# *Policy Capture without Electoral Failure: Evidence from the Laboratory*

JENS GROßER
Florida State University, e-mail: jgrosser@fsu.edu

ERNESTO REUBEN
New York University Abu Dhabi, Center for Behavioral Institutional Design, e-mail: ereuben@nyu.edu

## ABSTRACT

Can a wealthy minority obtain the policies it wants from a democracy whose elections work exactly as intended? We report results from a laboratory experiment in which two politicians commit to redistributive tax rates, four voters—an elite rich voter and three poor voters—elect one of them, and the elite voter may afterward reward politicians with voluntary, noncontractible transfers that everyone observes. Standard theory predicts no transfers and maximal redistribution. We find that, despite higher-tax politicians winning \$96\%\$ of contested elections, mean winning tax rates fall from \$71\%\$ to \$43\%\$ as the environment allows individual reputations to form. Policy capture operates on the menu rather than the ballot. No voter is misinformed, paid, or votes against their own interest, yet both candidates stop offering what the majority wants, and full disclosure of payments does not protect it. Elite voters reward accommodating politicians individually rather than paying only for coordinated success. Consequently, roughly two-thirds of what the majority loses accrues to the politicians who supply the policy, and the rich voter's own gain is statistically indistinguishable from zero. Large policy influence is thus compatible with negligible returns to the influencer, implying that the money observed in politics is a poor measure of how much policy capture occurs.

This version: August 2026

## ACKNOWLEDGEMENTS

Ernesto Reuben acknowledges financial support from Tamkeen under the NYU Abu Dhabi Research Institute Award CG005.

جامعة نيويورك أبوظبي
NYU | ABU DHABI

مركز التصميم السلوكي المؤسساتي
CENTER for BEHAVIORAL INSTITUTIONAL DESIGN

# 1. Introduction

Across established democracies, most citizens doubt that their government could resist corporate lobbying for policies that benefit corporations at the public's expense, and many report that no party on offer represents their views.[1] These are rarely complaints about fraud. Ballots are counted honestly, elections are competitive, and incumbents lose. The dissatisfaction is about something else: voters choose freely, but only among alternatives none of them would have chosen. Economics has a canonical version of this puzzle. Because income is right-skewed, the median voter's income lies below the mean, and majority rule should therefore deliver substantial redistribution (Meltzer and Richard, 1981). Yet redistribution responds weakly to inequality across countries and over time, and in the United States policy outcomes track the preferences of affluent citizens and organized business interests far more closely than those of the median voter (Gilens and Page, 2014).[2]

The obvious explanation is that organized interests shape policy, but establishing this has proved remarkably difficult. One puzzle is that the sums involved appear small relative to the stakes (Tullock, 1972). In the canonical modern treatment of this "too little money" puzzle, Ansolabehere et al. (2003) argue that much campaign giving reflects participation rather than investment. The deeper problem is that benefits flowing between interests and politicians are ambiguous even when fully observed. A campaign contribution may procure a policy concession, simply purchase access, or express ideological agreement (Kalla and Broockman, 2016). Lobbying expenditure may compensate for expertise and information rather than favors (Potters and Van Winden, 1992; Lohmann, 1995; Bertrand et al., 2014). Post-political employment may reward decisions taken in office, or may simply price the human capital and connections that office confers (Diermeier et al., 2005; Palmer and Schneer, 2019). Selection compounds the difficulty from both sides: interests choose which politicians to cultivate, and politicians choose policies in anticipation of future support, so an association between a favorable policy and a subsequent benefit cannot reveal whether the benefit induced the policy, rewarded it, or just

[1] In the OECD's 2024 Survey on Drivers of Trust in Public Institutions, based on roughly 60,000 respondents across 30 member countries, only 30% considered it likely that their government would withstand lobbying by a corporation seeking a policy that would benefit its industry while harming society as a whole (OECD, 2024). In Pew's 2023 survey of 24 countries, a median of 74% said elected officials do not care what people like them think, 59% were dissatisfied with how their democracy is functioning, and 42% said no political party in their country represents their views (Wike et al., 2024). For academic treatments of the gap between mass preferences and enacted policy in the United States, see Bartels (2016) and Gilens (2012).

[2] On the weak empirical relationship between inequality and redistribution and the mechanisms proposed to explain it, see Bénabou (2000), Alesina and Giuliano (2011), and the literature they survey. Gilens and Page (2014) findings are contested on measurement grounds; see Enns (2015) and Branham et al. (2017). Our design does not adjudicate that debate; it asks whether a mechanism of the kind they describe can operate at all when elections function well.

reflects pre-existing alignment.[3]

There is also a channel that is invisible in principle rather than simply difficult to measure. Majority rule disciplines politicians only over the policies they place before voters. A concentrated interest can therefore affect outcomes in two quite different ways. It can distort the act of voting (e.g., by funding advertising, buying votes, discouraging turnout), in which case its influence leaves a signature in electoral behavior and is at least potentially detectable. Or it can change the alternatives among which voters choose. If candidates can be induced to abandon the policy the majority wants, then the election remains fully fair, every voter selects the best available option, and the majority is nonetheless defeated before a single ballot is cast. Capture of this second kind operates on the menu rather than on the ballot. It is consistent with a flawless electorate, requires no voter to be deceived or bought, and the counterfactual one would need in order to detect it, the platforms that would have been offered had the interest not been present, is never observed. It would also rationalize the widespread intuition that elections are rigged in systems where, procedurally, they plainly are not.[4]

This paper studies that channel experimentally. The laboratory offers three things that field data cannot. First, it isolates the mechanism: we can construct an environment in which the only instrument available to a wealthy interest is a reward for policy already delivered, stripped of every alternative interpretation mentioned above. Second, it provides the counterfactual: we compare policy in that environment with an otherwise identical one in which the instrument is simply absent. Third, because we control the entire distribution of earnings, we can measure exactly how much the majority loses, how much the interest gains, and where the difference goes.

Our elite rent-diversion game has six players: two politicians and four voters. One voter, whom we call the elite voter, earns 60 points before taxes; the remaining three earn 10 points each. Taxation is purely redistributive, transferring points from the elite voter to the three majority voters, so the game is zero-sum across the society, and every point the elite voter retains is a point the majority does not receive. Because three of the four voters are majority

[3]Studies that estimate returns to political investment rather than roll-call effects generally find them substantial, though often conditional on access: De Figueiredo and Silverman (2006) find that returns to university lobbying for earmarks are large for institutions represented on the relevant appropriations committee and statistically indistinguishable from zero for those that are not. See also Richter et al. (2009) on effective tax rates, Kang (2016) on energy policy, and Bertrand et al. (2020) on politically targeted philanthropy. For reviews of the identification problems and the channels involved, see Bombardini and Trebbi (2020), Schnakenberg and Turner (2024), and Garlick et al. (2025).

[4]The possibility that competing candidates converge on a position favorable to an organized interest and away from the average voter was noted by Ben-Zion and Eytan (1974) and is central to Grossman and Helpman (1996), in which parties trade off attracting voters against attracting contributions. See also Snyder and Ting (2008) on interest groups within a political-agency framework, Bils et al. (2021) on lobbying in repeated elections, Awad et al. (2025) on learning by lobbying, and Aragonès et al. (2007) on how reputations make non-binding promises credible.

voters, the median voter is a majority voter, and the majority's material interest is unambiguous: it strictly prefers the highest feasible tax rate. Each period proceeds in three stages. The two politicians commit to binding tax policies. Voters then elect one of them under majority rule. Finally, the elite voter may transfer points to either or both politicians.

Two features of the final stage do the work. The first concerns timing: transfers occur after policies are final and after the election has been decided. They are voluntary and non-contractible — nothing obliges the elite voter to reciprocate a favorable tax policy, and no politician who has been rewarded is bound to offer one again. Transfers cannot finance a campaign, alter the realized vote, or convey information about an unresolved policy choice. Their only direct effect is to reduce the elite voter's earnings and raise those of the politician who receives them. The single instrument available is therefore an ex post reward for a decision already taken, the stylized counterpart of the private benefits that accrue to officeholders after they leave office through board seats, lobbying positions, and consultancies.[5] The second feature is that transfers are public. Every participant observes exactly which politician received what, and the three majority voters observe it along with everyone else. Whatever influence transfers exert in our environment is thus exerted under complete disclosure, in full view of the voters whose interests are being traded away.

Under standard assumptions, the instrument is worthless. Because transfers are unconditional and occur last, a materially self-interested elite voter never pays. Anticipating this, politicians face pure Downsian competition for a majority that wants maximal redistribution, and both commit to the highest tax rate. The prediction is unusually sharp. The maximal tax rate is the unique strict equilibrium of the policy stage and is selected by maximin reasoning, risk dominance, iterated deletion of weakly dominated strategies, and the limiting logit equilibrium alike. Playing it after every history is a subgame-perfect equilibrium of the finitely repeated game, and it survives inequity aversion under a weak restriction on the elite voter's preference parameters.[6] Any capture we observe therefore requires a departure from this benchmark, and

[5] Officeholding generates substantial subsequent private returns (Diermeier et al., 2005; Eggers and Hainmueller, 2009; Palmer and Schneer, 2016, 2019), much of which is attributable to political connections rather than expertise: lobbying revenue falls when a lobbyist's former contacts leave office (Blanes I Vidal et al., 2012; McCrain, 2018; Ban et al., 2019; Strickland, 2023), and anticipated private opportunities affect behavior while officials are still in office (Shepherd and You, 2020). The most direct evidence is Chen et al. (2023), who find that Chinese local officials granted favorable land transactions to firms and were subsequently appointed to those firms' boards. We do not read our treatments as literal implementations of lobbying firms or post-office labor markets; they isolate features common to such relationships. We likewise abstract from informational lobbying, campaign advertising, and the electoral use of contributions, all studied experimentally elsewhere; see Potters and Van Winden (1992, 2000), Lohmann (1995), and Kirchsteiger and Prat (2001) on informational lobbying; Fang et al. (2016) and Shapiro and Zillante (2017) on campaign-finance institutions; Dal Bó (2007) on bribing voters directly; and Großer and Reuben (2013) on countervailing interests.

[6] Under Fehr and Schmidt (1999) preferences, the benchmark holds exactly provided the elite voter's aversion to advantageous inequality is not too large. Details are in Appendix B.

the design is built to identify which one.

A politician abandons the majority's preferred tax rate only if she expects to be rewarded for it. Two forces can sustain that expectation. The first is reciprocity: elite voters who are not purely self-interested may reward favorable policies even in a single encounter, much as employers reward effort with unrequired wage premia.[7] The second is reputation: even a purely self-interested elite voter may pay early to shape later policy choices (Kreps et al., 1982; Camerer and Weigelt, 1988). The field evidence points the same way. Contributions are given early and repeatedly to the same legislators rather than as one-off purchases, and the committee structure of Congress has been read as an arrangement that allows legislators to build reputations with particular interests and to be rewarded for maintaining them (Snyder, 1992; Kroszner and Stratmann, 1998, 2005). Reputation, however, has two separable ingredients: past actions must be observable and attributable to an individual. This raises a question the literature has largely left implicit: whose reputation matters? Relationships in the field are often asymmetric. Interest groups are long-lived, and their conduct is observed by an entire political class, whereas individual politicians turn over, are term-limited, and leave office.[8]

We therefore vary whether transfers are available at all and, when they are, whose history can be attached to a persistent identity. In *No Transfers*, the same six participants interact for twenty-five periods under permanent public identities, but the transfer stage is removed. In *No Reputation*, transfers are available, but neither the elite-voter role nor the politician roles persist, and the complete transfer history is unavailable to the rotating pool of potential politicians. In *Elite Reputation*, the elite voter is fixed and publicly identifiable, and every potential politician observes their entire transfer history, while politicians themselves rotate anonymously. In other words, the special interest can build a public record of reciprocation, but politicians cannot build a record at all. In *Two-sided Reputation*, voters and politicians are fixed and identifiable, and the full history of tax policies, elections, and transfers is common knowledge. Comparing *Two-sided Reputation* with *No Transfers* isolates the transfer opportunity while holding the relationship fixed; the three transfer treatments maintain the availability of transfers and vary the reputational environment.

Our first result is that the electorate behaves exactly as theory predicts. When the two politicians offer different tax policies, the one promising more redistribution wins 96.1% of elections, and 100.0% of elections in *Two-sided Reputation*, the treatment in which rent diversion is most successful. Voters are never bribed, misinformed, or mistaken about their interests. They observe the transfers and vote according to their material interests. Hence, majority rule

[7] On reciprocity and gift exchange, see Fehr et al. (1993) and Fehr et al. (1997), and Fehr and Charness (2025) for a recent survey.

[8] See Besley and Case (2003) and Ferraz and Finan (2011) on the behavioral consequences of politician turnover and term limits.

consistently aggregates preferences across all treatments we run.

Yet the policies actually implemented move sharply away from what the majority wants. The mean winning tax rate falls from 70.8% when transfers are unavailable to 66.2% under *No Reputation*, 57.1% under *Elite Reputation*, and 42.8% under *Two-sided Reputation*; mean tax rates fall from 69.0% to 33.7% across the same range. In *Two-sided Reputation*, the modal tax rate is no longer the majority's preferred rate but the elite voter's: 35.5% of tax policies set a zero tax rate. Transfers rise in step, from 0.83 points per period under *No Reputation* to 2.27 under *Elite Reputation* and 3.60 under *Two-sided Reputation*, with the share of positive transfers rising from 19.5% to 47.3% to 56.5%.[9] Policy capture is achieved entirely through the composition of the menu. Nothing about the electoral process is compromised; there is simply nothing on the ballot for the majority to vote for, and disclosure does not help because the majority's problem was never that it was uninformed.

How do elite voters accomplish this? Here theory makes a specific prediction that the data reject, and the failure is informative. Because rent diversion succeeds only when both politicians abandon the majority, the cost-efficient transfer rule pays only when they do so jointly: it makes the low-tax profile a strict, payoff-dominant equilibrium at a cost of a fraction of a point, and it never pays out when rent diversion fails. Elite voters do not use it. Estimating transfers over the complete policy profile (the receiving politician's tax rate, her opponent's, and their interaction), we find that elite voters reward a politician's own accommodating policy largely irrespective of what the opponent did, paying 3.18 to 5.04 additional points for a zero tax rate when the opponent also chose zero and 2.43 to 5.93 additional points when the opponent chose the maximal tax rate. The rule they follow is reciprocal rather than strategic: it compensates the favor, not the outcome. In *Two-sided Reputation*, it acquires a further element of compensation for electoral sacrifice: a politician who alone offers the elite voter's preferred tax rate, and consequently loses the election, receives more (7.42 points) than one who does so in concert with her opponent and shares the win (5.10 points).

This consequence, we think, extends beyond the experiment. Moving from *No Transfers* to *Two-sided Reputation*, each majority voter loses 3.50 points, for an aggregate loss of 10.50 points. Politicians capture 7.20 points of this, and the elite voter captures 3.30, with the elite voter's gain not statistically distinguishable from zero. Roughly two-thirds of what the majority loses is captured not by the special interest that demands the policy but by the politicians who supply it, and the expected return to a large and demonstrably successful plan of policy capture is approximately zero. The reward rule we document accounts for part of this: because elite voters pay for individual low-tax-rate choices rather than for coordinated success, they pay even

[9] Jonckheere-Terpstra tests using society means reject equality in favor of the predicted descending order across all four treatments for both proposed and winning tax rates and within the three transfer treatments. Transfers increase in the predicted order across the transfer treatments.

when rent dissipation fails. We cannot determine whether this finding is specific to our setting or reflects a general feature of exchanges in which one side delivers first, and the other repays voluntarily.[10] However, the finding itself—large policy influence alongside negligible returns to the party who obtains it—suggests a resolution of the too-little-money puzzle that does not require influence to be small. Observing little money in politics is not evidence of little policy capture.

Policy capture is nonetheless far from automatic, and variation across societies is instructive. What separates societies that end up with low taxes from those that do not is neither the presence of transfers nor their average size, but the reliability of the marginal reward. A politician who abandons the majority forgoes three points in expected office bonus; in successful societies, the estimated increment for doing so comfortably exceeds that threshold in every contingency, whereas in unsuccessful ones it is smaller, imprecisely estimated, or present in only some contingencies. The same conditionality appears in the field: returns to lobbying for university earmarks are large for institutions represented on the relevant appropriations committee and close to zero for those without such access (De Figueiredo and Silverman, 2006). Two qualifications deserve emphasis. First, *Elite Reputation* and *No Reputation* differ both in whether the elite voter has a permanent identity and in whether the full transfer history reaches the whole politician pool, so this comparison identifies the combined effect of a one-sided public reputation environment rather than the effect of attribution alone. Second, with few independent societies per treatment, we have power to detect the overall ordering but not each adjacent step: among the transfer treatments, only the comparison between *No Reputation* and *Two-sided Reputation* is individually significant.

Our paper contributes to four literatures. First, it speaks to work on the distance between formal democratic institutions and the outcomes they produce, and on the persistence of de facto power under de jure political equality (Acemoglu and Robinson, 2008; Dal Bó, 2006). We show that well-functioning majoritarian institutions can be manipulated without violating any of their formal properties, and that this occurs through the policy choice set rather than through the vote, under full disclosure and without any voter acting other than in his own interest. Second, it contributes to the literature on special-interest influence by isolating the channel that is empirically hardest to identify: an ex post, voluntary, non-contractible reward for policies already delivered, which cannot be reinterpreted as access, information, electoral finance, or the price of human capital. A related methodological contribution is that we can estimate how transfers depend on the tax rates chosen by both politicians rather than on the

[10]The party who moves first in a voluntary sequential exchange commonly retains little of the surplus created. For example, in trust games, senders typically break even while responders keep most of the gain (Berg et al., 1995; Johnson and Mislin, 2011). Our environment differs in that rent dissipation requires two players to move first rather than one.

recipient's alone. The same low tax rate can mean very different things depending on what the opponent chose: it may be one half of a coordinated choice that leaves the majority no alternative, or an electorally costly concession the opponent declined to match. Field data rarely reveal the full set of alternatives voters faced, or what the interest would have paid had those alternatives differed (Chamon and Kaplan, 2013). Third, it engages the literature on political reputations and revolving doors by separating observability from attribution and finding that a long-lived interest facing a rotating political class already achieves a substantial part of the effect. Fourth, it connects to experimental work on corruption and reciprocal exchange, where anonymity and rotation are known to undermine bribery relationships (Abbink et al., 2002) and where monitoring by those who bear the cost of a bribe has been shown to constrain them (Serra, 2012). Our contribution is to embed that exchange inside a competitive election, so that reciprocity must overcome, rather than merely coexist with, the discipline of majority rule.[11]

The closest paper to our work is Großer et al. (2013), who study tacit quid pro quo between a special interest and two electorally competing candidates. We differ in three ways that matter. Their transfers precede policy, making influence an investment; ours follow both the policy and the election, making it a reward, which rules out prior commitment and places the entire burden on reciprocity and reputation. They contrast one-shot with finitely repeated interaction; we hold repetition fixed and vary whose identity persists, which is the margin on which relationships between interests and politicians actually differ in the field. And because taxation and transfers in our environment move points between participants rather than creating or destroying them, we can trace what the majority loses directly into the earnings of the politicians and the elite voter.[12]

The rest of the paper is organized as follows. Section 2 describes the elite rent-diversion game, the treatments, and the experimental procedures. Section 3 derives the zero-transfer benchmark, characterizes three transfer rules and their quantal-response predictions, and states our hypotheses. Section 4 presents the results. Section 5 concludes.

[11] Serra (2012) is close in spirit to our disclosure result: she finds that bottom-up monitoring by citizens who bear the cost of a bribe constrains corruption when paired with top-down auditing. In our environment, the majority observes every transfer but has no instrument to act on what it sees. See also Barr and Serra (2009) on the role of negative externalities for third parties in bribery decisions; Drugov et al. (2014) on the role of intermediaries; Ryvkin and Serra (2019, 2020) on competition among suppliers of corrupt services; and Abbink and Serra (2012) for a survey of the laboratory evidence on anticorruption policy.

[12] Großer et al. (2013) find successful influence in roughly 40% of societies with repeated interaction and none in one-shot societies. Our *No Reputation* treatment is not a one-shot environment (interaction is repeated but identities do not persist), which is why modest positive transfers survive there.

## 2. Experimental games and procedures

### 2.1. The elite rent diversion game

We study a repeated elite rent-diversion game. In each period, a society consists of two politicians, $i \in \{A, B\}$, and four voters: one elite voter, $j_E$, and three identical majority voters, $j_C$. The term "elite voter" refers to the experimentally advantaged voter: this voter has higher before-tax earnings and exclusive access to post-election transfers to politicians. We interpret this role as a stylized special interest. The three majority voters have lower before-tax earnings, constitute a majority of the electorate, and cannot make transfers to politicians. Thus, the median voter is a majority voter.

At the start of each period, the elite voter receives exogenous before-tax earnings of $e_E = 60$ points, while each majority voter receives $e_M = 10$ points. Each politician receives exogenous earnings of $e_P = 10$ points. Each period consists of three stages: tax policy, voting, and transfers. The tax policy and voting stages are present in all treatments. The transfer stage is present only in treatments in which transfers are feasible.

#### *Stage 1: Tax policy*

In this stage, each politician announces a redistributive tax rate, $\theta_i \in \{0, 0.18, 0.36, 0.54, 0.72\}$. Tax rates are binding campaign commitments: if politician $i$ wins the election, $\theta_i$ is implemented. Taxation is purely redistributive. The winning tax rate, $\theta_w$, determines the number of points of the elite voter's earnings that are redistributed equally among the three majority voters. Specifically, denoting $\theta_w$ as the winning tax rate, the elite voter's after-tax earnings equal $\bar{e}_E = e_E - 100 \times \frac{3}{8}\theta_w$, and each majority voter's after-tax earnings equal $\bar{e}_M = e_M + 100 \times \frac{1}{8}\theta_w$.[13] Table 1 reports the before- and after-tax earnings for each feasible winning tax rate. It also includes the Gini coefficient to quantify the degree of after-tax inequality implied by each tax rate. From a purely monetary perspective, the elite voter strictly prefers lower winning tax rates, whereas majority voters strictly prefer higher winning tax rates.

The two announced tax rates are determined as follows. Politicians start by simultaneously choosing an initial tax rate. Then, after observing each other's initial tax rates, each politician simultaneously decides whether to accept the current pair of tax rates or reject it. Rejecting costs $c = 0.25$ points and opens a new tax-setting round. If both politicians accept, the current tax rates become final and are announced to the voters. If at least one politician rejects, both politicians may revise their tax rates, although only politicians who rejected the current pair of tax rates pay the cost $c$. The process continues until both politicians accept. Voters observe only the final tax rates before voting.

[13] For simplicity, politicians neither pay taxes nor receive redistributive disbursements.

**Table 1. Voters' earnings before and after taxation**

*Note:* The table reports earnings (in points) before transfers to politicians. The elite voter's final earnings are the after-tax earnings shown in the table minus total transfers. Gini coefficients of after-tax earnings are adjusted for small groups.

| Winning | Total amount | *Elite voter* | | *Majority voter* | | After-tax Gini |
|---|---|---|---|---|---|---|
| tax rate | redistributed | Before tax | After tax | Before tax | After tax | coefficient |
| 0.00 | 0.00 | 60 | 60.00 | 10 | 10.00 | 0.556 |
| 0.18 | 6.75 | 60 | 53.25 | 10 | 12.25 | 0.456 |
| 0.36 | 13.50 | 60 | 46.50 | 10 | 14.50 | 0.356 |
| 0.54 | 20.25 | 60 | 39.75 | 10 | 16.75 | 0.256 |
| 0.72 | 27.00 | 60 | 33.00 | 10 | 19.00 | 0.156 |

We used this tax-setting procedure to facilitate coordination on tax rates while keeping the electoral information environment simple. A one-shot simultaneous choice of tax rates would make coordination difficult because politicians would not be able to observe and respond to their opponents' choices. In electoral competition, politicians often observe each other's positions and can adjust their own positions before a final set of platforms is presented to voters. The accept-reject procedure provides a stylized version of this pre-election adjustment process: politicians can react to each other's current positions, but changing positions carries some cost. Importantly, voters do not observe this adjustment process. They observe only the final announced tax rates, which are put to a vote. Thus, voters' subsequent decisions can be conditioned on the final tax rates but not on initial proposals or on the sequence of revisions that led to them.

***Stage 2: Voting***

In this stage, each voter casts a compulsory vote for either politician A or politician B. Politicians do not vote. The election is decided by majority rule, with ties broken by a fair coin flip. Vote totals are publicly revealed after the election. The winning politician receives an "office bonus" of 6 points in addition to the exogenous politician earnings $e_P = 10$, and the winner's tax rate $\theta_w$ is implemented. The losing politician receives no office bonus.

***Stage 3: Transfers***

In this stage, the elite voter can make nonnegative money transfers $t_{E\to i}$ to each politician $i$, subject only to the budget constraint $T_E \equiv t_{E\to A} + t_{E\to B} \leq 60$. Transfers are unconditional and non-contractible in that politicians are not formally required to respond to them in any future period. Transfers are deducted from the elite voter's earnings and added to the recipient politicians' earnings. Hence, the elite voter's final earnings in a period equal their after-tax earnings minus the amount transferred to politicians, and the final earnings of a politician equal the sum of their initial earnings, the office bonus if they win, and any transfers they receive from

the elite voter minus any costs incurred in the tax-setting procedure. The treatment-specific observability of transfers is described below.

## 2.2. Treatments

The treatments vary in whether transfers are feasible and in the matching, identification, and information conditions that determine whether histories of tax rates, elections, and transfers can be linked to the same individuals across periods. The design includes four treatments: *Two-sided Reputation*, *Elite Reputation*, *No Reputation*, and *No Transfers*.

### *Two-sided Reputation*

In this treatment, participants remain in fixed roles and fixed societies throughout the experiment. The same elite voter, the same two politicians, and the same three majority voters interact in all 25 periods. In addition, all participants are assigned permanent public ID numbers, visible to everyone in the society, so that public actions and outcomes can be linked to the same individual across periods.

This treatment preserves the within-period timing of the stage game but creates persistent individual-specific histories observable across periods. The public history contains the final tax rates, the winning tax rate, the vote tally from each election, and the transfers from the elite voter to the politicians.

All participants observe the final tax rates, the winning tax rate, the vote tally, and the transfers from the elite voter to each politician in every period. Because the same participants occupy fixed roles and have permanent public IDs, these observations form a public, individual-specific history. Politicians can condition their current tax rates on how the same elite voter transferred following previous tax-rate pairs and election outcomes. The elite voter and majority voters can likewise condition current behavior on the public histories of identifiable politicians, including their previous tax rates, electoral outcomes, and transfers received.

We interpret this treatment as capturing a two-sided reputational channel that can operate in long-term relationships between special interests and politicians, such as the repeated interactions observed in lobbying relationships and revolving-door connections.

### *Elite Reputation*

In this treatment, voters are fixed and identifiable, but politicians are not. The same elite voter and the same three majority voters interact in all 25 periods, and each has a permanent public ID number. At the beginning of each period, however, two politicians are randomly drawn from a pool of four potential politicians and assigned the roles of "Candidate 1" and "Candidate 2." Politicians do not have permanent public ID numbers. Potential politicians who are not

selected in a period are inactive, make no decisions, and receive $e_P = 10$ points.

Relative to *Two-sided Reputation*, this treatment makes individual-specific public histories available to the voters, and especially for the elite voter, but not to the politicians. The final tax rates, winning tax rate, vote tally, and transfers are observed by all participants, including potential politicians who are inactive in a given period. Thus, every potential politician can observe the complete public transfer history of the same elite voter and can condition current tax rates on how that elite voter transferred following previous tax-rate pairs and election outcomes. By contrast, because politicians rotate and have no permanent public IDs, their past tax choices, election outcomes, and transfers received cannot be linked to them as individuals. We interpret this treatment as capturing a one-sided reputational channel that can operate when a long-lived special interest interacts with short-lived politicians who leave office after making policy decisions but may subsequently be rewarded privately by the special interest, represented in the game by a transfer.

***No Reputation***

In this treatment, neither voters nor politicians have persistent public identities. At the beginning of each period, the elite-voter role is randomly assigned from a pool of four voters: each voter has an equal chance of being the elite voter, subject to the restriction that the same participant cannot be the elite voter in two consecutive periods. The remaining three voters are majority voters. Similarly, two participants are randomly selected from a pool of four potential politicians and assigned to the active-politician roles. Participants do not have permanent public ID numbers. Potential politicians who are not selected in a period are inactive, make no decisions, and receive $e_P = 10$ points.

This treatment removes persistent individual-specific histories for both voters and politicians. Final tax rates, the winning tax rate, and the vote tally are observed by all participants. Transfers are observed by the current elite voter, the three majority voters, and the two active politicians, but not by inactive politicians. Because the elite-voter and active-politician roles are reassigned and participants have no permanent public IDs, these observations cannot be linked to persistent elite-voter or politician identities. This removes the two-sided reputational channel present in *Two-sided Reputation* and the public elite-voter reputation present in *Elite Reputation*.

We interpret it as a benchmark environment in which transfers are feasible, but interactions are too short-lived for either a durable relationship between a special interest and politicians or a durable special-interest reputation to operate.

**Table 2. Summary of treatments**

*Notes:* In *Two-sided Reputation* and *Elite Reputation*, transfers are observed by all participants. In *Elite Reputation*, this includes inactive politicians. In *No Reputation*, transfers are observed by all voters and active politicians but not by inactive politicians. Final tax rates, winning tax rates, and vote tallies are observed by all participants in every treatment. Permanent IDs allow histories to be linked to the same individuals across periods.

| | *Two-sided Reputation* | *Elite Reputation* | *No Reputation* | *No Transfers* |
|---|---|---|---|---|
| Transfers to politicians | ✓ | ✓ | ✓ | × |
| Number of politicians: active (potential) | 2 (−) | 2 (4) | 2 (4) | 2 (−) |
| Politician permanent IDs | ✓ | × | × | ✓ |
| Voter permanent IDs | ✓ | ✓ | × | ✓ |

***No Transfers***

This treatment has the same fixed matching and permanent public IDs as *Two-sided Reputation*: the same elite voter, the same two politicians, and the same three majority voters interact in all 25 periods, and their public actions and outcomes can be linked to the same individuals across periods. The only difference is that the transfer stage is omitted. Thus, the treatment preserves repeated interaction, individual-specific histories of final tax-rate choices, and electoral outcomes, but removes the elite voter's ability to reward politicians after the election.

We interpret this treatment as a benchmark that allows us to observe behavior when long-lived special interests and politicians coexist, but post-election transfers from the special interest are prohibited.

The treatment comparisons separate several components of the reputational environment. Comparing *Two-sided Reputation* with *No Transfers* holds fixed the stable, identifiable repeated interaction between the elite voter and the same politicians and varies whether post-election transfers are feasible. Comparing *Two-sided Reputation* with *Elite Reputation* holds fixed the availability and public observability of transfers, as well as the presence of a continuing elite voter, and varies whether the same identifiable politicians repeatedly interact with that voter. Comparing *Elite Reputation* with *No Reputation* holds fixed the availability of transfers and rotation of politicians but changes both whether the elite voter has a persistent public identity and whether all potential politicians observe the complete transfer history. This comparison therefore encapsulates the combined effect of a one-sided public reputation environment rather than the effect of identity alone.

### 2.3. Procedures

The experiment was conducted at the Northwestern Lab at Northwestern University. We followed standard experimental economics procedures: participants made incentivized decisions, interacted anonymously, received neutrally framed instructions, and were not deceived. The computerized experiment was programmed in z-Tree (Fischbacher, 2007).

Upon arrival, participants were randomly assigned to seats in the laboratory. They read the instructions and answered control questions designed to verify their understanding of the game. Participants were informed that the experiment consisted of 25 periods and that, at the end of the session, two periods would be randomly selected for payment. The instructions and computer screens identified participants by their experimental roles and endowments. The majority voters and the elite voter were labeled "Voter10" and "Voter60," corresponding to their before-tax earnings, and active politicians were labeled as "Candidate 1" and "Candidate 2." Earnings were denominated in points and converted into cash at a rate of \$2.50 per 10 points. A sample of the instructions is provided in Appendix A.

At the beginning of a session, participants were assigned to a society, a treatment, and to be either a voter or a politician. The treatment-specific rules described above then determined whether a participant's role as an elite voter or active politician was fixed across periods or reassigned from period to period, and whether the participant had a permanent public ID number. Real identities were never revealed. Once all participants had completed the instructions and control questions, they played 25 periods of the elite rent diversion game. At the end of the experiment, participants were paid privately and in cash. Earnings were denominated in points and converted into cash at a rate of \$2.50 per 10 points. Average earnings were \$18.97, with no show-up fee. A total of 212 students participated in 20 sessions. Sessions lasted between 45 and 60 minutes.

## 3. Predictions

This section derives the main theoretical predictions. We first consider the benchmark in which transfers are either unavailable or equal to zero. We then examine how strictly positive transfers can change politicians' incentives at the tax-policy stage. The latter analysis is not meant to characterize all possible repeated-game equilibria. Instead, it identifies three simple transfer rules that can support low-tax outcomes and clarifies how their plausibility depends on the information and matching structure of the treatments.[14]

[14]Public transfer observability also allows majority voters to condition future votes on transfer histories. Our predictions focus on politicians' beliefs about elite-voter reciprocity because majority voters already observe the final tax rates directly and have a strict material preference for the higher rate in all treatments.

### 3.1. The zero-transfer benchmark

We begin with the benchmark in which players are risk-neutral and self-interested. We first characterize the subgame-perfect equilibrium (SPE) of the one-shot elite rent-diversion game and then extend the argument to the finitely repeated game.

Transfers are chosen after tax rates, voting, and the election outcome are determined. Because transfers are unconditional and occur in the final stage, a self-interested elite voter has no incentive to make positive transfers in any SPE of the one-shot game. Therefore, backward induction implies $T_E \equiv t_{E\to A} + t_{E\to B} = 0$. Given zero transfers, voting incentives are straightforward. In the voting subgame, a Nash equilibrium in weakly undominated voting strategies has each majority voter and the elite voter vote for the politician whose tax rate gives them the higher payoff. Since majority voters prefer higher tax rates and the elite voter prefers lower tax rates, if $\theta_i > \theta_{-i}$, each majority voter votes for politician $i$ and the elite voter votes for politician $-i$. If $\theta_i = \theta_{-i}$, we assume that voters randomize with equal probability between the two politicians.[15]

It is useful to summarize the tax-policy stage by the normal-form game in Figure 1. The actions in the matrix are the politicians' initial tax rates. The payoffs are expected office bonuses, net of any tax-revision cost and excluding the fixed politician earnings $e_P = 10$. On the diagonal, both politicians initially choose the same tax rate, neither rejects the tax-rate pair, and each wins with probability one-half, yielding an expected office payoff of 3 points. Off the diagonal, the politician who initially chose the lower tax rate would lose the election if the initial tax-rate pair were accepted. Since $c < 3$, this politician prefers to reject the tax-rate pair, pay the revision cost $c$, and revise to the highest tax rate, 0.72, which guarantees, at a minimum, an electoral tie and an expected office payoff of $3 - c$. Anticipating this, the other politician also revises to 0.72 if necessary, without paying the rejection cost in that round. The final tax-rate pair is therefore $(0.72, 0.72)$, and the politician who triggered the revision obtains $3 - c$ while the other politician obtains 3.

The game in Figure 1 has five pure-strategy Nash equilibria: both politicians choose the same initial tax rate and accept it. However, the equilibrium in which both choose 0.72 is the only strict equilibrium. It is also selected by maximin reasoning, risk dominance, iterated deletion of weakly dominated strategies, and the logit solution of the quantal-response equilibrium analyzed below. The reason is that 0.72 is the only tax rate that guarantees a politician the expected office payoff of 3 points regardless of the opponent's initial tax rate.

By contrast, any equal-tax equilibrium with $\theta_A = \theta_B < 0.72$ relies on very restrictive beliefs. For politician $i$ to choose an initial tax rate below 0.72, she must be certain that the other

[15]This assumption is also consistent with the behavior observed in the experiment. As usual, there are additional weak Nash equilibria of the voting subgame in which all voters vote for the same politician independently of tax rates. We focus on equilibria in weakly undominated voting strategies.

| | | *Initial tax rate $\theta_B$ of politician B* | | | | |
|---|---|---|---|---|---|---|
| | | 0 | 0.18 | 0.36 | 0.54 | 0.72 |
| *Initial tax rate $\theta_A$ of politician A* | 0 | $(3, 3)$ | $(3-c, 3)$ | $(3-c, 3)$ | $(3-c, 3)$ | $(3-c, 3)$ |
| | 0.18 | $(3, 3-c)$ | $(3, 3)$ | $(3-c, 3)$ | $(3-c, 3)$ | $(3-c, 3)$ |
| | 0.36 | $(3, 3-c)$ | $(3, 3-c)$ | $(3, 3)$ | $(3-c, 3)$ | $(3-c, 3)$ |
| | 0.54 | $(3, 3-c)$ | $(3, 3-c)$ | $(3, 3-c)$ | $(3, 3)$ | $(3-c, 3)$ |
| | 0.72 | $(3, 3-c)$ | $(3, 3-c)$ | $(3, 3-c)$ | $(3, 3-c)$ | $(3, 3)$ |

**Figure 1. Normal-form representation of the tax-policy stage with zero transfers**

*Note:* The first entry in each cell is politician $A$'s payoff and the second entry is politician $B$'s payoff. Payoffs correspond to the expected office bonus net of tax-revision costs and exclude the fixed politician earnings $e_P = 10$. In the experiment, $c = 0.25$ in all treatments.

politician will not choose a higher initial tax rate. Formally, for any equal-tax equilibrium with $\theta_A = \theta_B < 0.72$, each politician $i$ must believe that the opponent assigns zero probability to any strictly higher initial tax rate: $\Pr_i(\theta_{-i} > \theta_i) = \sum_{y \in \Theta:\, y > \theta_i} \beta_i^y = 0$, where $\beta_i^y$ denotes politician $i$'s belief that politician $-i$ chooses initial tax rate $\theta_{-i} = y$. If politician $i$ assigns positive probability to any higher tax rate by the opponent, then choosing $\theta_i < 0.72$ exposes them to a costly revision with positive probability, whereas choosing 0.72 avoids this risk. Because sustaining any lower-tax equilibrium requires each politician to rule out any higher tax rate by the opponent, and because the main equilibrium-selection criteria point to $\theta_A = \theta_B = 0.72$, we use the high-tax equilibrium as the zero-transfer benchmark.[16]

The same selection logic applies to the finitely repeated game. If transfers are zero in every period, applying the stage-game selection argument period by period yields the high-tax outcome in each period, regardless of the treatment. This gives us our first proposition.

**Proposition 1 (Zero-transfer benchmark):**

*If transfers are infeasible or equal to zero, in the voting stage, majority voters vote for the politician who offers the higher tax rate, the elite voter votes for the politician who offers the lower tax rate, and if both politicians offer the same tax rate, voters randomize between them. The unique strict equilibrium of the tax-policy stage is that both politicians initially choose $\theta_A = \theta_B = 0.72$ and neither politician rejects the tax-rate pair. Together with zero transfers, this strategy profile constitutes the selected SPE of the one-shot game. In the finitely repeated game with a known final period, playing this selected one-shot SPE after every history is an SPE. Hence, the same high-tax outcome is selected in every period.*

[16]The pure strategy $\theta_i = 0.72$ is the only strategy that is a best response to every pure or mixed strategy of the other politician. Appendix B also discusses predictions under inequality aversion using Fehr and Schmidt (1999). The basic benchmark remains the same: majority voters prefer the highest winning tax rate, and electoral competition favors high taxes in the absence of transfers.

### 3.2. Positive transfers and transfer strategies

We next ask how strictly positive transfers can support lower tax rates. In a one-shot game with purely self-interested players, the elite voter would still transfer nothing after the election. Hence, positive transfers in the one-shot game require some departure from strict material self-interest, such as reciprocal or social preferences, or decision errors. Conditional on the possibility of such transfers, politicians' willingness to choose low tax rates depends on their belief that the elite voter will reward favorable tax rates. In the repeated game, reputational incentives can also make positive transfers credible: a materially self-interested elite voter may transfer in earlier periods to influence politicians' later tax choices.

The full tax-policy game allows five tax rates and many possible transfer rules.[17] To isolate the main forces, we focus on the two extreme tax rates, 0 and 0.72. A successful rent-diversion outcome is a zero winning tax rate, $\theta_w = 0$. This reduced game describes the central strategic tension: the elite voter wants both politicians to choose low tax rates, while electoral competition gives each politician an incentive to move toward the majority voters' preferred high tax rate.[18]

We consider three stylized transfer rules. They serve as natural benchmarks because they represent different ways in which the elite voter can try to overcome the electoral incentives pushing politicians toward high taxes. The first rule, *individual low-tax reward* (ILTR), rewards a politician for choosing the elite voter's preferred tax rate of 0, regardless of the other politician's tax rate or the election outcome. This is the most direct and intuitive rule because it simply rewards individual low-tax choices. The second rule, *strict payoff-dominance implementation* (SPDI), rewards joint success: the elite voter transfers to both politicians only when the final tax-rate pair is $(0, 0)$. This rule directly targets the outcome the elite voter wants because a zero winning tax rate requires both politicians to choose 0. The third rule, *election-loss compensation* (ELC), rewards individual sacrifice: the elite voter compensates a politician who chooses the low tax rate when the other politician chooses the high tax rate. This rule addresses the electoral cost of adopting the elite voter's preferred position when the opponent instead appeals to the majority voters.

#### *Individual low-tax reward*

We begin with ILTR because it is the simplest reward rule. Under ILTR, the elite voter transfers $t_i$ to politician $i$ whenever $i$ chooses a final tax rate of 0, and transfers nothing otherwise. Thus,

[17] The elite voter observes the final accepted tax rates and the election outcome when choosing transfers, but not the full sequence of rejected and revised proposals. Transfer rules must therefore be based on final tax rates and the election outcome, not on unobserved proposal histories.

[18] The two extreme tax rates are also the most frequently chosen in the experiment. Appendix B extends the examples to the full five-rate action space. The larger action space makes the tax-policy stage more complex, but does not change the central insights obtained with the reduced game.

| | | *Final tax rate $\theta_B$ of politician B* | |
|---|---|---|---|
| | | 0 | 0.72 |
| *Final tax rate $\theta_A$* | 0 | $(3 + t_A, 3 + t_B)$ | $(t_A, 6)$ |
| *of politician A* | 0.72 | $(6, t_B)$ | $(3, 3)$ |

**Figure 2. Reduced normal-form representation of the tax-policy stage with individual low-tax reward (ILTR)**

*Note:* The first entry in each cell is politician $A$'s payoff and the second is politician $B$'s payoff. Payoffs correspond to the expected office bonus plus transfers received from the elite voter, net of tax-revision costs and excluding the fixed politician earnings $e_P = 10$. A transfer $t_i$ is paid to politician $i$ whenever $i$ chooses a tax rate of 0.

the transfer depends only on politician $i$'s own final tax rate. Figure 2 shows the resulting normal-form game. For this rule, we abstract away from tax-rate revisions and treat choices as the final accepted tax rates. This means that politicians choosing 0 are deliberately selecting the elite voter's preferred tax rate, rather than arriving at it through proposals and revisions. This abstraction is helpful because ILTR rewards final tax rates, so there is no need to distinguish between an intended low-tax choice and a low final tax rate reached through the tax-setting procedure.

Under ILTR, the payoff difference between choosing 0 and 0.72 for politician $i$ is $t_i - 3$, regardless of the other politician's tax rate. If $t_i > 3$, choosing 0 is strictly dominant; if $t_i < 3$, choosing 0.72 is strictly dominant; and if $t_i = 3$, $i$ is indifferent. With symmetric transfers, $t_A = t_B = t$, ILTR therefore implements the low-tax outcome as a dominant-strategy equilibrium when $t > 3$. A prominent symmetric benchmark is the split-the-difference transfer. Compared with the high-tax outcome, the low-tax outcome allows the elite voter to retain 27 points that would otherwise be redistributed to the majority voters. In this case, if the elite voter transfers 9 points to each politician and keeps the remaining 9 points, the payoff gain from successful rent diversion is the same for the elite voter and each politician.

The appeal of ILTR is its simplicity. It rewards politicians for choosing the elite voter's preferred tax rate without conditioning transfers on the tax-rate pair. However, this simplicity comes at a cost. ILTR rewards a politician for choosing 0 even if rent diversion fails because the other politician chooses 0.72 and wins the election. In other words, ILTR does not condition transfers on successful low-tax coordination.

### *Strict payoff-dominance implementation*

Under SPDI, the elite voter transfers positive amounts to both politicians if the final tax pair is $(0, 0)$ and transfers nothing otherwise. Let $\tau_i > 0$ denote the transfer to politician $i$ when the final tax-rate pair is $(0, 0)$. Unlike ILTR, SPDI does not reward a politician merely for choosing a low tax rate. It rewards only coordinated low taxes, which is the outcome required for successful rent diversion. Figure 3 shows the reduced tax-policy game under SPDI. The

| | | *Initial tax rate $\theta_B$ of politician B* | |
|---|---|---|---|
| | | 0 | 0.72 |
| *Initial tax rate* | 0 | $(3+\tau_A, 3+\tau_B)$ | $(3-c, 3)$ |
| $\theta_A$ *of politician A* | 0.72 | $(3, 3-c)$ | $(3, 3)$ |

**Figure 3. Reduced normal-form representation of the tax-policy stage with strict payoff-dominance implementation (SPDI)**

*Note:* The first entry in each cell is politician $A$'s payoff and the second is politician $B$'s payoff. Payoffs correspond to the expected office bonus plus transfers received from the elite voter, net of tax-revision costs and excluding the fixed politician earnings $e_P = 10$. Transfers $\tau_A$ and $\tau_B$ are paid only after a final tax-rate pair of $(0, 0)$. In the experiment, $c = 0.25$ in all treatments.

actions in the matrix are the politicians' initial tax rates, and the off-diagonal cells incorporate the continuation of the tax-setting procedure. Thus, it reflects that if one politician initially chooses 0 and the other chooses 0.72, the low-tax politician can reject the tax-rate pair, pay the revision cost $c$ to revise their tax rate, and the final tax-rate pair ends up being $(0.72, 0.72)$. Since SPDI transfers are paid only after a final tax-rate pair of $(0, 0)$, no transfer is paid in the off-diagonal cells.

The SPDI game has two strict pure-strategy Nash equilibria: $(0, 0)$ and $(0.72, 0.72)$. The low-tax equilibrium strictly payoff-dominates the high-tax equilibrium for the politicians, since each politician receives $3 + \tau_i$ rather than 3.[19] Hence, the main role of SPDI is that it makes coordinated low taxes a strict equilibrium that payoff-dominates the high-tax equilibrium for the politicians. A useful benchmark is the symmetric case, $\tau_A = \tau_B = \tau$. Any strictly positive transfer makes $(0, 0)$ a strict equilibrium, though very small transfers may give the low-tax equilibrium little behavioral pull. The split-the-difference benchmark introduced above can also be implemented under SPDI by setting $\tau = 9$. Conditional on a final tax pair of $(0, 0)$, this yields the same 9-point gain for the elite voter and each politician relative to the high-tax outcome. The difference from ILTR is that SPDI pays these transfers only when the politicians coordinate on low tax rates. Thus, the same split-the-difference amount is more selectively targeted under SPDI: the elite voter pays only when rent diversion succeeds.

### *Election-loss compensation*

Under ELC, the elite voter compensates a politician who chooses the low tax rate when the other politician chooses the high tax rate. Let $\kappa_i$ denote the compensation transfer paid to politician $i$ under ELC: that is, $t_{E \to i} = \kappa_i$ when politician $i$ chooses 0 and politician $-i$ chooses 0.72. Unlike ILTR, ELC does not reward every individual low-tax choice, and unlike SPDI, it

[19] The game also has a mixed-strategy equilibrium. In this equilibrium, $p^*_{A,0} = c/(c+\tau_B)$ and $p^*_{B,0} = c/(c+\tau_A)$, where $p^*_{i,0}$ is the probability that politician $i$ chooses the low tax rate. Politician $i$'s mixing probability depends on the transfer received by the other politician because it must make the other politician indifferent between the two tax rates. Hence, in the mixed equilibrium, larger transfers reduce the probability assigned to low initial tax rates. This inverse comparative static is a property of the mixed equilibrium.

| | | *Final tax rate $\theta_B$ of politician B* | |
|---|---|---|---|
| | | 0 | 0.72 |
| *Final tax rate $\theta_A$* | 0 | $(3, 3)$ | $(\kappa_A, 6)$ |
| *of politician A* | 0.72 | $(6, \kappa_B)$ | $(3, 3)$ |

**Figure 4. Reduced normal-form representation of the tax-policy stage with election-loss compensation (ELC)**

*Note:* The first entry in each cell is politician $A$'s payoff and the second is politician $B$'s payoff. Payoffs correspond to the expected office bonus plus transfers received from the elite voter, net of tax-revision costs and excluding the fixed politician earnings $e_P = 10$. A transfer $\kappa_i$ is paid to politician $i$ only when politician $i$ chooses a tax rate of 0 and the opponent chooses 0.72.

does not reward coordinated low tax rates. Instead, it rewards a politician for taking the elite voter's preferred position when doing so leads to an electoral loss.

Figure 4 shows the reduced tax-policy game under ELC. In this game, the threshold for compensation is 3 points, which is the expected office payoff a politician obtains by choosing 0.72 rather than 0 when the other politician chooses 0.72, thereby creating an electoral tie. Thus, when $\kappa_i > 3$, choosing the low tax rate is strictly preferred in the asymmetric cells of the reduced game. If both compensation transfers exceed the threshold, $\kappa_A > 3$ and $\kappa_B > 3$, the ELC game has two asymmetric strict pure-strategy Nash equilibria: $(0, 0.72)$ and $(0.72, 0)$. In each equilibrium, the low-tax politician loses the election and is compensated by the elite voter. These equilibria do not produce successful rent diversion because the high-tax politician wins and the implemented tax rate is 0.72. A zero winning tax rate occurs only if both politicians choose 0, which happens with positive probability in the mixed-strategy equilibrium. In that equilibrium, $q^*_{A,0} = \frac{\kappa_B - 3}{\kappa_B}$ and $q^*_{B,0} = \frac{\kappa_A - 3}{\kappa_A}$, where $q^*_{i,0}$ is the probability that politician $i$ chooses the low tax rate. Thus, ELC can make unilateral low-tax choices attractive, but it does not directly reward successful low-tax coordination, which makes it conceptually distinct from both ILTR and SPDI.

### 3.3. Quantal-response predictions

The analysis of ILTR, SPDI, and ELC illustrates why Nash equilibrium alone may be insufficient. ILTR yields a large set of transfers for which low tax rates constitute a strict equilibrium. Moreover, both SPDI and ELC have two pure-strategy equilibria and a mixed-strategy equilibrium. Thus, Nash equilibrium identifies the strategic possibilities created by each transfer rule, but it does not uniquely predict the likelihood of successful rent diversion or how it is affected by noisy behavior or by differing transfer amounts.

We therefore complement the equilibrium analysis with logit quantal-response equilibrium (QRE). The reason is not only to address equilibrium selection. Human decision makers often respond imperfectly but systematically to incentives: choices are noisy, yet choice errors are payoff-sensitive. Deviations from best responses are less frequent when they are costly and

more frequent when the payoff loss from deviating is small (see Goeree et al., 2016). This matters here because the three transfer rules change the payoff consequences of different tax choices. QRE allows us to trace how these different incentives affect behavior as choices range from nearly random to nearly exact best responses. This is especially useful for comparing the transfer rules, because they create different incentives for coordinated low-tax choices, unilateral low-tax choices, and high-tax deviations.

In a logit QRE, actions with higher expected payoffs are chosen with greater probability, but lower-payoff actions may still be chosen. The parameter $\lambda \geq 0$ measures decision precision. When $\lambda = 0$, politicians randomize uniformly across tax rates. As $\lambda$ increases, choice probabilities become more sensitive to differences in expected payoffs. As $\lambda \to \infty$, behavior approaches the limiting logit solution, which selects among Nash equilibria of the reduced tax-policy game.[20] QRE allows us to compare, for each transfer rule and transfer amount, how the likelihood of successful rent diversion and the elite voter's expected earnings vary with the level of decision noise. This is useful because ILTR, SPDI, and ELC all create incentives for low-tax choices, but they do so in different ways: ILTR rewards individual low-tax choices, SPDI rewards coordinated low-tax choices, and ELC compensates unilateral low-tax choices that lose the election.

Figure 5 plots the QRE-predicted probability that the winning tax rate is zero, $\Pr(\theta_w^\lambda = 0)$, as the precision parameter $\lambda$ ranges from 0 to 10. The three panels correspond to the transfer rules: ILTR, SPDI, and ELC. For each rule, we depict various symmetric transfer amounts. We illustrate a transfer rule's relevant threshold by plotting one transfer below it, one exactly at it, and one just above it. In addition, we show how outcomes change as transfers increase beyond this threshold by including three increasingly larger transfer amounts. Each panel also includes one asymmetric transfer with the same total cost as one of the symmetric transfers. When $\lambda = 0$, politicians randomize uniformly between the two tax rates, so all curves begin at $\Pr(\theta_w^\lambda = 0) = 0.25$. As $\lambda$ increases, choices become more sensitive to payoff differences, and the panels show how each transfer rule moves behavior toward or away from successful rent diversion.

Panel A reports predictions for ILTR. For this transfer rule, the relevant threshold for symmetric transfers is $t = 3$, the expected earnings a politician gives up by choosing the elite voter's preferred tax rate when their opponent chooses the high tax rate. If $t < 3$, the QRE path converges to the high-tax outcome as $\lambda$ increases, $\Pr(\theta_w^\lambda = 0) \to 0$. If $t = 3$, both tax rates are chosen with probability one-half for all $\lambda$, $\Pr(\theta_w^\lambda = 0) = 0.25$. If $t > 3$, the QRE path converges to the low-tax outcome, $\Pr(\theta_w^\lambda = 0) \to 1$.

The finite-$\lambda$ predictions provide additional insight beyond what is described by the equilibrium

[20] The QRE calculations follow McKelvey and Palfrey (1995, 1998). We computed the predictions using Gambit (Savani and Turocy, 2026).

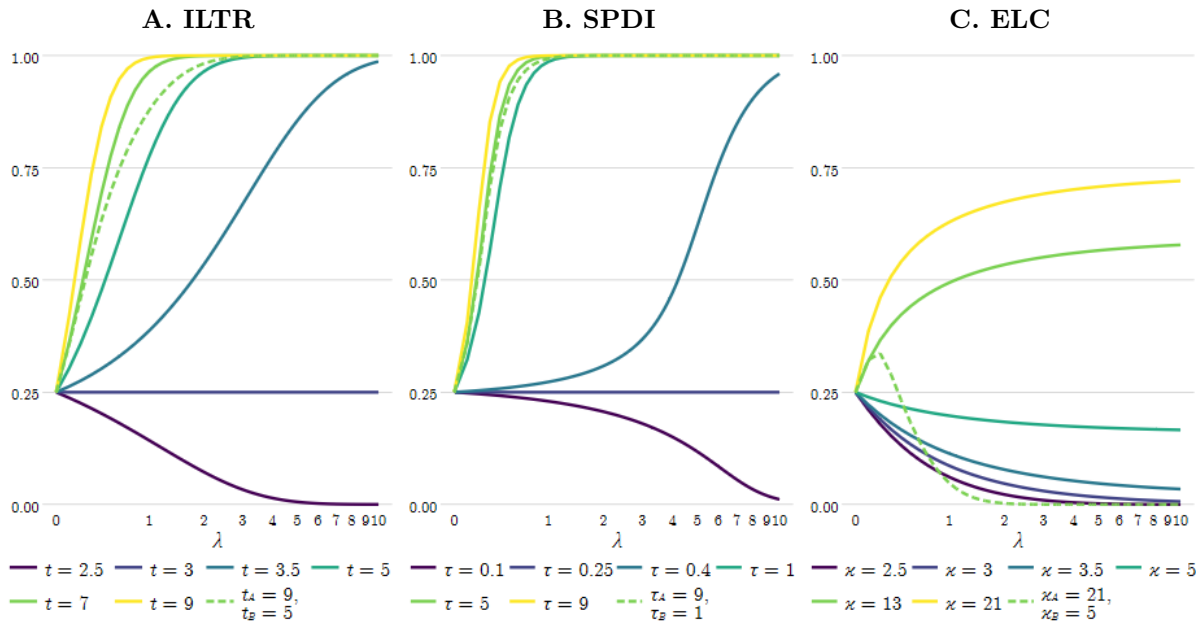


**Figure 5. QRE predictions for the probability of a zero winning tax rate,** $\Pr(\theta_w^\lambda = 0)$

*Notes:* The figure plots the QRE-predicted probability that the winning tax rate equals zero, $\Pr(\theta_w^\lambda = 0)$, as a function of the precision parameter $\lambda$. To make differences at low values of $\lambda$ easier to see, the horizontal axis is plotted using the transformation $\ln(\lambda + 1)$, with tick labels reported in the original $\lambda$ units. Predictions are calculated along the principal path of the logit QRE for the reduced games in Figures 2, 3, and 4. Panel A reports predictions for individual low-tax reward (ILTR), Panel B for strict payoff-dominance implementation (SPDI), and Panel C for election-loss compensation (ELC). Each panel includes several symmetric transfer amounts and one asymmetric transfer.

selected in the limit. Although all symmetric transfers above 3 eventually converge to the low-tax equilibrium, larger transfers make coordination on zero taxes more likely when behavior is still noisy. This follows directly from the payoff difference under ILTR. For politician $i$, choosing 0 rather than 0.72 changes their payoff by $t_i - 3$, so increasing $t_i$ makes the low tax rate more attractive at any finite value of $\lambda$.

Panel A also shows that the distribution of transfers across politicians matters. The asymmetric transfer $(t_A, t_B) = (9, 5)$ has the same total cost as the symmetric transfer $t = 7$ and therefore yields the same earnings for the elite voter conditional on successful rent diversion. However, the asymmetric curve lies below the symmetric $t = 7$ curve. Successful rent diversion requires both politicians to choose 0. Holding $t_A + t_B$ fixed, an asymmetric transfer raises the incentive for one politician but lowers it for the other, reducing the probability that the politicians coordinate on the low tax rate. Thus, for a fixed total ILTR transfer, symmetric transfers are more effective at generating successful rent diversion than asymmetric transfers.

Panel B reports the corresponding predictions for SPDI. Under SPDI, the key comparison is between the transfer $\tau$ and the revision cost $c = 0.25$. If $\tau < c$, the QRE path converges to the high-tax equilibrium; if $\tau = c$, the probability of a zero winning tax rate remains 0.25; and if $\tau > c$, the QRE path converges to the low-tax equilibrium. Hence, SPDI can support

low-tax coordination with much smaller transfers than ILTR. This is because SPDI rewards the coordinated low-tax outcome, whereas ILTR must make low tax rate choices attractive even when the other politician chooses the high tax rate. For politician $i$, the relevant SPDI payoff difference is $\beta_i^0\tau_i - (1-\beta_i^0)c$, where $\beta_i^0$ is politician $i$'s belief that the other politician chooses 0. A higher $\tau_i$ makes the low tax rate more attractive whenever $i$ assigns positive probability to the other politician choosing 0. As in ILTR, larger transfers above the threshold matter at finite values of $\lambda$, and the asymmetric transfer $(\tau_A, \tau_B) = (9, 5)$ lies below the symmetric transfer with the same total cost, $\tau = 7$. Compared with ILTR, however, SPDI reaches high probabilities of successful rent diversion at substantially lower transfer levels.

Panel C shows that ELC produces a different pattern. Under symmetric transfers, $\kappa_A = \kappa_B = \kappa$, the relevant threshold is again $\kappa = 3$. If $\kappa \leq 3$, the transfer is not large enough to make unilateral low-tax choices attractive, and the QRE path converges to the high-tax outcome. If $\kappa > 3$, the QRE path converges to the mixed equilibrium of the reduced ELC game. The limiting probability of a zero winning tax rate is $\Pr(\theta_w = 0) = (\frac{\kappa-3}{\kappa})^2$. Thus, larger transfers make successful rent diversion more likely, but even in the limit, the probability of a zero winning tax rate remains bounded away from one for any finite $\kappa$. This is the key contrast with ILTR and SPDI, where transfers above their respective thresholds produce convergence to zero taxes with probability one. The asymmetric ELC example, $(\kappa_A, \kappa_B) = (21, 5)$, illustrates a related limitation. A large compensation transfer to one politician can make that politician likely to choose the low tax rate, but it does not make coordinated low taxes likely. As decision precision increases, the QRE path can instead converge to an asymmetric outcome in which one politician chooses the low tax rate, the other chooses the high tax rate, and successful rent diversion vanishes in the limit.

Figure 6 translates the predicted QRE probabilities into the elite voter's expected earnings. It shows how these earnings vary with the symmetric transfer amount under each transfer rule. A higher transfer can increase the elite voter's expected earnings by making successful rent diversion more likely, but it also reduces their earnings when transfers are paid. The figure illustrates this tradeoff for ILTR, SPDI, and ELC at four different values of $\lambda$.

Panel A shows the elite voter's expected earnings under ILTR. When transfers are below the threshold of 3 points, politicians are unlikely to choose the low tax rate, so the elite voter rarely makes transfers, and earnings approach those under high tax rates, 33 points. Once transfers exceed the threshold, higher transfers make low-tax choices more likely, so expected earnings initially rise. But once low tax rates are sufficiently likely, further increases in $t$ mainly raise payments to politicians and reduce the elite voter's earnings. The earnings-maximizing transfer is therefore typically interior. The panel also shows that this transfer decreases as $\lambda$ increases as a small transfer above the threshold is enough to make low tax rates attractive when there is

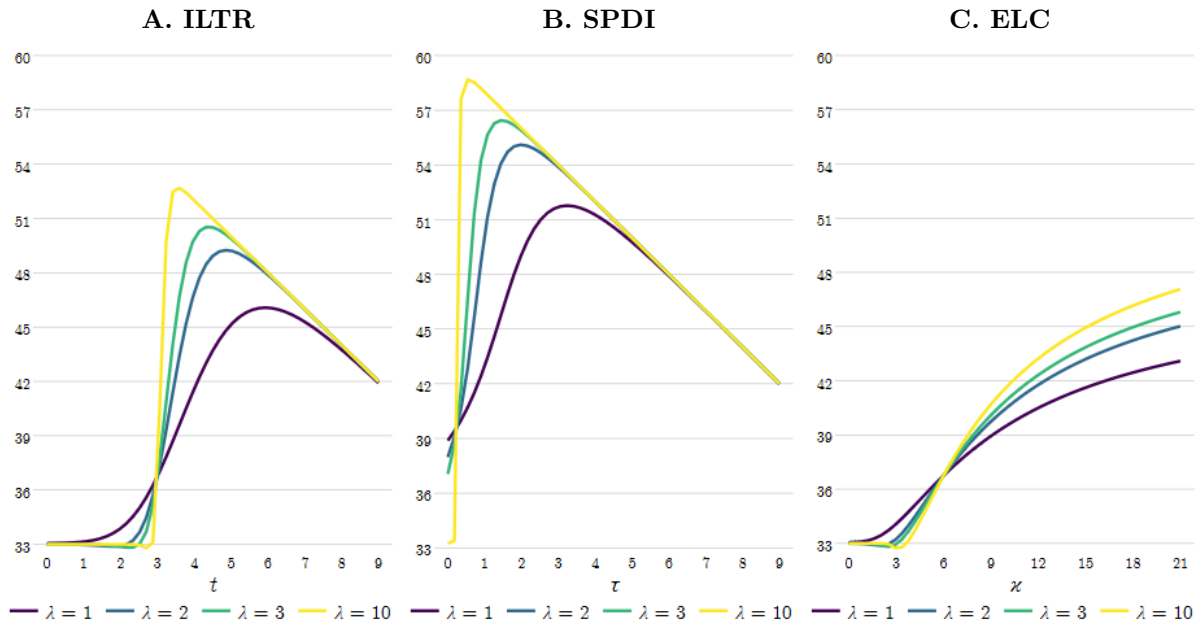


**Figure 6. QRE predictions for the elite voter's expected earnings, $E(\pi_E)$**

*Notes:* The figure plots the QRE-predicted expected earnings of the elite voter, $E(\pi_E)$, as a function of the symmetric transfer amount. Predictions are calculated along the principal path of the logit QRE for the reduced games in Figures 2, 3, and 4. Panel A reports predictions for individual low-tax reward (ILTR), Panel B for strict payoff-dominance implementation (SPDI), and Panel C for election-loss compensation (ELC). Each panel includes the predictions for four different values of the precision parameter $\lambda$.

little decision noise.[21] Thus, the split-the-difference transfer $t = 9$ is a useful fairness benchmark and a highly effective transfer, but it is not generally the elite voter's optimal transfer under QRE.

Panel B shows the analogous expected earnings under SPDI. The same cost–benefit logic applies, but the tradeoff is more favorable to the elite voter in two ways. First, the relevant threshold is the revision cost, $c = 0.25$, rather than the foregone expected office payoff of 3 points. Second, SPDI pays transfers only after coordinated low tax rates, so transfer payments are made only when rent diversion succeeds. As a result, expected earnings rise sharply once transfers exceed the revision-cost threshold, and the earnings-maximizing transfer is substantially lower than under ILTR. Compared with ILTR, SPDI therefore reaches high expected earnings with smaller transfers.[22]

[21] For symmetric ILTR, let $p_\lambda(t)$ denote the QRE probability that a politician chooses the low tax rate when the transfer for a low tax rate is $t$. Then $p_\lambda(t) = 1/(1 + \exp[-\lambda(t-3)])$, and the elite voter's expected earnings are $\Pi_E(t;\lambda) = 33 + 27p_\lambda(t)^2 - 2tp_\lambda(t)$. The second term is the expected gain from both politicians choosing 0, and the third term is the expected transfer payment to politicians who choose 0. For $\lambda > 0$, an interior optimum satisfies $\lambda[1 - p_\lambda(t)]\,[27p_\lambda(t) - t] = 1$. This condition portrays the tradeoff in Panel A: a larger transfer increases the probability that politicians choose low tax rates, but also increases the payment made whenever a politician chooses 0.

[22] For symmetric SPDI, let $p_\lambda(\tau)$ denote the QRE probability that a politician chooses the low tax rate when the elite voter transfers $\tau$ to each politician after a final tax-rate pair of $(0, 0)$. Along the principal branch of the logit QRE, the symmetric choice probability satisfies $p_\lambda(\tau) = 1/(1 + \exp[-\lambda((\tau + c)p_\lambda(\tau) - c)])$, and the elite voter's expected earnings are $\Pi_E(\tau;\lambda) = 33 + p_\lambda(\tau)^2(27 - 2\tau)$. Equivalently, the expected transfer cost

Panel C shows the elite voter's expected earnings under ELC. The pattern differs from ILTR and SPDI because compensation is paid in asymmetric outcomes: one politician chooses 0, the other chooses 0.72, the high-tax politician wins, and rent diversion fails. Near the threshold, this can lower expected earnings because the elite voter may pay compensation without obtaining a zero winning tax rate. As transfers increase further, however, both politicians become more likely to choose low tax rates, raising the probability of successful rent diversion and increasing expected earnings. Unlike ILTR and SPDI, larger ELC transfers can continue to increase the elite voter's expected earnings even at high values of $\lambda$.[23]

Taken together, the QRE analysis highlights how the three transfer rules differ in their ability to support successful rent diversion. ILTR is the simplest rule because it simply rewards each politician's low-tax choice and can generate low winning tax rates when transfers exceed the 3-point threshold. However, it is costly because transfers are paid even in asymmetric outcomes where rent diversion fails. SPDI is more targeted: it rewards only the joint outcome required for successful rent diversion and can generate high probabilities of low-tax coordination with substantially smaller transfers. ELC can make unilateral low-tax choices attractive, but even large symmetric transfers leave the limiting probability of a zero winning tax rate below one. Thus, among the three rules, SPDI with symmetric transfers provides the most cost-efficient way for the elite voter to sustain coordinated low-tax outcomes.

### 3.4. Beliefs, reciprocity, and treatment-level predictions

The preceding analysis treats the elite voter's transfer rule as given. For such a rule to affect tax-rate choices, politicians must expect reciprocity: they must believe that the elite voter is sufficiently likely to reward the relevant low-tax choice with a transfer. Therefore, the incentive to choose a low tax rate depends on the size of the potential transfer and on beliefs about whether the elite voter will reciprocate. For SPDI and ELC, it also depends on beliefs about the other politician's tax choice, since the transfer is paid only in particular tax-rate contingencies.

To make the belief channel explicit, consider a self-interested politician in the reduced game and let $\beta_i^0$ denote politician $i$'s belief that the other politician chooses the low tax rate. Under ILTR, let $\gamma_i^{ILTR}$ denote politician $i$'s belief that the elite voter will reciprocate by transferring $t_i$ to $i$ when $i$ chooses 0. Choosing 0 rather than 0.72 then gives $i$ an expected payoff gain

is $2\tau p_\lambda(\tau)^2$, rather than $2tp_\lambda(t)$ as under ILTR, because SPDI transfers are paid only when both politicians choose 0. For $\lambda > 0$, an interior optimum satisfies $\lambda p_\lambda(\tau)(1-p_\lambda(\tau))(27+c-\tau) = 1$.

[23] For symmetric ELC, let $q_\lambda(\kappa)$ denote the QRE probability that a politician chooses the low tax rate when the compensation transfer is $\kappa$. Then, $q_\lambda(\kappa) = 1/(1+\exp[-\lambda(\kappa - 3 - \kappa q_\lambda(\kappa))])$, and the elite voter's expected earnings are $\Pi_E(\kappa;\lambda) = 33 + 27q_\lambda(\kappa)^2 - 2\kappa q_\lambda(\kappa)(1-q_\lambda(\kappa))$. The first term is the elite voter's earnings in the zero-transfer benchmark, the second term is the expected gain from both politicians choosing 0, and the third term is the expected transfer paid in asymmetric outcomes. In the limiting mixed equilibrium for $\kappa > 3$, the elite voter's expected gain relative to the zero transfer benchmark is $21 - 144/\kappa + 243/\kappa^2$, which is increasing for $\kappa > 27/8$.

of $\gamma_i^{ILTR} t_i - 3$. Under SPDI, let $\gamma_i^{SPDI}$ denote politician $i$'s belief that the elite voter will reciprocate by transferring $\tau_i$ to $i$ after a final tax-rate pair of $(0, 0)$. Choosing 0 rather than 0.72 then gives $i$ an expected payoff gain of $\beta_i^0 \gamma_i^{SPDI} \tau_i - (1 - \beta_i^0)c$. Under ELC, let $\gamma_i^{ELC}$ denote politician $i$'s belief that the elite voter will reciprocate by transferring $\kappa_i$ to $i$ when $i$ chooses 0 and the other politician chooses 0.72. Choosing 0 rather than 0.72 then gives $i$ an expected payoff gain of $(1 - \beta_i^0)\gamma_i^{ELC} \kappa_i - 3$. In all three cases, transfers affect tax-rate choices only if politicians believe that the elite voter is sufficiently likely to reciprocate. Under SPDI and ELC, politicians must also believe that the relevant tax-rate contingency is sufficiently likely. The treatment-level predictions, therefore, depend on how the matching and information structures shape these beliefs.

Reciprocation by the elite voter can arise through different channels. In a one-shot interaction, positive transfers require the elite voter to be motivated by reciprocity or other social preferences (Fehr and Charness, 2025), or to make noisy decisions that sometimes result in positive transfers following favorable tax choices. In finitely repeated interactions, reciprocation can also be sustained by reputation (Kreps et al., 1982; Camerer and Weigelt, 1988). A self-interested elite voter may make transfers in earlier periods if doing so affects politicians' later tax-rate choices. This reputation-based interpretation is consistent with the view that special-interest influence often relies on long-term relationships rather than one-shot exchanges (e.g., Snyder, 1992; Kroszner and Stratmann, 1998, 2005). Whether this reputational channel is available depends on which histories are observed and whether those histories can be linked to the same individuals across periods (for similar theoretical arguments in electoral contexts, see Aragonès et al., 2007; Großer et al., 2013).

In *Two-sided Reputation*, the same elite voter and the same two politicians interact repeatedly, and all participants observe the complete history of final tax rates, election outcomes, and transfers. Because these histories are linked to persistent elite-voter and politician identities, politicians can condition current tax choices on their previous interactions with the same elite voter, and the elite voter can condition transfers on the behavior of the same politicians over time. Hence, beliefs about coordinated low-tax choices and beliefs about the elite voter's willingness to reciprocate can be supported by individual-specific histories. This is the most favorable environment for sustaining beliefs about both coordinated low-tax choices and elite-voter reciprocity.

In *Elite Reputation*, the elite voter is fixed and publicly identifiable, while politicians rotate and have no permanent public IDs. All potential politicians, whether active or inactive, observe the history of final tax rates, election outcomes, and transfers. They therefore observe directly how the same elite voter has transferred following previous tax-rate pairs. This creates a direct one-sided reputation channel: the elite voter can develop a public reputation for rewarding favorable tax rates, but individual politicians cannot develop persistent public histories because

their identities are not carried across periods.

In *No Reputation*, neither the elite voter nor the politicians have persistent public identities. Transfers are observed by the current voters and active politicians, but inactive potential politicians do not observe them. Transfers may still affect behavior if politicians expect reciprocity in the current period because elite voters have social preferences or make noisy but payoff-sensitive choices. However, there is neither a complete transfer record available to the entire politician pool nor a persistent elite-voter identity to which such a record could be attached. The treatment therefore provides substantially less support for individual reputation than *Elite Reputation*.

Finally, in *No Transfers*, transfers are absent. The treatment preserves the repeated matching and public identities of *Two-sided Reputation*, but removes the elite voter's ability to reward politicians after the election. Therefore, Proposition 1 predicts very limited rent diversion. Low-tax outcomes could arise from errors or social preferences, but not from the reciprocal reputation channels available in the other treatments.

These arguments imply two main predictions. First, transfers should be directed toward low final tax rates, but the transfer rule matters. ILTR may arise because it is simple and intuitive: it rewards each politician's own low-tax choice. It can also implement the split-the-difference fairness benchmark when both politicians choose 0. However, ILTR requires relatively large transfers and pays even in asymmetric outcomes where low-tax coordination fails. SPDI should be the most reliable transfer rule for sustained rent diversion because it directly rewards coordinated low taxes. It can implement the same split-the-difference benchmark, but pays transfers only when the joint low-tax outcome is achieved. ELC may also occur, especially as a way to compensate a politician who loses the election because they chose the elite voter's preferred tax rate, but it is less likely to sustain successful rent diversion because it does not directly reward the joint low-tax outcome.

It should be most likely in *Two-sided Reputation*, where complete public histories are linked to the same elite voter and the same politicians. It should be less likely in *Elite Reputation*, where all potential politicians observe the continuing elite voter's transfer history but politicians themselves rotate without persistent IDs. Successful rent diversion should be even less likely in *No Reputation*, where transfers are possible but identities do not persist and inactive politicians do not observe transfers, and least likely in *No Transfers*, where politicians cannot be rewarded with post-election transfers.

This gives us our second proposition.

**Proposition 2 (Transfer strategies and rent diversion):**
*When transfers are feasible, strict payoff-dominance implementation (SPDI) is expected to occur more often than election-loss compensation (ELC). The expected frequency of successful rent diversion, defined as a zero winning tax rate, is ranked as follows:*

*Two-sided Reputation* > *Elite Reputation* > *No Reputation* > *No Transfers.*

*The ranking reflects the availability of transfers and the extent to which histories of tax rates, elections, and transfers are commonly observed and linked to the same individuals over time.*

# 4. Results

We now present the experimental results. We have eight societies in each transfer treatment—*Two-sided Reputation*, *Elite Reputation*, and *No Reputation*—and six societies in *No Transfers*. Each society had four voters. In *Two-sided Reputation* and *No Transfers*, each society had two politicians who remained fixed across periods. In *Elite Reputation* and *No Reputation*, each society had four potential politicians, two of whom were randomly selected to be active in each period.[24]

Before analyzing tax rates and transfer choices, we first verify that voting behaved as intended. Among elections in which the two politicians chose different final tax rates, the politician with the higher tax rate won 96.1% of the time. The corresponding rates are 100.0% in *No Transfers*, 92.6% in *No Reputation*, 94.1% in *Elite Reputation*, and 100.0% in *Two-sided Reputation*. Thus, higher final tax rates led to electoral success in the overwhelming majority of unequal-tax elections in all treatments. This allows us to interpret unilateral low final tax rates as electorally costly in the analyses below. We first examine tax rates, then analyze transfer choices and how they are conditioned on politicians' final tax rates, and finally study society-level heterogeneity and earnings.

## 4.1. Tax rates

Figure 7 shows the distributions of final and winning tax rates by treatment.[25] The maximum tax rate, 72%, remains common, especially in *No Transfers* and *No Reputation*. However, the distribution shifts markedly toward lower tax rates when transfers are available and the reputational environment is stronger. This shift is most striking in *Two-sided Reputation*. In

[24] Random rematching without permanent public IDs is intended to remove individual reputation building. This is consistent with Camera and Casari (2009), who find that, with random rematching in groups of four, anonymous public histories do not increase cooperation relative to private monitoring, whereas histories linked to individual identities do. It is also consistent with Duffy and Ochs (2009), who find little evidence that payoff or action histories generate cooperative norms under random matching.

[25] Although the tax policy stage allowed politicians to reject the current tax-rate pair and open another round, the process generally ended after the initial round. The mean number of tax-setting rounds was 1.03 in *No Transfers*, 1.35 in *No Reputation*, 1.28 in *Elite Reputation*, and 1.29 in *Two-sided Reputation*. Brunner–Munzel tests using society means indicate significantly more rounds in each transfer treatment than in *No Transfers* ($p < 0.008$), but no significant differences among the three transfer treatments ($p > 0.741$). Thus, the availability of transfers generated somewhat more reconsideration of tax rates, but the difference in magnitude was modest.

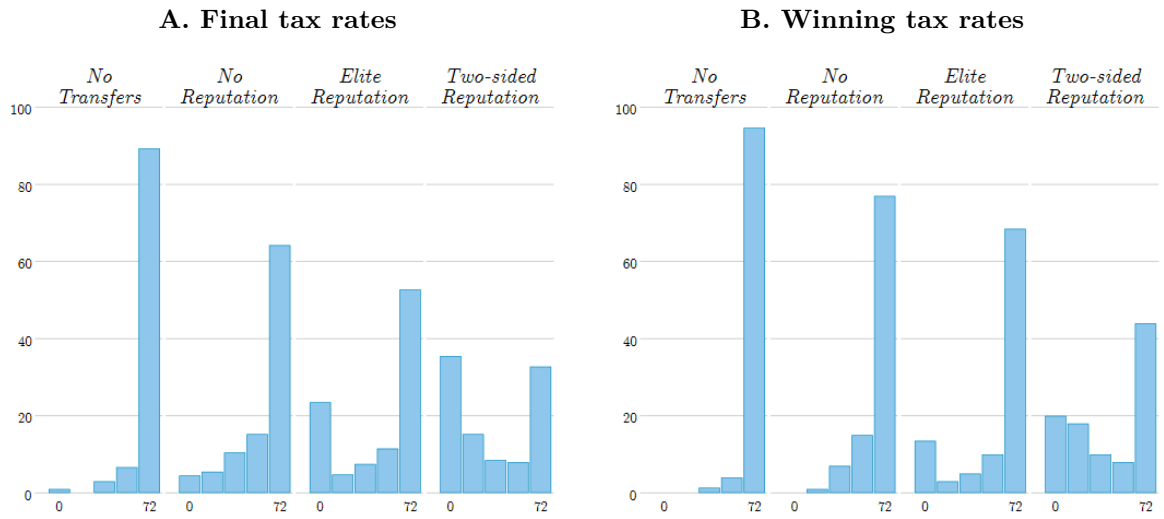


**Figure 7. Distribution of tax rates by treatment**

*Notes:* The figure shows the distribution of tax rates in each treatment. Panel A corresponds to all final tax rates, and Panel B to winning tax rates.

this treatment, the modal final tax rate is no longer 72% but 0%: final tax rates equal 0% in 35.50% of observations and 72% in 32.75% of observations. For winning tax rates, 72% remains the modal value across all treatments, but Panel B shows the same movement toward lower tax rates as the reputational environment strengthens.

The treatment means show the same pattern. In *No Transfers*, final and winning tax rates are close to the maximum: the mean final tax rate is 69.0%, and the mean winning tax rate is 70.8%. With transfers, both averages are lower. In *No Reputation*, the mean final tax rate is 59.3% and the mean winning tax rate is 66.2%. These means fall to 47.7% and 57.1% in *Elite Reputation*, and to 33.7% and 42.8% in *Two-sided Reputation*. Thus, the descriptive pattern is consistent with Proposition 2: tax rates are highest when transfers are absent and, among the treatments with transfers, lowest when the reputational environment is strongest.

We test these treatment differences using nonparametric tests with society means as the unit of observation.[26] Since Proposition 2 predicts an ordering, the most direct test is whether tax rates decrease as we move from *No Transfers* to *No Reputation*, *Elite Reputation*, and *Two-sided Reputation*. The Jonckheere–Terpstra test strongly supports this descending order for both final and winning tax rates ($p < 0.001$ for both). The same ordered prediction is also supported when the test is restricted to the three transfer treatments: *Two-sided Reputation* $<$ *Elite Reputation* $<$ *No Reputation*. For this restricted comparison, the Jonckheere–Terpstra

[26] Our primary test is the Jonckheere–Terpstra test, a nonparametric test for ordered alternatives across independent samples (Terpstra, 1952; Jonckheere, 1954). The test is similar to the Kruskal–Wallis test but uses the predicted ordering of the treatments. We report one-sided $p$-values for the descending ordered alternative. For pairwise comparisons, we use Brunner–Munzel tests (Brunner and Munzel, 2000). The Brunner–Munzel test is a rank-based two-sample test of stochastic equality that is appropriate when the two samples may differ in dispersion or distributional shape.

test gives $p = 0.005$ for final tax rates and $p = 0.008$ for winning tax rates.

Pairwise comparisons refine these results. Relative to *No Transfers*, each transfer treatment has significantly lower final tax rates ($p < 0.001$ in all three comparisons). The corresponding differences in winning tax rates are also significant ($p < 0.013$ in all three comparisons). Among the transfer treatments, the strongest pairwise difference is between *No Reputation* and *Two-sided Reputation*: final tax rates and winning tax rates are both significantly lower in *Two-sided Reputation* ($p = 0.009$ and $p = 0.003$, respectively). The differences between *No Reputation* and *Elite Reputation*, and between *Elite Reputation* and *Two-sided Reputation*, are in the predicted direction but are not statistically significant at conventional levels ($p > 0.135$).

We summarize these findings as our first two results.

**Result 1 (The availability of transfers lowers tax rates):**
*Final and winning tax rates are lower when transfers are available than when transfers are absent.*

**Result 2 (Tax rates fall with the strength of the reputational environment):**
*Among treatments with transfers, final and winning tax rates decrease as histories become more closely linked to the same individuals. Tax rates are lowest in Two-sided Reputation, followed by Elite Reputation, and highest in No Reputation.*

### 4.2. Transfers

Figure 8 shows the distribution of individual transfers from the elite voter to politicians in the three treatments in which transfers are available. Zero transfers remain the modal outcome in all three treatments, but positive transfers become much more frequent when histories are more closely linked to the same individuals. In *No Reputation*, only 19.5% of transfers are positive. This share rises to 47.3% in *Elite Reputation* and to 56.5% in *Two-sided Reputation*. The right tail of the distribution also thickens: larger transfers are substantially more common in *Elite Reputation* and especially in *Two-sided Reputation* than in *No Reputation*.

The treatment means follow the same pattern. Average transfers are 0.83 points in *No Reputation*, 2.27 points in *Elite Reputation*, and 3.60 points in *Two-sided Reputation*. Thus, both the frequency and the size of transfers increase as the design provides more scope for individual-specific reputations: *No Reputation* < *Elite Reputation* < *Two-sided Reputation*.

We test this ordering using the same nonparametric approach as above, with society means as the unit of observation. The Jonckheere–Terpstra test strongly supports the predicted increasing ordering of transfers across the three transfer treatments ($p < 0.001$). Pairwise Brunner–Munzel tests refine this result. Transfers differ significantly when comparing *No Reputation* to *Elite Reputation* ($p = 0.049$) and to *Two-sided Reputation* ($p < 0.001$). The difference between *Elite Reputation* and *Two-sided Reputation* is also in the predicted direction, although it is

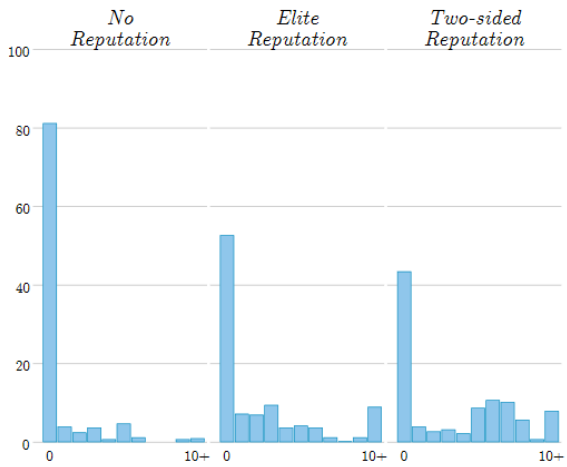


**Figure 8. Distribution of per-period transfers by treatment**

*Notes:* The figure shows the distribution of per-period transfers in each treatment where transfers are available. The rightmost bin, labeled 10+, combines all transfers of at least 10 points.

not statistically significant at conventional levels ($p = 0.109$). These findings give us our third result.

**Result 3 (Transfers rise with the strength of the reputational environment):** *Among treatments with transfers, elite voters transfer more often and in larger amounts when histories are more closely linked to the same individuals. Transfers are largest and most frequent in Two-sided Reputation, followed by Elite Reputation, and smallest and least frequent in No Reputation.*

We next examine how transfer choices depend on the final tax rates chosen by the two politicians. This analysis links the observed transfer choices to the transfer patterns studied in Section 3. The theoretical transfer rules are not directly observed. What we observe is whether the elite voter transfers to a given politician and, conditional on doing so, the amount transferred. The different rules imply distinct patterns across final tax-rate profiles. ILTR predicts transfers to politicians who choose low final tax rates, regardless of the other politician's final tax rate. SPDI predicts especially high transfers when both politicians choose low final tax rates. ELC predicts transfers to a politician who chooses a low final tax rate while the other chooses a high final tax rate. We therefore estimate how transfers vary with the receiving politician's final tax rate, the other politician's final tax rate, and the interaction between the two.

Transfer choices have two features that are important for the empirical specification. First, there is a large mass at zero: elite voters often make no transfer to a politician. Second, positive transfers are right-skewed. We therefore estimate a hurdle model (Cragg, 1971). The first equation is a logit model for whether the elite voter makes a positive transfer to a politician. The second equation is a linear model for the log amount transferred, conditional on a positive transfer. This specification allows the extensive margin of transfers and the intensive margin of

positive transfers to depend differently on politicians' final tax rates.[27]

The explanatory variables are chosen to align with the theoretical framework. In each equation, we include treatment indicators interacted with the receiving politician's final tax rate, the other politician's final tax rate, and the interaction between the two final tax rates. This specification allows us to distinguish patterns consistent with the different transfer rules. Under ILTR, the transfer depends solely on whether the receiving politician chose a low final tax rate. Under SPDI, transfers should be highest when both politicians chose low final tax rates. Lastly, under ELC, transfers should be high when the receiving politician chose a low final tax rate and the other politician chose a high final tax rate. Therefore, allowing the interaction between tax rates lets us distinguish transfers for individual low tax rates, transfers for coordinated low tax rates, and compensation for unilateral low tax rates.

Both equations include elite-voter random effects to account for repeated observations of the same elite voter's transfer choices, which may reflect persistent unobserved heterogeneity. Some elite voters may be systematically more willing to spend points to induce lower tax rates, irrespective of the observed final tax rates. We allow the random effects to be correlated across the two equations, so unobserved heterogeneity among elite voters can affect both the intensive and extensive margins of transfers. Some elite voters may be more likely to transfer at all and, conditional on transferring, may transfer larger amounts. We cluster standard errors at the society level.

Because the coefficients include treatment interactions and an interaction between the two politicians' final tax rates, they are difficult to interpret directly. Therefore, we use the estimated model to compute predicted transfers for the four extreme final tax-rate pairs: $(72, 72)$, $(0, 72)$, $(72, 0)$, and $(0, 0)$. These pairs correspond to the cells of the reduced tax policy games in Section 3 and provide a straightforward way to assess whether observed transfer choices resemble ILTR, SPDI, ELC, or a combination of the three. The full hurdle estimates are reported in Appendix C.

Table 3 reports predicted transfers for the four final tax-rate pairs corresponding to the reduced tax policy games. The table shows a clear and robust relationship between transfers and the receiving politician's final tax rate. In every treatment, predicted transfers are substantially larger when the receiving politician chooses the elite voter's preferred final tax rate rather than the majority voters' preferred final tax rate. This pattern holds irrespective of the other politician's choice. If we calculate the increase in transfers from choosing a final tax rate of 0%

[27] We model positive transfers in logs because their distribution is right-skewed and the log specification provides a better fit of the data. Since information criteria are not directly comparable across models estimated on transfers and on log transfers, we apply the standard Jacobian adjustment to express the log-transfer likelihood on the original transfer scale. After this adjustment, the log specification yields lower information criteria than the non-log specification: AIC = 3397.0 and BIC = 3514.1, compared with AIC = 3661.1 and BIC = 3778.2. Because we use log transfers, we apply a smearing correction when estimating predicted transfers (Duan, 1983).

**Table 3. Predicted transfers by final tax-rate pairs**

*Note:* The table reports predicted transfers from the elite voter, estimated using a hurdle model with a logit equation for whether the elite voter makes a positive transfer and a linear equation for the amount transferred (in logs). Both equations include treatment indicators interacted with the receiving politician's final tax rate, the other politician's final tax rate, and their interaction. The model includes elite-voter random effects in both equations and clusters standard errors at the society level. The details are described in the text. Each cell reports the predicted transfer from the elite voter to a given politician for the indicated combination of final tax rates. Standard errors are in parentheses.

| Final tax rate of receiving politician | Final tax rate of other politician | *No Reputation* | *Elite Reputation* | *Two-sided Reputation* |
|---|---|---|---|---|
| 72% | 72% | 0.18 | 1.02 | 1.49 |
| | | (0.10) | (0.27) | (0.76) |
| 72% | 0% | 0.45 | 0.98 | 0.06 |
| | | (0.28) | (0.34) | (0.08) |
| 0% | 72% | 2.61 | 3.58 | 7.42 |
| | | (1.03) | (0.99) | (1.59) |
| 0% | 0% | 3.94 | 4.16 | 5.10 |
| | | (1.14) | (1.10) | (0.90) |

instead of 72%, we find that this increase equals 3.50 points in *No Reputation*, 3.18 points in *Elite Reputation*, and 5.04 points in *Two-sided Reputation* when the other politician chooses 0%. When the other politician chooses 72%, the corresponding increase equals 2.43 points in *No Reputation*, 2.56 points in *Elite Reputation*, and 5.93 points in *Two-sided Reputation*. Wald tests reject the equality of transfers to low-tax and high-tax politicians in every treatment, both when the other politician's final tax rate is 0% ($p < 0.008$ across all three treatments) and when it is 72% ($p < 0.020$ across all three treatments). Thus, elite voters systematically reward politicians who choose low final tax rates.

This pattern is closest to the logic behind ILTR. Transfers are directed toward politicians who choose the elite voter's preferred final tax rate, regardless of whether the other politician also chooses a low final tax rate. This does not mean that elite voters literally follow ILTR as a rule. Rather, the estimates show that the receiving politician's own final tax rate is the primary determinant of transfer choices. By contrast, we find little evidence that transfers are concentrated solely in the coordinated low-tax outcome, as in SPDI, or solely in the unilateral low-tax outcome, as in ELC. In other words, the additional transfer associated with choosing a low final tax rate is statistically similar across the other politician's two final tax rates.

The magnitude of these increases helps link transfers to the treatment differences in tax rates. Under ILTR, transfers should exceed the threshold of 3 points to incentivize politicians to prefer the low final tax rate to the high final tax rate in the reduced game. In *No Reputation* and *Elite Reputation*, the estimated increase in transfers from choosing 0% rather than 72% is close to this threshold. In *Two-sided Reputation*, the corresponding increases are clearly above the

threshold. This helps explain why all three transfer treatments display a similar qualitative pattern in transfer choices, while the reduction in winning tax rates is much larger in *Two-sided Reputation*. The reward for choosing a low final tax rate appears strongest precisely in the treatment in which tax rates fall the most.

There is also suggestive evidence of ELC-like behavior in *Two-sided Reputation*. When the receiving politician chooses 0%, and the other politician chooses 72%, the predicted transfer is 7.42 points, which is noticeably higher than the transfer of 5.10 points when both politicians choose 0%. The unilateral choice of a low tax rate is the ELC contingency: the receiving politician chooses the elite voter's preferred final tax rate even though the other politician chooses the electorally attractive high tax rate. The large transfer in this case suggests that, in *Two-sided Reputation*, elite voters may provide additional compensation when a low final tax rate is electorally costly. This interpretation should be treated cautiously, however, because the main statistical pattern is not that transfers are concentrated only in the unilateral low-tax profile. Politicians who choose 0% also receive substantial transfers when both politicians choose 0%. Thus, the evidence is best summarized as a broad reward for low final tax rates, with suggestive evidence of additional election-loss compensation in *Two-sided Reputation*.

Taken together, Table 3 suggests that elite voters use transfers primarily to reward politicians for choosing low final tax rates. This pattern appears in all three transfer treatments, but it is much stronger in *Two-sided Reputation*. The estimates, therefore, help connect the earlier treatment-level findings: transfers are more frequent and larger when individual-specific histories are stronger, and those transfers are directed toward the final tax rates that favor the elite voter. As a result, winning tax rates decline much more in *Two-sided Reputation* than in the other two transfer treatments.

In Appendix C, we show that this conclusion is not sensitive to the specific hurdle specification used in Table 3. These results are qualitatively unchanged when positive transfers are modeled in levels rather than in logs, and when we add controls for whether the receiving politician won the election, the politician label, and the period number. Across these specifications, transfers remain primarily directed toward politicians who choose low final tax rates, with the largest rewards in *Two-sided Reputation*. We summarize these findings as the next result.

**Result 4 (Elite voters independently reward politicians who choose low tax rates):** *Elite voters transfer substantially more to politicians who choose low final tax rates. This pattern holds whether the other politician chooses a low or high final tax rate, and is therefore most closely aligned with a broad reward for individual low final tax rates. The reward is largest in Two-sided Reputation, where transfers also suggest an additional election-loss compensation component.*

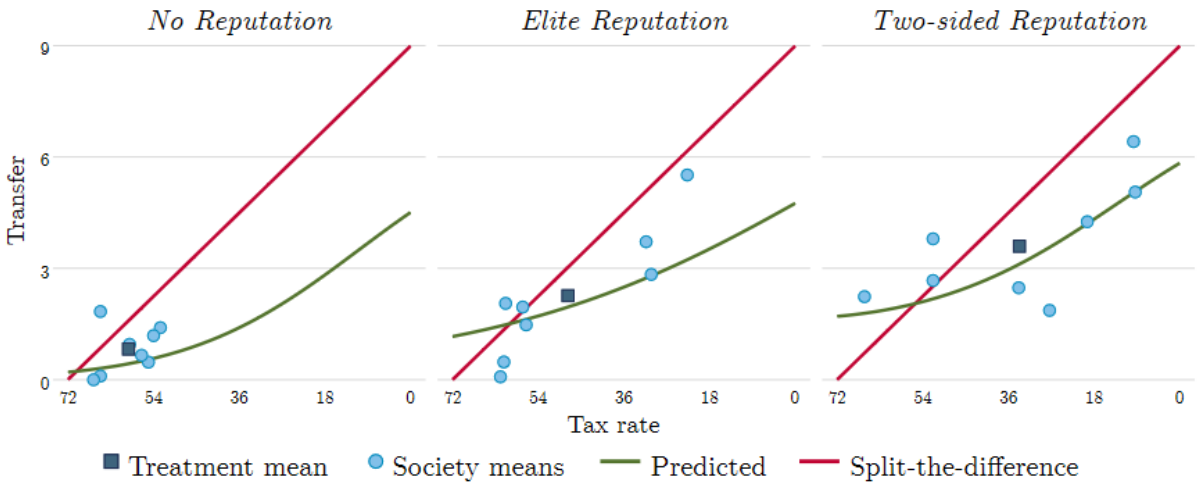


**Figure 9. Heterogeneity in tax rates and transfers across societies**

*Notes:* The blue circles show the mean winning tax rate and mean transfer to a politician in each society. The dark blue square shows the corresponding treatment mean. The split-the-difference line gives the transfer that splits the elite voter's gross gain from lower tax rates equally among the elite voter and the two politicians. The predicted line shows the estimated transfer when the two politicians choose the same final tax rate, based on the hurdle model estimated in Subsection 4.2.

### 4.3. Society-level heterogeneity in rent diversion

The treatment averages in the previous subsections mask substantial heterogeneity across societies. Figure 9 plots, for each society, the average winning tax rate and the average transfer to a politician. The figure also reports the corresponding treatment means. The split-the-difference line provides a benchmark for how transfers would look if the elite voter's gross gain from lower taxes were divided equally between the elite voter and the two politicians. The predicted line visualizes the predicted transfers estimated with the hurdle model from Subsection 4.2 for cases where both politicians chose the same final tax rate, including intermediate tax rates not shown in Table 3.

The aggregate pattern mirrors the individual-level estimates from the previous subsection. In societies with high tax rates, transfers tend to be low, whereas those with lower tax rates tend to have higher average transfers. However, the figure also reveals distinct patterns across treatments. In *No Reputation*, societies cluster tightly around high winning tax rates and low transfers. This pattern is consistent with the absence of persistent public identities and of a complete transfer history available to the rotating politician pool: transfer choices exist, but there is little evidence of a stable society-level pattern in which lower tax rates and higher transfers reinforce one another. In *Elite Reputation*, societies are more dispersed. Some resemble *No Reputation*, with high winning tax rates and modest transfers, while others display substantially lower winning tax rates and higher transfers. In *Two-sided Reputation*, all societies move away from the near-zero-transfer region, but considerable heterogeneity remains in how much tax rates fall. Some societies remain relatively close to high winning tax rates, while others

achieve much lower winning tax rates and substantially higher transfers. Most society means nevertheless lie below the split-the-difference line, indicating that even when transfers are large enough to be associated with lower tax rates, elite voters typically retain more than one-third of the gross gain from lower taxes.

To examine what distinguishes low-tax from high-tax societies, we classify societies in *Elite Reputation* and *Two-sided Reputation* according to their average winning tax rate. A society is classified as low-tax if its average winning tax rate is below 36%, and as high-tax otherwise. This yields a simple descriptive comparison between societies in which rent diversion is more successful and those in which it is not.

We then reestimate the hurdle model from Subsection 4.2, allowing the relationship between final tax rates and transfers to differ across low- and high-tax societies. Specifically, we replace the treatment indicators for *Elite Reputation* and *Two-sided Reputation* with separate indicators for low- and high-tax societies in each treatment. These indicators are interacted with the receiving politician's final tax rate, the other politician's final tax rate, and their interaction. The model also includes the *No Reputation* treatment, but Table 4 reports only the estimates for *Elite Reputation* and *Two-sided Reputation*, since all societies in *No Reputation* are high-tax. As before, the first equation models whether the elite voter makes a positive transfer, the second models the transfer amount conditional on a positive transfer, elite-voter random effects are included in both equations and allowed to be correlated, and standard errors are clustered at the society level. The full regression is reported in Appendix C. Table 4 reports the predicted transfers for the four extreme final tax-rate pairs, separately for low- and high-tax societies in *Elite Reputation* and *Two-sided Reputation*.

Table 4 shows that the key distinction between low- and high-tax societies is the size and reliability of the reward for the receiving politician's low tax rate. To see this, we can compare the differences in transfers when the receiving politician chooses 0% rather than 72%, holding the other politician's final tax rate fixed. These differences indicate the reward politicians receive for choosing the elite voter's preferred final tax rate.

In low-tax *Elite Reputation* societies, both differences are large and statistically significant. When the other politician chooses 0%, the predicted transfer from choosing 0% rather than 72% significantly increases by $5.83 - 0.96 = 4.87$ points ($p < 0.001$). When the other politician chooses 72%, the corresponding increase is $6.31 - 1.34 = 4.97$ points ($p = 0.002$). Moreover, the two increases are nearly identical ($p = 0.956$). Thus, low-tax *Elite Reputation* societies display a clean ILTR-like pattern: elite voters reward a politician's low final tax rate, and the size of this reward is largely independent of the other politician's final tax rate.

Low-tax *Two-sided Reputation* societies show even stronger rewards for low final tax rates. When the other politician chooses 0%, the predicted transfer increases by $4.85 - 0.01 = 4.84$ points ($p < 0.001$) when choosing 0% rather than 72%. When the other politician chooses 72%,

**Table 4. Predicted transfers by final tax-rate pairs in high-tax and low-tax societies**

*Note:* The table reports predicted transfers from the elite voter, estimated using a hurdle model with a logit equation for whether the elite voter makes a positive transfer and a linear equation for the amount transferred. Both equations include indicators identifying the treatment and whether a society is high-tax (average tax rate above 36%) or low-tax (average tax rate below 36%). Indicators are interacted with the receiving politician's final tax rate, the other politician's final tax rate, and their interaction. The model includes elite-voter random effects in both equations and clusters standard errors at the society level. The details are described in the text. Each cell reports the predicted transfer from the elite voter to a given politician for the indicated combination of final tax rates. Standard errors are in parentheses.

| Final tax rate of | Final tax rate of | *Elite Reputation* | | *Two-sided Reputation* | |
|---|---|---|---|---|---|
| receiving politician | other politician | High tax | Low tax | High tax | Low tax |
| 72% | 72% | 0.87 | 1.34 | 2.15 | 0.54 |
| | | (0.31) | (0.48) | (0.33) | (0.62) |
| 72% | 0% | 0.96 | 0.96 | 0.75 | 0.01 |
| | | (0.38) | (0.37) | (0.44) | (0.01) |
| 0% | 72% | 2.28 | 6.31 | 2.62 | 9.31 |
| | | (0.81) | (1.44) | (0.51) | (1.31) |
| 0% | 0% | 4.40 | 5.83 | 5.94 | 4.85 |
| | | (12.73) | (0.78) | (3.08) | (0.83) |

the increase is $9.31 - 0.54 = 8.77$ points ($p < 0.001$). In contrast to low-tax *Elite Reputation*, however, the two increases are not similar: the reward for choosing 0% is substantially larger when the other politician chooses 72% ($p < 0.001$). This pattern still contains a strong ILTR-like component, since politicians are rewarded for choosing low final tax rates in both comparisons. But it also has an ELC-like component: the reward is especially large when the receiving politician chooses the elite voter's preferred tax rate while the other politician chooses the electorally attractive high tax rate.

High-tax societies look different. In high-tax *Elite Reputation* societies, the reward for choosing 0% appears only in the unilateral low-tax comparison. When the other politician chooses 72%, the predicted-transfer difference is $2.28 - 0.87 = 1.41$ points ($p = 0.021$). When the other politician chooses 0%, the estimated difference is imprecise and not statistically significant. In high-tax *Two-sided Reputation* societies, the evidence is also weaker than in low-tax societies. The predicted-transfer difference is large when the other politician chooses 0% (5.94—0.75 = 5.19 points) but is imprecisely estimated ($p = 0.090$). When the other politician chooses 72%, the difference is small and not statistically significant ($2.62 - 2.15 = 0.47$ points, $p = 0.496$). Thus, high-tax societies do not display the same consistent reward for low final tax rates that characterizes low-tax societies.

The magnitudes are informative when compared with the ILTR benchmark. In the reduced ILTR game, the relevant threshold is 3 points: the payoff difference that must be offset for a politician to prefer the low final tax rate to the high one. In low-tax societies, the estimated reward for choosing 0% comfortably exceeds this threshold in both *Elite Reputation* and *Two-*

*sided Reputation*. In high-tax societies, by contrast, the reward is either below the threshold, statistically weak, or present in only one of the two comparisons. This helps explain why the broad tendency to reward low final tax rates does not produce low winning tax rates in every society. What distinguishes low-tax societies is not merely that elite voters sometimes transfer after low final tax rates, but that the incremental reward for choosing a low rather than a high final tax rate is large and reliable.

The society-level evidence sharpens the interpretation of the aggregate results. Successful low-tax societies are not primarily characterized by transfers concentrated only in the coordinated low-tax profile, as a pure SPDI pattern would imply. Instead, they are characterized by large rewards for the receiving politician's own low final tax rate. In low-tax *Elite Reputation* societies, this reward is nearly the same whether the other politician chooses 0% or 72%, closely aligning with ILTR. In low-tax *Two-sided Reputation* societies, the reward is present in both cases but is especially large when the other politician chooses 72%, suggesting additional compensation for electorally costly low final tax rates. Thus, the main empirical mechanism behind successful rent diversion appears to be a strong reward for individual low final tax rates, supplemented in low-tax *Two-sided Reputation* societies by an ELC-like component.

**Result 5 (Low-tax societies strongly reward low final tax rates):**
*Societies with lower winning tax rates are characterized by larger and more consistent transfers to politicians who choose low final tax rates. The pattern is most closely aligned with individual low-tax reward: successful societies reward a politician's low final tax rate, whether or not the other politician also chooses a low final tax rate. In low-tax Two-sided Reputation societies, transfers also suggest additional compensation for electorally costly low final tax rates.*

### 4.4. Earnings

We conclude the results section by examining how changes in tax rates and transfers affect earnings. Aside from the small costs of revising tax rates, the game redistributes earnings among the elite voter, the majority voters, and the politicians. The selected zero-transfer benchmark from Proposition 1 serves as a useful reference point: when the winning tax rate is 72% and transfers are zero, the elite voter earns 33 points, each majority voter earns 19 points, and each politician earns 13 points in expectation. Figure 10 reports earnings by role and treatment. The figure shows that transfers and lower tax rates shift earnings away from majority voters and toward politicians, while the effects on elite-voter earnings are more heterogeneous.

Politician earnings increase monotonically across treatments. Politicians earn 13.00 points in *No Transfers*, 13.83 in *No Reputation*, 15.27 in *Elite Reputation*, and 16.60 in *Two-sided Reputation*. These differences are statistically meaningful. Jonckheere–Terpstra tests strongly support the increasing ordering of politician earnings across all four treatments and within the

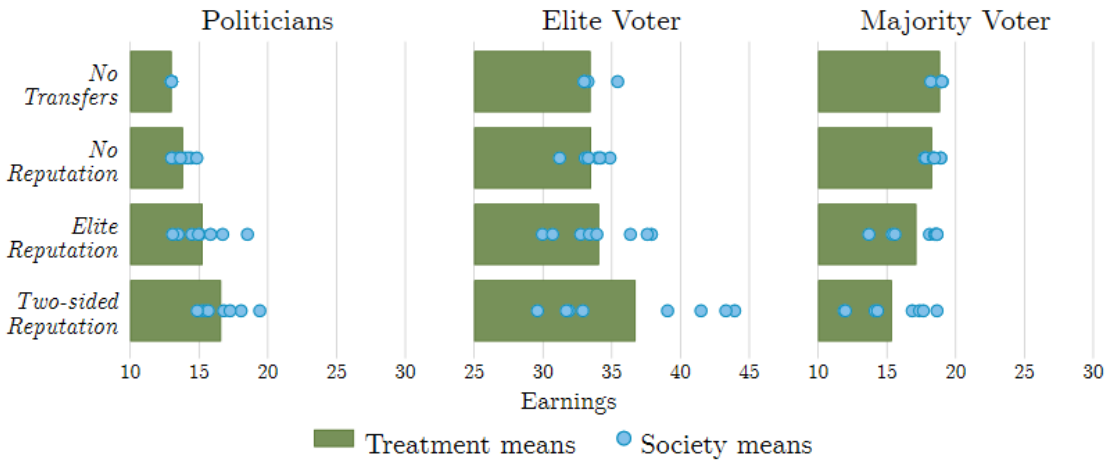


**Figure 10. Mean earnings by role and treatment**

*Notes:* Bars report treatment mean earnings, and circles denote society mean earnings. The panels report politician earnings, elite-voter earnings, and majority-voter earnings, respectively.

three transfer treatments ($p < 0.001$). Pairwise comparisons show that, relative to *No Transfers*, politician earnings are significantly higher in all three transfer treatments ($p < 0.001$). Moreover, politician earnings are significantly higher in *Elite Reputation* and *Two-sided Reputation* than in *No Reputation* ($p < 0.049$). The difference between *Elite Reputation* and *Two-sided Reputation* is in the predicted direction but is not statistically significant ($p = 0.109$).

Majority voter earnings move in the opposite direction. They fall from 18.85 points in *No Transfers* to 18.28 in *No Reputation*, 17.13 in *Elite Reputation*, and 15.36 in *Two-sided Reputation*. This pattern follows directly from the tax-rate results: lower winning tax rates reduce the amount redistributed from the elite voter to the majority voters. The Jonckheere–Terpstra tests again support the overall pattern: they reject equality in favor of decreasing majority voter earnings across all four treatments ($p < 0.001$) and within the three transfer treatments ($p = 0.008$). Relative to *No Transfers*, majority voters earn significantly less in each transfer treatment ($p < 0.012$). Among the transfer treatments, the clearest pairwise difference is between *No Reputation* and *Two-sided Reputation* ($p = 0.003$). The differences between *No Reputation* and *Elite Reputation*, and between *Elite Reputation* and *Two-sided Reputation*, are in the predicted direction but are not statistically significant ($p = 0.599$ and $p = 0.136$, respectively).

The pattern for the elite voter is more subtle. Average elite-voter earnings are 33.45 points in *No Transfers*, 33.50 in *No Reputation*, 34.07 in *Elite Reputation*, and 36.73 in *Two-sided Reputation*. Thus, elite-voter earnings are highest on average in *Two-sided Reputation*. However, the differences are not statistically significant ($p > 0.363$ for the Jonckheere–Terpstra tests and $p > 0.286$ for pairwise Brunner–Munzel tests). This does not mean that elite voters never gain from rent diversion. Rather, the society-level variation shown in Figure 10 indicates that gains

in successful low-tax societies are offset by losses or smaller gains in societies where transfers do not produce sufficiently low winning tax rates. We summarize these findings as our last result.

**Result 6 (Transfers shift earnings away from majority voters toward politicians):** *Politicians earn more and majority voters earn less when transfers are available and histories are more closely linked to the same individuals. Elite-voter earnings are highest on average in Two-sided Reputation, but treatment differences are not statistically significant because elite-voter gains in successful low-tax societies are offset by the cost of transfers in less successful societies.*

## 5. Conclusions

In this paper, we study whether an elite voter can obtain the policies they want from a democracy in which they are a minority, cannot influence how anyone else votes, and cannot commit in advance to rewarding any politician. Their only instrument is transfers made after tax policies are set and the election is decided. Transfers are voluntary, noncontractible, visible to every participant, and incapable of financing campaigns, conveying information, or purchasing votes. Standard theory holds that the instrument is worthless: with self-interested players, the policy-setting stage has a unique strict equilibrium at the majority's preferred tax rate, selected by every refinement we applied and robust to inequity aversion.

We find that transfers are not worthless. Mean winning tax rates fall from 70.8% when payments are unavailable to 42.8% when the elite voter and the politicians form a durable, identifiable relationship. What is striking is that the electorate does not fail. The politician offering higher tax rates wins 96.1% of contested elections and 100.0% of them in the treatment with the highest rent diversion. Voters are not deceived, and they do not vote against their own interests. The majority loses because both candidates stop offering what it wants, not because it chooses badly among what it is offered. In other words, policy capture operates on the menu, not on the ballot.

How much policy capture occurs depends on whether behavior can be linked to persistent individuals. Transfers become both more frequent and larger as the environment supports individual reputations—positive transfers occur in 19.5% of cases without persistent identities, 47.3% when only the elite voter is identifiable, and 56.5% when both sides are identifiable- and implemented tax rates fall in the same order. The *Elite Reputation* treatment, in which the special interest is long-lived and publicly identifiable but politicians rotate anonymously, is informative. In this treatment, a substantial share of rent dissipation persists. A reputation for reciprocating is valuable even when the politician being rewarded today will not be the politician of tomorrow.

The mechanism sustaining this is cruder than theory predicts. The cost-efficient way to buy low taxes is to pay only when both politicians move away from the majority's preferred tax rate, since that is the only configuration in which policy capture succeeds. Elite voters do not do this. They reward a politician for choosing lower tax rates whether or not the opponent does the same, and even transfer an additional amount when a low-tax choice costs the politician an election. This is reciprocity, as the favor is compensated rather than the outcome, which is one of the most robust regularities in experimental economics. It is, therefore, not a mechanism that requires sophisticated politicians, tacit coordination, or a shared understanding of the equilibrium being implemented. It requires only that politicians reliably choose low tax rates because they expect to be rewarded for doing so. We think that the finding that policy capture relies on a robust behavioral foundation makes it more plausible in the field, not less.

Reciprocity, however, makes policy capture expensive for the elite voter. Because transfers are made for individual low tax rates rather than for successful coordination, the elite voter subsidizes both failed and successful attempts. Moving from the treatment with no transfers to that with transfers and durable relationships costs the majority voters 10.50 points in total; the politicians capture 7.20 of these, and the elite voter 3.30, an amount not statistically distinguishable from zero. In other words, most of what is taken from the majority is absorbed by those who supply the policy options rather than by the interest that demands them. This suggests a resolution to the long-standing puzzle of why so little money is spent buying policy given what is at stake. The returns may be negligible but not because influence is small. If this finding carries over to the field, then the volume of money observed in politics is a poor proxy for the amount of policy capture occurring, and inferring the latter from the former, as much of the debate since Tullock has done, is misleading.

These findings speak to arrangements that are widespread and largely lawful. Officeholders move to board seats, consultancies, and lobbying firms; the value of a revolving-door lobbyist falls when his former colleagues leave office; officials who grant favorable treatment are later hired by the firms that received it. Our environment reproduces what is essential to these relationships—the benefit follows the decision, nothing is written down, and credibility rests entirely on which histories are observed and to whom they are attributed—while stripping away the interpretations that make field evidence ambiguous. What we find is that this is sufficient. Neither contributions, advertising, nor information transmission is needed to move policy away from the median voter's preference.

Three policy implications follow, each of which cuts against a common intuition. The first concerns transparency. Disclosure is the principal regulatory instrument in this domain nearly everywhere, and the presumption behind it is that voters who can see the money will discipline those who take it. In our environment, every payment is public, every voter sees exactly who was paid what, and policy capture proceeds regardless. The reason is that disclosure gives

voters information without giving them an instrument: their only lever is a choice between two platforms, and once both have moved, knowing why changes nothing. Transparency is a remedy for misinformed voters. It is not a remedy for a captured choice set.

The second concerns rotation. Term limits, mandatory turnover, and cooling-off periods all work by disrupting durable relationships, and our results confirm that this helps: capture is substantially lower when politicians cannot be identified across periods. But it helps only partially, because these instruments regulate the short-lived side of an asymmetric relationship. The reputation that does the work belongs to the special interest, which persists, is publicly identifiable, and is watched by everyone who might hold office next. Policies that rotate politicians while leaving the interest's record intact address only one side of the relationship.

The third concerns which transactions to regulate. Campaign finance rules govern payments made before policy is set, when the exchange looks most like a purchase. Our payments come afterward, are voluntary, and carry no obligation in either direction—the configuration that is hardest to prohibit, hardest to detect, and easiest to defend as something other than an exchange. That this configuration suffices suggests that the regulated margin and the effective margin are not the same.

These implications share a common thread. A politician who moves away from the majority's interests forgoes office rents. When the incremental reward for doing so reliably exceeds those rents, societies converge on low taxes; when it is smaller or unreliable, they do not, even though transfers are still made. Policy capture is not inevitable, and the margin between the two outcomes is narrow. Interventions need not eliminate the exchange to work. They need only push the expected reward below the electoral cost of accommodation.

Several limitations qualify the generality of our findings. Our societies are small; the participants in the experiment are students; and a laboratory election compresses into minutes a process that unfolds over years. We study a single interest, so we cannot speak to competition among interests, which may either discipline or intensify capture. We deliberately removed vote-buying, advertising, and informational lobbying, so our estimates isolate one channel rather than measuring its share of total influence. With few independent societies per treatment, we identify the overall ordering with confidence but not every pairwise comparison. And because our elite voter's persistent identity and the observability of their transfers move together, that comparison recovers the combined effect of a one-sided public reputation rather than the effect of attribution alone. Each of these limitations points to a natural extension for future research. The most promising, in our view, would introduce several interests with conflicting objectives competing for the same politicians.

We began with the complaint, common across established democracies, that governments serve concentrated interests and that no available party represents one's views. It is tempting to read such complaints as claims of election corruption and to answer them by pointing to

clean ballots and genuine competition. Our results suggest that the complaint can be accurate and that the answer can be accurate at the same time. An election can be entirely fair, an electorate entirely competent, and the money entirely visible, yet the majority can still lose because everything that determined the outcome happened before the ballots were printed.

## References


Abbink, K., Irlenbusch, B., and Renner, E. (2002). An Experimental Bribery Game. *Journal of Law, Economics, and Organization*, 18(2):428–454.

Abbink, K. and Serra, D. (2012). Anticorruption Policies: Lessons from the Lab. In Serra, D. and Wantchekon, L., editors, *Research in Experimental Economics*, volume 15, pages 77–115. Emerald Group Publishing Limited.

Acemoglu, D. and Robinson, J. A. (2008). Persistence of Power, Elites, and Institutions. *American Economic Review*, 98(1):267–293.

Alesina, A. and Giuliano, P. (2011). Preferences for Redistribution. In Benhabib, J., Bisin, A., and Jackson, M. O., editors, *Handbook of Social Economics*, volume 1, pages 93–131. Elsevier, North-Holland, Amsterdam, NL.

Ansolabehere, S., De Figueiredo, J. M., and Snyder, J. M. (2003). Why is There so Little Money in U.S. Politics? *Journal of Economic Perspectives*, 17(1):105–130.

Aragonès, E., Postlewaite, A., and Palfrey, T. (2007). Political Reputations and Campaign Promises. *Journal of the European Economic Association*, 5(4):846–884.

Awad, E., Judd, G., and Riquelme, N. (2025). Learning by lobbying. *American Journal of Political Science*, page ajps.70017.

Ban, P., Palmer, M., and Schneer, B. (2019). From the Halls of Congress to K Street: Government Experience and its Value for Lobbying. *Legislative Studies Quarterly*, 44(4):713–752.

Barr, A. and Serra, D. (2009). The effects of externalities and framing on bribery in a petty corruption experiment. *Experimental Economics*, 12(4):488–503.

Bartels, L. M. (2016). *Unequal Democracy: The Political Economy of the New Gilded Age*. Princeton University Press, Princeton, NJ, 2 edition. ISBN: 9780691172842.

Ben-Zion, U. and Eytan, Z. (1974). On Money, Votes, and Policy in a Democratic Society. *Public Choice*, 17:1–10.

Berg, J., Dickhaut, J., and McCabe, K. (1995). Trust, Reciprocity, and Social History. *Games and Economic Behavior*, 10(1):122–142.

Bertrand, M., Bombardini, M., Fisman, R., and Trebbi, F. (2020). Tax-Exempt Lobbying: Corporate Philanthropy as a Tool for Political Influence. *American Economic Review*, 110(7):2065–2102.

Bertrand, M., Bombardini, M., and Trebbi, F. (2014). Is It Whom You Know or What You Know? An Empirical Assessment of the Lobbying Process. *American Economic Review*, 104(12):3885–3920.

Besley, T. and Case, A. (2003). Political Institutions and Policy Choices: Evidence from the United States. *Journal of Economic Literature*, 41(1):7–73.

Bils, P., Duggan, J., and Judd, G. (2021). Lobbying and policy extremism in repeated elections. *Journal*

*of Economic Theory*, 193:105223.

Blanes I Vidal, J., Draca, M., and Fons-Rosen, C. (2012). Revolving Door Lobbyists. *American Economic Review*, 102(7):3731–3748.

Bombardini, M. and Trebbi, F. (2020). Empirical Models of Lobbying. *Annual Review of Economics*, 12(1):391–413.

Branham, J. A., Soroka, S. N., and Wlezien, C. (2017). When Do the Rich Win? *Political Science Quarterly*, 132(1):43–62.

Brunner, E. and Munzel, U. (2000). The Nonparametric Behrens-Fisher Problem: Asymptotic Theory and a Small-Sample Approximation. *Biometrical Journal*, 42(1):17–25.

Bénabou, R. (2000). Unequal Societies: Income Distribution and the Social Contract. *American Economic Review*, 90(1):96–129.

Camera, G. and Casari, M. (2009). Cooperation among Strangers under the Shadow of the Future. *American Economic Review*, 99(3):979–1005.

Camerer, C. F. and Weigelt, K. (1988). Experimental tests of a sequential equilibrium reputation model. *Econometrica*, 56:1–36.

Chamon, M. and Kaplan, E. (2013). The Iceberg Theory of Campaign Contributions: Political Threats and Interest Group Behavior. *American Economic Journal: Economic Policy*, 5(1):1–31.

Chen, T., Han, L., Kung, J., and Xie, J. (2023). Trading Favours through the Revolving Door: Evidence from China's Primary Land Market. *The Economic Journal*, 133(649):70–97.

Cragg, J. G. (1971). Some Statistical Models for Limited Dependent Variables with Application to the Demand for Durable Goods. *Econometrica*, 39(5):829–844.

Dal Bó, E. (2006). Regulatory Capture: A Review. *Oxford Review of Economic Policy*, 22(2):203–225.

Dal Bó, E. (2007). Bribing Voters. *American Journal of Political Science*, 51(4):789–803.

De Figueiredo, J. and Silverman, B. (2006). Academic Earmarks and the Returns to Lobbying. *The Journal of Law and Economics*, 49(2):597–625.

Diermeier, D., Keane, M., and Merlo, A. (2005). A Political Economy Model of Congressional Careers. *American Economic Review*, 95(1):347–373.

Drugov, M., Hamman, J., and Serra, D. (2014). Intermediaries in corruption: an experiment. *Experimental Economics*, 17(1):78–99.

Duan, N. (1983). Smearing Estimate: A Nonparametric Retransformation Method. *Journal of the American Statistical Association*, 78(383):605–610.

Duffy, J. and Ochs, J. (2009). Cooperative behavior and the frequency of social interaction. *Games and Economic Behavior*, 66(2):785–812.

Eggers, A. C. and Hainmueller, J. (2009). MPs for Sale? Returns to Office in Postwar British Politics. *American Political Science Review*, 103(4):513–533.

Enns, P. K. (2015). Relative Policy Support and Coincidental Representation. *Perspectives on Politics*, 13(4):1053–1064.

Fang, H., Shapiro, D., and Zillante, A. (2016). An Experimental Study of Alternative Campaign Finance Systems: Transparency, Donations, And Policy Choices. *Economic Inquiry*, 54(1):485–507.

Fehr, E. and Charness, G. (2025). Social Preferences: Fundamental Characteristics and Economic

Consequences. *Journal of Economic Literature*, 63(2):440–514.

Fehr, E., Gächter, S., and Kirchsteiger, G. (1997). Reciprocity as a Contract Enforcement Device: Experimental Evidence. *Econometrica*, 65(4):833–860.

Fehr, E., Kirchsteiger, G., and Riedl, A. (1993). Does Fairness Prevent Market Clearing? An Experimental Investigation. *The Quarterly Journal of Economics*, 108(2):437–459.

Fehr, E. and Schmidt, K. M. (1999). A Theory of Fairness, Competition, and Cooperation. *The Quarterly Journal of Economics*, 114(3):817–868.

Ferraz, C. and Finan, F. (2011). Electoral Accountability and Corruption: Evidence from the Audits of Local Governments. *American Economic Review*, 101(4):1274–1311.

Fischbacher, U. (2007). z-Tree: Zurich toolbox for ready-made economic experiments. *Experimental Economics*, 10(2):171–178.

Garlick, A., Junk, W. M., and Brown, H. (2025). How Lobbying Matters. *Annual Review of Political Science*, 28(1):457–475.

Gilens, M. (2012). *Affluence and Influence: Economic Inequality and Political Power in America*. Princeton University Press, Princeton, NJ.

Gilens, M. and Page, B. I. (2014). Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens. *Perspectives on Politics*, 12(3):564–581.

Goeree, J. K., Holt, C. A., and Palfrey, T. R. (2016). *Quantal Response Equilibrium A Stochastic Theory of Games*. Princeton University Press, Princeton, NJ.

Grossman, G. M. and Helpman, E. (1996). Electoral Competition and Special Interest Politics. *The Review of Economic Studies*, 63(2):265–286.

Großer, J. and Reuben, E. (2013). Redistribution and market efficiency: An experimental study. *Journal of Public Economics*, 101(1):39–52.

Großer, J., Reuben, E., and Tymula, A. (2013). Political Quid Pro Quo Agreements: An Experimental Study. *American Journal of Political Science*, 57(3):582–597.

Johnson, N. D. and Mislin, A. A. (2011). Trust games: A meta-analysis. *Journal of Economic Psychology*, 32(5):865–889.

Jonckheere, A. R. (1954). A Distribution-free $k$-sample Test Against Ordered Alternatives. *Biometrika*, 41(1-2):133–145.

Kalla, J. L. and Broockman, D. E. (2016). Campaign Contributions Facilitate Access to Congressional Officials: A Randomized Field Experiment. *American Journal of Political Science*, 60(3):545–558.

Kang, K. (2016). Policy Influence and Private Returns from Lobbying in the Energy Sector. *The Review of Economic Studies*, 83(1):269–305.

Kirchsteiger, G. and Prat, A. (2001). Inefficient equilibria in lobbying. *Journal of Public Economics*, 82(3):349–375.

Kreps, D. M., Milgrom, P., Roberts, J., and Wilson, R. (1982). Rational cooperation in the finitely repeated prisoners' dilemma. *Journal of Economic Theory*, 27(2):245–252.

Kroszner, R. and Stratmann, T. (2005). Corporate Campaign Contributions, Repeat Giving, and the Rewards to Legislator Reputation. *The Journal of Law and Economics*, 48(1):41–71.

Kroszner, R. S. and Stratmann, T. (1998). Interest-Group Competition and the Organization of Congress:

Theory and Evidence from Financial Services' Political Action Committees. *American Economic Review*, 88(5):1163–1187.

Lohmann, S. (1995). Information, access, and contributions: A signaling model of lobbying. *Public Choice*, 85(3-4):267–284.

McCrain, J. (2018). Revolving Door Lobbyists and the Value of Congressional Staff Connections. *The Journal of Politics*, 80(4):1369–1383.

McKelvey, R. D. and Palfrey, T. R. (1995). Quantal Response Equilibria for Normal Form Games. *Games and Economic Behavior*, 10(1):6–38.

McKelvey, R. D. and Palfrey, T. R. (1998). Quantal Response Equilibria for Extensive Form Games. *Experimental Economics*, 1(1):9–41.

Meltzer, A. H. and Richard, S. F. (1981). A Rational Theory of the Size of Government. *Journal of Political Economy*, 89(5):914–927.

OECD (2024). *OECD Survey on Drivers of Trust in Public Institutions – 2024 Results: Building Trust in a Complex Policy Environment*. OECD Publishing.

Palmer, M. and Schneer, B. (2016). Capitol Gains: The Returns to Elected Office from Corporate Board Directorships. *The Journal of Politics*, 78(1):181–196. _eprint: https://www.journals.uchicago.edu/doi/pdf/10.1086/683206.

Palmer, M. and Schneer, B. (2019). Postpolitical Careers: How Politicians Capitalize on Public Office. *The Journal of Politics*, 81(2):670–675.

Potters, J. and Van Winden, F. (1992). Lobbying and asymmetric information. *Public Choice*, 74(3):269–292.

Potters, J. and Van Winden, F. (2000). Professionals and students in a lobbying experiment. *Journal of Economic Behavior & Organization*, 43(4):499–522.

Richter, B. K., Samphantharak, K., and Timmons, J. F. (2009). Lobbying and Taxes. *American Journal of Political Science*, 53(4):893–909.

Ryvkin, D. and Serra, D. (2019). Is more competition always better? An experimental study of extortionary corruption. *Economic Inquiry*, 57(1):50–72.

Ryvkin, D. and Serra, D. (2020). Corruption and competition among bureaucrats: An experimental study. *Journal of Economic Behavior & Organization*, 175:439–451.

Savani, R. and Turocy, T. L. (2026). Gambit: The package for computation in game theory, Version 16.6.0.

Schnakenberg, K. E. and Turner, I. R. (2024). Formal Theories of Special Interest Influence. *Annual Review of Political Science*, 27(1):401–421.

Serra, D. (2012). Combining Top-Down and Bottom-Up Accountability: Evidence from a Bribery Experiment. *Journal of Law, Economics, and Organization*, 28(3):569–587.

Shapiro, D. and Zillante, A. (2017). Contribution Limits and Transparency in a Campaign Finance Experiment: Campaign Finance Experiment. *Southern Economic Journal*, 84(1):98–119.

Shepherd, M. E. and You, H. Y. (2020). Exit Strategy: Career Concerns and Revolving Doors in Congress. *American Political Science Review*, 114(1):270–284.

Snyder, J. M. (1992). Long-Term Investing in Politicians; Or, Give Early, Give Often. *The Journal of*

*Law and Economics*, 35(1):15–43.

Snyder, J. M. and Ting, M. M. (2008). Interest groups and the electoral control of politicians. *Journal of Public Economics*, 92(3-4):482–500.

Strickland, J. M. (2023). The contingent value of connections: legislative turnover and revolving-door lobbyists. *Business and Politics*, 25(2):152–172.

Terpstra, T. J. (1952). The asymptotic normality and consistency of kendall's test against trend, when ties are present in one ranking. *Indagationes Mathematicae*, 55:327–333.

Tullock, G. (1972). The Purchase of Politicians. *Western Economic Journal*, 10(3):354–355.

Wike, R., Fetterolf, J., Smerkovich, M., Austin, S., Gubbala, S., and Lippert, J. (2024). Representative Democracy Remains a Popular Ideal, but People Around the World Are Critical of How It Is Working.

# Online appendices for: Policy Capture without Electoral Failure: Evidence from the Laboratory

Appendix A contains a sample of the experiment's instructions. Appendix B contains additional analyses of the theoretical predictions. Appendix C contains supplementary figures and the regression tables on which the data analysis is based.

## Appendix A. Instructions

Below are the instructions for the *No Reputation* treatment. The instructions for the other treatments differed in their matching, public-ID, and transfer-observability rules and are available upon request.

### Instructions

You are participating in a study on economic decision-making in which you can earn money. At the end of the study, you will be paid your earnings in cash.

You are not allowed to communicate with other participants. Moreover, the study is strictly anonymous: that is, your identity and actions will not be revealed to others and the identity and actions of others will not be revealed to you.

The study consists of *25 periods*. As payment for the study, you will receive the earnings of *two randomly chosen periods*. The randomization will take place after the 25 periods have ended. During the study your earnings will be expressed in points. Points will be converted to US dollars at the following rate: *10 points = $2.50*.

In the study, you will be part of a group with other participants. Participants within each group will be *randomly* assigned to different roles. You will *keep the same role and remain in the same group* for the entire study.

In each group there will be *four* participants in the role of *voter* and *four or more* participants in the role of *candidate*. Each period is divided into four stages. They are described in detail next.

### Stage one

In stage one, voters are told what their endowment is. In each period, one of the four voters will be randomly selected to receive an endowment of *60 points*. For convenience we refer to this voter as voter60. Each voter has the same probability of being voter60 with the restriction

that the same participant cannot be voter60 for two periods in a row. The three remaining voters receive and endowment of 10 points, we refer to them as voter10.

Note that voter60 will be a *different* participant in every period.

Also in stage one, candidates receive an endowment of 10 points. In addition, candidates learn whether they are *active or inactive* in this period. In each period, *two* candidates are randomly selected to be active (each with equal probability). Active candidates will be randomly labeled as candidate 1 and candidate 2. In a given period, only active candidates have the opportunity to earn additional points.

Note that candidates 1 and 2 will be different participants in every period.

Also note that inactive candidates will be able to see the decisions of active candidates and of voters on their screens.

## Stage two

In stage two, candidate 1 and candidate 2 each choose a number between 1 and 5. The number corresponds to a row on the table below (a copy is available on your desk).

| *Number* | Voter60 | Voter10 | Voter10 | Voter10 |
|---|---|---|---|---|
| 1 | 60 | 10 | 10 | 10 |
| 2 | 53.25 | 12.25 | 12.25 | 12.25 |
| 3 | 46.50 | 14.50 | 14.50 | 14.50 |
| 4 | 39.75 | 16.75 | 16.75 | 16.75 |
| 5 | 33.00 | 19.00 | 19.00 | 19.00 |

As you can see, higher numbers transfer points from voter60 to the three voter10s.

### *Choosing a number*

The procedure used by candidate 1 and candidate 2 to choose a number is divided into two steps:

*Step 1:* Both candidates simultaneously choose a number, which is communicated to the other candidate.

*Step 2:* Both candidates decide simultaneously whether they *accept* or to *change* the current numbers. If *both* candidates accept, the procedure ends and the two numbers are communicated to the voters. If one or both of the candidates wants to change then the procedure goes back to step 1. If a candidate decides to change he/she incurs a small cost of 0.25 points which is deducted from his/her period earnings.

### Stage three

In stage three, voters cast a vote in favor of candidate 1 or in favor of candidate 2. The candidate with more votes wins and his/her chosen number is used to determine the voters' earnings in this period (according to the table above). In case of a tie, one candidate is randomly selected to be the winner (each with equal probability). The candidate that wins receives *6 additional points* as earnings in this period. Candidates that lose do not receive additional points.

### Stage four

In stage four, voter60 decides how many points to *transfer to candidate 1 and to candidate 2*. He can choose any combination of points. The amount transferred will be deducted from voter60's earnings in this period. Voter10s do not make any transfers. Once voter60 makes a decision, the amount transferred to each candidate will be seen by both candidates and by other voters.

Note that the amount voter60 transfers to the candidates will be visible only to the active candidates and voters. In other words, transfers are *not* observed by inactive candidates.

### Earnings Summary

In short, the earnings of each role are given by:

- Voter60 = Earnings from the table corresponding to the winning number − transfer to candidate 1 − transfer to candidate 2.
- Voter10s = Earnings from the table corresponding to the winning number.
- Winning candidate = 10 points + 6 points + transfer from voter60.
- Losing candidate = 10 points + transfer from voter60.

### Examples

*Example 1.* Suppose that candidate 1 chooses *number 5* and candidate 2 chooses *number 1*. Furthermore, suppose that candidate 1 gets more votes. Finally, imagine that voter60 *does not transfer* any points to the candidates. In this case, the voters' earnings are determined by *number 5* and equal: voter60 = 33 points and voter10s = 19 points. The earnings of the candidates are: candidate 1 = 16 points and candidate 2 = 10 points.

*Example 2.* Suppose that candidate 1 chooses *number 5* and candidate 2 chooses *number 1*. Furthermore, suppose that candidate 1 gets more votes. Finally, imagine that voter60 *transfers 8 points to candidate 2*. In this case, the voters' earnings are determined by *number 5* and equal: voter60 = 33 - 8 = 25 points and voter10s = 19 points. The earnings of the candidates are: candidate 1 = 16 points and candidate 2 = 10 + 8 = 18 points.

*Example 3.* Suppose that candidate 1 chooses *number 1* and candidate 2 chooses *number 1*. Furthermore, suppose that candidate 2 gets more votes. Finally, imagine that voter60 *transfers 10 points to candidate 1 and 6 points to candidate 2*. In this case, the voters' earnings are determined by *number 1* and equal: voter60 = 60 - 16 = 44 points and voter10s = 10 points. The earnings of the candidates are: candidate 1 = 10 + 10 = 20 points and candidate 2 = 16 + 6 = 22 points.

*Example 4.* Suppose that candidate 1 chooses *number 2* and candidate 2 chooses *number 2*. Furthermore, suppose that candidate 2 gets more votes. Finally, imagine that voter60 *does not transfer* any points to the candidates. In this case, the voters' earnings are determined by *number 2* and equal: voter60 = 53.25 points and voter10s = 12.25 points. The earnings of the candidates are: candidate 1 = 10 points and candidate 2 = 16 points.

### Please answer the following questions

*Questions 1 to 4.* Suppose that candidate 1 chooses number 3 and candidate 2 chooses number 2. Furthermore, suppose that candidate 1 gets more votes. Finally, imagine that voter60 transfers 6 points to candidate 1 and 6 points to candidate 2. How much are the earnings of:

1. Voter60:
2. The voter10s:
3. Candidate 1:
4. Candidate 2:

*Question 5 to 8.* Suppose that candidate 1 chooses number 1 and candidate 2 chooses number 2. Furthermore, suppose that candidate 2 gets more votes. Finally, imagine that voter60 transfers 10 points to candidate 1 and 1 point to candidate 2. How much are the earnings of:

5. Voter60:
6. The voter10s:
7. Candidate 1:
8. Candidate 2:

*Question 9.* Please choose:

☐ Option 1: Voters will face the same two candidates every period.

☐ Option 2: Voters will face two different candidates who were randomly selected every period.

*Question 10.* Please choose:

☐ Option 2: Voter60 will be the same participant every period.

☐ Option 3: Voter60 will be a different participant every period (randomly selected among all voters).

**Please wait**

You are done with the instructions and questions. Once everyone else is finished the first period will begin.

You can go back and read the instructions once again if you wish.

# Appendix B. Additional predictions

## B.1. Robustness to inequity aversion

We examine whether Proposition 1 is robust to Fehr–Schmidt inequity aversion. Let individual $i$'s utility be $U_i = \pi_i - \frac{1}{5}\alpha_i \sum_{j \neq i} \max\{\pi_j - \pi_i, 0\} - \frac{1}{5}\beta_i \sum_{j \neq i} \max\{\pi_i - \pi_j, 0\}$, where the reference group comprises the other five members of the society and $\alpha_i > \beta_i > 0$.

Majority voters continue to strictly prefer higher winning tax rates. A higher tax rate raises their material earnings and reduces their disadvantage relative to the elite voter. Although it can also increase their advantage relative to the politicians, this effect receives less weight, $\beta_i < \alpha_i$. Direct substitution shows that the smallest utility gain from moving to the next-highest feasible tax rate is $2.5 + 2\alpha_i - \beta_i > 0$. Thus, each majority voter votes for the politician offering the higher final tax rate, and the higher-tax politician wins every unequal-tax election.

The elite voter is richer than every other individual at all feasible tax rates. Before transfers, their utility from winning tax rate $\theta_w$ is $U_E = 60 - 48.8\beta_E + (45\beta_E - 37.5)\theta_w$. Therefore, they strictly prefer lower tax rates if $\beta_E < \frac{5}{6}$. The same threshold determines their transfer choice. Starting from zero transfers, a one-point transfer reduces their material earnings by one point but decreases the sum of their advantageous earnings differences by six points. Its marginal utility is therefore $-1 + \frac{6}{5}\beta_E$. Because Fehr–Schmidt utility is concave in transfers, zero transfers are optimal whenever $\beta_E < 5/6$. This is a relatively weak restriction: Fehr and Schmidt's calibration assigns $\beta = 0.6$ even to individuals with the strongest aversion to advantageous inequality.

Finally, inequity aversion does not overturn politicians' incentives to choose the maximum tax rate. With zero transfers, a politician's expected utility given equal final tax rates, $U_i(\theta)$, satisfies $U_i(0) < U_i(0.18) < U_i(0.36) < U_i(0.54) = U_i(0.72)$. The tax-setting procedure breaks the remaining indifference in favor of 0.72. From any equal initial tax pair below 0.72, a politician can initially choose 0.72 and induce the other politician to match it, paying the revision cost. At $(0.54, 0.54)$, where the final earnings distributions would otherwise yield the same expected utility, this deviation raises utility by $\frac{c}{10}(\alpha_i - \beta_i) > 0$. At $(0.72, 0.72)$, a downward deviation either produces an election loss or requires the deviating politician to pay the revision cost, and neither outcome is profitable. Hence, the unique equilibrium of the zero-transfer tax policy game remains $\theta_A = \theta_B = 0.72$.

It follows that Proposition 1 holds exactly under Fehr–Schmidt preferences when $\beta_E < 5/6$: majority voters support the higher-tax politician, the elite voter supports the lower-tax politician and makes no transfers, and both politicians choose 0.72. Playing this one-shot SPE after every history is also an SPE of the finitely repeated game. If $\beta_E \geq 5/6$, the zero-transfer prediction can fail because the elite voter may transfer to reduce advantageous inequality, and the elite voter's ranking of tax rates can also reverse. These departures concern the elite voter's behavior, however, not the electoral advantage of high tax rates: majority voters continue to elect the higher-tax politician, and the zero-transfer tax policy game continues to select 0.72.

## B.2. Transfer rules with all five tax rates

The analysis in Section 3 uses reduced tax policy games with the two extreme tax rates, 0 and 0.72. This appendix shows how the same transfer rules extend to the full five-rate action space, $\theta = \{0, 0.18, 0.36, 0.54, 0.72\}$. The additional tax rates make the tax policy games more complex, but they also clarify which features of the transfer rules underlie the predictions in the reduced games.

### *Individual low-tax reward*

We begin with individual low-tax reward (ILTR). With five tax rates, the natural analogue of ILTR is a transfer that decreases linearly with the politician's final tax rate. Let $\bar{t}_i$ denote the maximum transfer politician $i$ can receive under ILTR. If politician $i$ chooses final tax rate $\theta_i$, the elite voter transfers $t_i(\theta_i, \bar{t}_i) = \bar{t}_i(1 - \theta_i/0.72)$. Thus, politician $i$ receives $\bar{t}_i$ after choosing 0, receives no transfer after choosing 0.72, and receives intermediate transfers after choosing intermediate tax rates. Figure B1 shows the resulting full five-rate tax policy game. As in the main text, we abstract away from tax-rate revisions and treat the actions in the matrix as final, accepted tax rates. Thus, a politician who chooses a lower tax rate is deliberately choosing a tax rate closer to the elite voter's preferred policy.

The full tax-rate matrix shows why ILTR is less powerful once intermediate tax rates are available. Consider the symmetric case, $\bar{t}_A = \bar{t}_B = \bar{t}$. In the reduced two-rate game, the relevant comparison is between choosing 0 and choosing 0.72, so $t > 3$ is sufficient to make the low tax rate attractive. With five tax rates, a politician can instead move one step above the other politician's tax rate, win the election, and still retain most of the linear transfer. For example, suppose both politicians choose 0. If politician $i$ stays at 0, she receives $3 + \bar{t}$. If she deviates to 0.18, she wins the election and receives $6 + 0.75\bar{t}$. Thus, $(0, 0)$ is a Nash equilibrium only if $3 + \bar{t} \geq 6 + 0.75\bar{t}$, or $\bar{t} \geq 12$. The same logic applies throughout the matrix: increasing one's tax rate by one step raises the office payoff by 3 points but reduces the ILTR transfer by only $\bar{t}/4$. Hence, the linear reward must be steep enough that $\bar{t} \geq 12$.

| *Final tax rate $\theta_A$ of politician A* | *Final tax rate $\theta_B$ of politician B* | | | | |
|---|---|---|---|---|---|
| | 0 | 0.18 | 0.36 | 0.54 | 0.72 |
| 0 | $(3+\bar{t}_A,\ 3+\bar{t}_B)$ | $(\bar{t}_A,\ 6+0.75\bar{t}_B)$ | $(\bar{t}_A,\ 6+0.50\bar{t}_B)$ | $(\bar{t}_A,\ 6+0.25\bar{t}_B)$ | $(\bar{t}_A,\ 6)$ |
| 0.18 | $(6+0.75\bar{t}_A,\ \bar{t}_B)$ | $(3+0.75\bar{t}_A,\ 3+0.75\bar{t}_B)$ | $(0.75\bar{t}_A,\ 6+0.50\bar{t}_B)$ | $(0.75\bar{t}_A,\ 6+0.25\bar{t}_B)$ | $(0.75\bar{t}_A,\ 6)$ |
| 0.36 | $(6+0.50\bar{t}_A,\ \bar{t}_B)$ | $(6+0.50\bar{t}_A,\ 0.75\bar{t}_B)$ | $(3+0.50\bar{t}_A,\ 3+0.50\bar{t}_B)$ | $(0.50\bar{t}_A,\ 6+0.25\bar{t}_B)$ | $(0.50\bar{t}_A,\ 6)$ |
| 0.54 | $(6+0.25\bar{t}_A,\ \bar{t}_B)$ | $(6+0.25\bar{t}_A,\ 0.75\bar{t}_B)$ | $(6+0.25\bar{t}_A,\ 0.50\bar{t}_B)$ | $(3+0.25\bar{t}_A,\ 3+0.25\bar{t}_B)$ | $(0.25\bar{t}_A,\ 6)$ |
| 0.72 | $(6,\ \bar{t}_B)$ | $(6,\ 0.75\bar{t}_B)$ | $(6,\ 0.50\bar{t}_B)$ | $(6,\ 0.25\bar{t}_B)$ | $(3,\ 3)$ |

**Figure B1. Normal-form representation of the tax-policy stage with individual low-tax reward (ILTR)**

*Note:* The first entry in each cell is politician $A$'s payoff and the second is politician $B$'s payoff. Payoffs correspond to the expected office bonus plus transfers received from the elite voter, net of tax-revision costs and excluding the fixed politician earnings $e_P = 10$. A transfer $t_i(\theta_i, \bar{t}_i) = \bar{t}_i(1 - \theta_i/0.72)$ is paid to politician $i$ whenever $i$ chooses a tax rate of $\theta_i$.

The equilibrium implications are therefore sharper than in the reduced two-rate game. If $t < 3$, the high-tax profile $(0.72, 0.72)$ is the unique pure-strategy equilibrium. If $3 < t < 12$, the symmetric five-rate ILTR game has no pure-strategy equilibrium. If $t > 12$, choosing 0 is a strict best response to every final tax rate the other politician can choose, so $(0, 0)$ is the unique pure-strategy equilibrium. This exercise clarifies the role of the reduced two-rate game. A transfer slightly above 3 is enough to reward a politician for choosing 0 rather than 0.72, but it is not enough to prevent deviations to intermediate tax rates. Thus, once intermediate tax rates are feasible, ILTR requires a steeper reward schedule to implement zero tax rates as an equilibrium.

### *Strict payoff-dominance implementation*

We next extend strict payoff-dominance implementation (SPDI) to the full tax-rate action space, $\theta = \{0, 0.18, 0.36, 0.54, 0.72\}$. Let $\bar{\tau}_i$ denote the maximum SPDI transfer that politician $i$ can receive. With five tax rates, we define SPDI as a coordinated low-tax reward: the elite voter transfers to both politicians only when they choose the same final tax rate, and the transfer decreases linearly with that common tax rate. Thus, if $\theta_A = \theta_B = \theta$, politician $i$ receives $\tau_i(\theta, \bar{\tau}_i) = \bar{\tau}_i(1 - \theta/0.72)$. If $\theta_A \neq \theta_B$, no SPDI transfer is paid.

Figure B2 shows the five-rate tax policy game under SPDI. As in the reduced SPDI game, the matrix summarizes the continuation of the accept–reject tax-setting procedure. If the two initial tax rates are equal, both politicians accept the tax pair and receive the SPDI transfer associated with that tax rate. If the initial tax rates differ, the politician who initially chose the lower tax rate can reject the pair, pay the revision cost $c$, and match the higher tax rate.

| Initial tax rate $\theta_A$ of politician $A$ | Initial tax rate $\theta_B$ of politician $B$: 0 | 0.18 | 0.36 | 0.54 | 0.72 |
|---|---|---|---|---|---|
| 0 | $(3+\bar{\tau}_A,$ $3+\bar{\tau}_B)$ | $(3+0.75\bar{\tau}_A-c,$ $3+0.75\bar{\tau}_B)$ | $(3+0.50\bar{\tau}_A-c,$ $3+0.50\bar{\tau}_B)$ | $(3+0.25\bar{\tau}_A-c,$ $3+0.25\bar{\tau}_B)$ | $(3-c,$ $3)$ |
| 0.18 | $(3+0.75\bar{\tau}_A,$ $3+0.75\bar{\tau}_B-c)$ | $(3+0.75\bar{\tau}_A,$ $3+0.75\bar{\tau}_B)$ | $(3+0.50\bar{\tau}_A-c,$ $3+0.50\bar{\tau}_B)$ | $(3+0.25\bar{\tau}_A-c,$ $3+0.25\bar{\tau}_B)$ | $(3-c,$ $3)$ |
| 0.36 | $(3+0.50\bar{\tau}_A,$ $3+0.50\bar{\tau}_B-c)$ | $(3+0.50\bar{\tau}_A,$ $3+0.50\bar{\tau}_B-c)$ | $(3+0.50\bar{\tau}_A,$ $3+0.50\bar{\tau}_B)$ | $(3+0.25\bar{\tau}_A-c,$ $3+0.25\bar{\tau}_B)$ | $(3-c,$ $3)$ |
| 0.54 | $(3+0.25\bar{\tau}_A,$ $3+0.25\bar{\tau}_B-c)$ | $(3+0.25\bar{\tau}_A,$ $3+0.25\bar{\tau}_B-c)$ | $(3+0.25\bar{\tau}_A,$ $3+0.25\bar{\tau}_B-c)$ | $(3+0.25\bar{\tau}_A,$ $3+0.25\bar{\tau}_B)$ | $(3-c,$ $3)$ |
| 0.72 | $(3,$ $3-c)$ | $(3,$ $3-c)$ | $(3,$ $3-c)$ | $(3,$ $3-c)$ | $(3,$ $3)$ |

**Figure B2. Normal-form representation of the tax-policy stage with strict payoff dominance implementation (SPDI)**

*Note:* The first entry in each cell is politician $A$'s payoff and the second is politician $B$'s payoff. Payoffs correspond to the expected office bonus plus transfers received from the elite voter, net of tax-revision costs and excluding the fixed politician earnings $e_P = 10$. If initial tax rates are equal $\theta_A = \theta_B = \theta$, the tax pair is accepted and the SPDI transfer $\tau_i(\theta, \bar{\tau}_i) = \bar{\tau}_i(1 - \theta/0.72)$ is paid to politician $i$ for a final tax-rate pair of $(\theta, \theta)$. If initial tax rates differ, the lower-tax politician rejects the pair, pays $c$, and matches the higher tax rate. In the experiment, $c = 0.25$ in all treatments.

The matrix shows that SPDI generalizes differently from ILTR. Under SPDI, the transfer depends on coordinated final tax rates. In the symmetric case, $\bar{\tau}_A = \bar{\tau}_B = \bar{\tau}$, every diagonal profile is a pure-strategy equilibrium for $\bar{\tau} > 0$. If both politicians initially choose the same tax rate, deviating downward requires the deviating politician to pay the revision cost and return to the original tax rate, whereas deviating upward leads to coordination at a higher tax rate and a lower SPDI transfer. Thus, no unilateral deviation is profitable. Although the full five-rate SPDI game has five coordinated pure-strategy equilibria, these equilibria are strictly ranked for the politicians when $\bar{\tau} > 0$. Hence, $(0, 0)$ strictly payoff-dominates all other coordinated equilibria for the politicians whenever $\bar{\tau} > 0$.

### *Election-loss compensation*

We next extend election-loss compensation (ELC) to the full tax-rate action space. Let $\bar{\kappa}_i$ denote the maximum compensation politician $i$ can receive under ELC. With five tax rates, the natural analog of ELC is to compensate a politician who chooses a lower final tax rate than the other politician, with compensation increasing in the distance between the two final tax rates. Thus, if $\theta_i < \theta_{-i}$, politician $i$ receives $\kappa_i(\theta_i, \theta_{-i}, \bar{\kappa}_i) = \bar{\kappa}_i(\theta_{-i} - \theta_i)/0.72$. If $\theta_i \geq \theta_{-i}$, no ELC compensation is paid to politician $i$. Hence, politician $i$ receives the maximum compensation $\kappa_i$ only when she chooses 0 and the other politician chooses 0.72. Figure B3 shows the full five-rate tax policy game under ELC. As in the main text, the matrix treats the actions as final tax rates. Compensation is paid only to the lower-tax politician, who loses the election.

Under ELC, transfers compensate politicians for unilateral low final tax rates. In the sym-

| | | *Final tax rate $\theta_B$ of politician B* | | | | |
|---|---|---|---|---|---|---|
| | | 0 | 0.18 | 0.36 | 0.54 | 0.72 |
| *Final tax rate $\theta_A$ of politician A* | 0 | (3, 3) | ($0.25\bar{\kappa}_A$, 6) | ($0.50\bar{\kappa}_A$, 6) | ($0.75\bar{\kappa}_A$, 6) | ($\bar{\kappa}_A$, 6) |
| | 0.18 | (6, $0.25\bar{\kappa}_B$) | (3, 3) | ($0.25\bar{\kappa}_A$, 6) | ($0.50\bar{\kappa}_A$, 6) | ($0.75\bar{\kappa}_A$, 6) |
| | 0.36 | (6, $0.\bar{5}0\kappa_B$) | (6, $0.25\bar{\kappa}_B$) | (3, 3) | ($0.25\bar{\kappa}_A$, 6) | ($0.50\bar{\kappa}_A$, 6) |
| | 0.54 | (6, $0.\bar{7}5\kappa_B$) | (6, $0.50\bar{\kappa}_B$) | (6, $0.25\bar{\kappa}_B$) | (3, 3) | ($0.25\bar{\kappa}_A$, 6) |
| | 0.72 | (6, $\bar{\kappa}_B$) | (6, $0.75\bar{\kappa}_B$) | (6, $0.50\bar{\kappa}_B$) | (6, $0.25\bar{\kappa}_B$) | (3, 3) |

**Figure B3. Normal-form representation of the tax-policy stage with election loss compensation (ELC)**

*Note:* The first entry in each cell is politician $A$'s payoff and the second is politician $B$'s payoff. Payoffs correspond to the expected office bonus plus transfers received from the elite voter, net of tax-revision costs and excluding the fixed politician earnings $e_P = 10$. A transfer $\kappa_i(\theta_i, \theta_{-i}, \bar{\kappa}_i) = \bar{\kappa}_i(\theta_{-i} - \theta_i)/0.72$ is paid to politician $i$ only when politician $i$ chooses a lower tax rate than their opponent, $\theta_i < \theta_{-i}$. If $\theta_i \geq \theta_{-i}$, no ELC compensation is paid to politician $i$.

metric case, $\bar{\kappa}_A = \bar{\kappa}_B = \bar{\kappa}$, the high-tax profile $(0.72, 0.72)$ is a pure-strategy equilibrium if $\bar{\kappa} \leq 3$. If $\bar{\kappa} > 3$, this outcome is no longer an equilibrium because a politician can deviate to 0 and receive compensation $\bar{\kappa}$. At the same time, coordinated low taxes are not a pure-strategy equilibrium under ELC. At $(0, 0)$, either politician can deviate to 0.18, win the election, and receive 6 points instead of the expected office payoff of 3 points. In other words, successful rent diversion is not implemented by a coordinated low-tax equilibrium. Instead, ELC can generate asymmetric equilibria. The profile $(0, 0.72)$, and symmetrically $(0.72, 0)$, is a pure-strategy equilibrium when $\bar{\kappa} \geq 3$. For sufficiently large compensation, additional asymmetric equilibria with lower winning tax rates become possible. These equilibria still do not produce a zero winning tax rate. However, they show that larger ELC compensation can make asymmetric outcomes with lower winning tax rates more attractive.

### *Quantal-response predictions*

Figure B4 shows that QRE predictions from the reduced games largely carry over to the full tax-rate action space. Because intermediate tax rates are now feasible, the figure plots the expected winning tax rate rather than the probability of a zero winning tax rate. Under ILTR, larger rewards reduce the expected winning tax rate, but the reduction is gradual: intermediate tax rates allow politicians to move toward the majority voters' preferred tax rate while still retaining part of the low-tax reward. Consequently, even the split-the-difference amount, $t = 9$, does not select the zero tax rate as sharply as in the reduced game. Under SPDI, the prediction is much closer to the reduced-game result. Transfers targeted at coordinated low tax rates

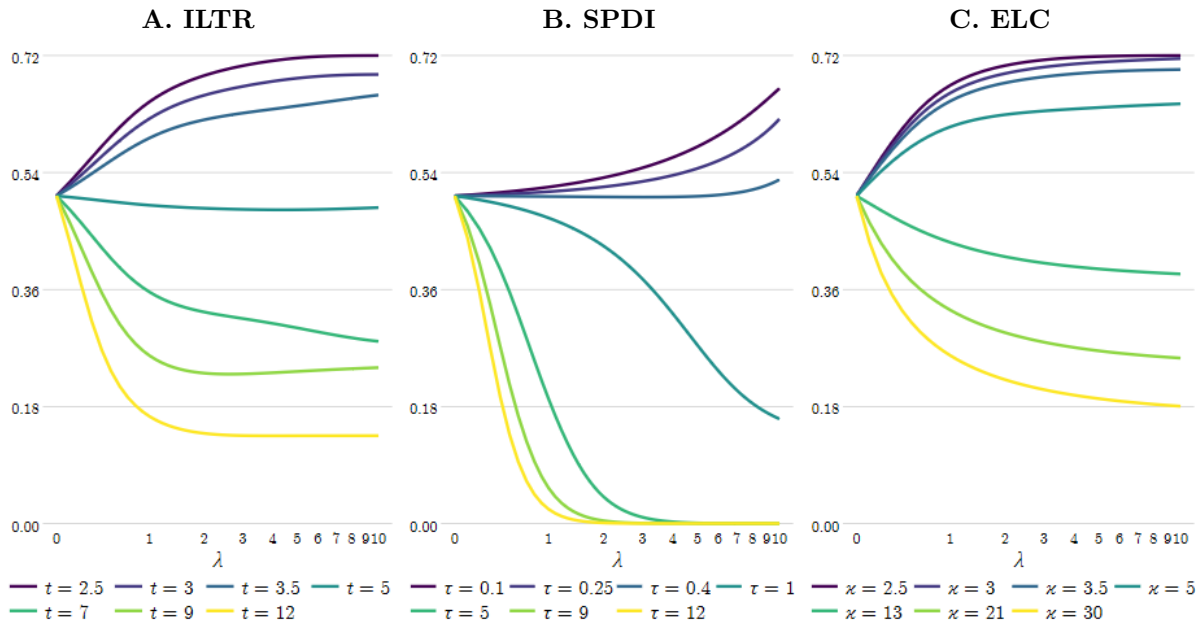


**Figure B4. QRE predictions for the expected winning tax rate when considering the full tax-rate action space**

*Notes:* The figure plots the QRE-predicted expected winning tax rate as a function of the precision parameter $\lambda$. To make differences at low values of $\lambda$ easier to see, the horizontal axis is plotted using the transformation $\ln(\lambda + 1)$, with tick labels reported in the original $\lambda$ units. Predictions are calculated along the principal path of the logit QRE for the reduced games in Figures B1, B2, and B3. Panel A reports predictions for individual low-tax reward (ILTR), Panel B for strict payoff-dominance implementation (SPDI), and Panel C for election-loss compensation (ELC). Each panel includes several symmetric transfer amounts.

move the expected winning tax rate sharply toward zero, and relatively modest transfers are sufficient to generate low expected tax rates as decision precision increases. Under ELC, higher compensation lowers the expected winning tax rate, but the limiting outcome remains bounded away from zero.

Figure B5 shows the corresponding implications for the elite voter's expected earnings. The qualitative comparison across transfer rules is again similar to the reduced-game analysis. ILTR can raise the elite voter's expected earnings, but the gains are modest because rewards are paid for all individual low tax rates, including cases where the winning tax rate remains positive. SPDI generates the largest gains. Expected earnings rise sharply once the transfer is large enough to make low-tax coordination likely, and then fall as transfers become unnecessarily large. As in the reduced game, the earnings-maximizing SPDI transfer decreases as decision precision increases. ELC produces a different pattern. Expected earnings rise more gradually with compensation because larger compensation continues to reduce the expected winning tax rate even at high decision precision. However, these gains require substantially larger transfers and remain below the peak earnings generated by SPDI. Thus, the full five-rate analysis reinforces the main prediction: SPDI is the most direct and payoff-conserving transfer rule for sustaining low tax rates, while ILTR and ELC can reduce taxes but do so less efficiently from

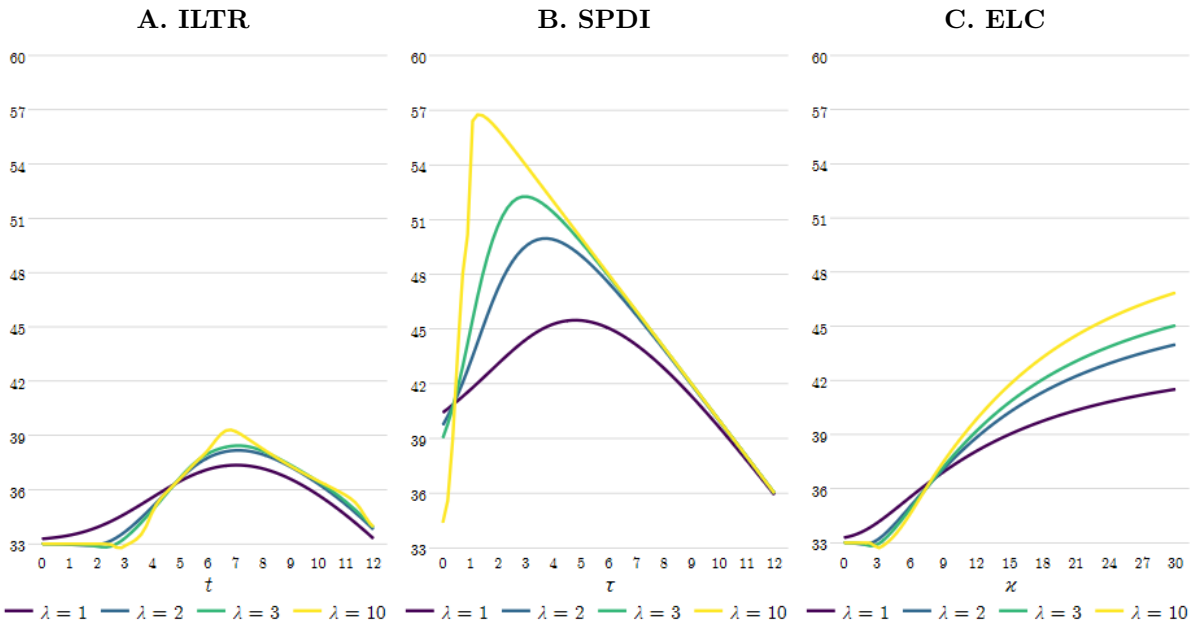


**Figure B5. QRE predictions for the elite voter's expected earnings, $E(\pi_E)$**

*Notes:* The figure plots the QRE-predicted expected earnings of the elite voter, $E(\pi_E)$, as a function of the symmetric transfer amount. Predictions are calculated along the principal path of the logit QRE for the reduced games in Figures 2, 3, and 4. Panel A reports predictions for individual low-tax reward (ILTR), Panel B for strict payoff-dominance implementation (SPDI), and Panel C for election-loss compensation (ELC). Each panel includes the predictions for four different values of the precision parameter $\lambda$.

the elite voter's perspective.

## Appendix C. Regression tables

Table C1 reports the estimates from the hurdle models underlying the predicted transfers presented in the main text. Each specification jointly estimates two equations. Panel A reports logit coefficients for whether the elite voter makes a positive transfer to a politician. Panel B reports coefficients from a linear model of the transfer amount conditional on a positive transfer; the dependent variable is the log transfer amount in columns I and II and the transfer amount in points in column III. In both equations, the explanatory variables include treatment indicators and treatment-specific coefficients on the receiving politician's final tax rate (labeled as "tax rate"), the other politician's final tax rate (labeled as "other's tax rate"), and the interaction between the two tax rates. Hence, the specification allows both margins of transfer behavior, as well as the relationship between transfers and the complete final tax-rate profile, to differ across treatments. *No Reputation* is the omitted treatment category. Column I reports the baseline specification. Column II adds controls for whether the receiving politician won the election, the period number, and the politician label. Column III reestimates the baseline specification with positive transfer amounts measured in levels rather than logs. All specifications include elite-voter random effects in both equations to account for persistent unobserved heterogeneity

across an elite voter's repeated transfer choices. The random effects are allowed to be correlated across equations, and standard errors are clustered at the society level. Panel C reports the corresponding variance components. The estimated random-effect variances indicate substantial persistent heterogeneity among elite voters on both the probability and conditional-amount margins, while the estimated covariance between these propensities is positive but imprecisely estimated.

**Table C1. Hurdle regressions of transfer choices**

*Notes:* Panel A reports logit coefficients for whether the elite voter makes a positive transfer. Panel B reports linear coefficients for the amount of a positive transfer; the dependent variable is the log transfer amount in columns I and II and the transfer amount in points in column III. *No Reputation* is the omitted treatment category. Column II additionally controls for whether the receiving politician won the election, the period number, and the politician label (these coefficients are omitted). Both equations include elite-voter random effects, which are allowed to be correlated. Standard errors clustered at the society level are in parentheses. $^{*}$, $^{**}$, and $^{***}$ denote statistical significance at the 10%, 5%, and 1% levels, respectively.

| | I | II | III |
|---|---|---|---|
| *Panel A. Positive transfer: logit coefficients* | | | |
| *Elite Reputation* | −0.45 | 0.12 | −0.44 |
| | (1.32) | (1.40) | (1.31) |
| *Two-sided Reputation* | 0.83 | 1.26 | 0.88 |
| | (0.94) | (1.05) | (0.94) |
| *No Reputation* × tax rate | −6.12*** | −5.36*** | −6.10*** |
| | (0.93) | (1.05) | (0.93) |
| *Elite Reputation* × tax rate | −4.05*** | −4.24*** | −4.02*** |
| | (1.50) | (1.55) | (1.49) |
| *Two-sided Reputation* × tax rate | −10.45*** | −10.43*** | −10.50*** |
| | (1.97) | (2.04) | (1.98) |
| *No Reputation* × other's tax rate | −1.52 | −1.37 | −1.48 |
| | (2.02) | (2.11) | (2.02) |
| *Elite Reputation* × other's tax rate | 0.35 | −0.36 | 0.37 |
| | (1.24) | (1.18) | (1.23) |
| *Two-sided Reputation* × other's tax rate | 1.19 | 0.61 | 1.20 |
| | (1.09) | (0.95) | (1.11) |
| *No Reputation* × tax rate × other's tax rate | 1.92 | 1.21 | 1.83 |
| | (1.87) | (1.99) | (1.89) |
| *Elite Reputation* × tax rate × other's tax rate | 1.53 | 2.15 | 1.50 |
| | (1.93) | (1.88) | (1.91) |
| *Two-sided Reputation* × tax rate × other's tax rate | 5.67** | 6.12** | 5.54** |
| | (2.60) | (2.68) | (2.60) |
| Constant | 1.60** | 1.58* | 1.59** |
| | (0.79) | (0.92) | (0.79) |

**Table C1. Hurdle regressions of transfer choices *(continued)***

| | I | II | III |
|---|---|---|---|
| *Panel B. Positive-transfer amount* | | | |
| *Elite Reputation* | 0.14 | 0.10 | 3.53 |
| | (0.22) | (0.22) | (2.16) |
| *Two-sided Reputation* | 0.14 | 0.10 | 3.42 |
| | (0.25) | (0.28) | (2.40) |
| *No Reputation* × tax rate | −0.36 | −0.27 | 5.90 |
| | (1.03) | (1.02) | (8.66) |
| *Elite Reputation* × tax rate | −0.42 | −0.35 | −2.96** |
| | (0.27) | (0.30) | (1.45) |
| *Two-sided Reputation* × tax rate | −0.68 | −0.47 | −1.45 |
| | (0.73) | (0.82) | (4.48) |
| *No Reputation* × other's tax rate | −0.22 | −0.31 | 3.77 |
| | (0.45) | (0.46) | (5.77) |
| *Elite Reputation* × other's tax rate | −0.28 | −0.32* | −2.07* |
| | (0.21) | (0.19) | (1.25) |
| *Two-sided Reputation* × other's tax rate | 0.42* | 0.36 | 2.76** |
| | (0.21) | (0.22) | (1.18) |
| *No Reputation* × tax rate × other's tax rate | −1.32 | −1.36 | −18.17 |
| | (2.35) | (2.33) | (18.18) |
| *Elite Reputation* × tax rate × other's tax rate | −0.56 | −0.58 | 0.18 |
| | (0.44) | (0.44) | (2.72) |
| *Two-sided Reputation* × tax rate × other's tax rate | 0.12 | −0.09 | −6.69 |
| | (0.95) | (0.96) | (6.54) |
| Constant | 1.51*** | 1.59*** | 3.13 |
| | (0.19) | (0.20) | (2.18) |
| *Panel C. Variance components* | | | |
| Variance of random effect: positive transfers | 2.27*** | 2.32*** | 2.34** |
| | (0.87) | (0.88) | (0.93) |
| Variance of random effect: transfer amount | 0.23** | 0.24** | 4.22* |
| | (0.11) | (0.11) | (2.31) |
| Covariance of elite-voter random effects | 0.26 | 0.23 | 1.45 |
| | (0.27) | (0.27) | (1.09) |
| Residual variance: transfer amount | 0.29*** | 0.29*** | 9.12*** |
| | (0.05) | (0.05) | (2.38) |
| Additional controls | No | Yes | No |
| Observations | 1200 | 1200 | 1200 |
| Positive-transfer observations | 493 | 493 | 493 |
| Societies | 24 | 24 | 24 |

Table C2 presents the predicted transfers from the regression in column II of Table C1. This specification adds controls for whether the receiving politician won the election, the period number, and the politician label to both equations of the hurdle model. The predicted transfers are very similar to those in Table 3. In particular, transfers remain substantially higher when

the receiving politician chooses 0% rather than 72%, holding the other politician's final tax rate fixed. These differences remain statistically significant across all three treatments and for both final tax rates of the other politician. Moreover, the Wald tests continue to find no significant difference in the reward for a low final tax rate when the other politician chooses 0% versus 72%. The largest numerical change occurs in *Two-sided Reputation*, where the predicted transfer in the unilateral low-tax profile falls from 7.42 to 6.87 points, but it remains the largest predicted transfer in the table. Thus, controlling for the election outcome, time trends, and the politician label does not alter the conclusion that transfers primarily reward the receiving politician's own low final tax rate.

**Table C2. Predicted transfers with additional controls**

*Notes:* The table reports predicted transfers from the elite voter, estimated using a hurdle model with a logit equation for whether the elite voter makes a positive transfer and a linear equation for the amount transferred (in logs). Both equations include treatment indicators interacted with the receiving politician's final tax rate, the other politician's final tax rate, and their interaction. In addition, both equations control for whether the receiving politician won the election, the period number, and the politician label. The model includes elite-voter random effects in both equations and clusters standard errors at the society level. Each cell reports the predicted transfer from the elite voter to a given politician for the indicated combination of final tax rates. Standard errors are in parentheses.

| Final tax rate of receiving politician | Final tax rate of other politician | *No Reputation* | *Elite Reputation* | *Two-sided Reputation* |
|---|---|---|---|---|
| 72% | 72% | 0.18 | 0.99 | 1.46 |
| | | (0.10) | (0.26) | (0.78) |
| 72% | 0% | 0.59 | 1.10 | 0.08 |
| | | (0.39) | (0.37) | (0.11) |
| 0% | 72% | 2.36 | 3.26 | 6.87 |
| | | (0.98) | (0.89) | (1.77) |
| 0% | 0% | 3.81 | 4.33 | 5.08 |
| | | (1.21) | (1.14) | (0.97) |

Table C3 presents the predicted transfers from the regression in column III of Table C1. This specification assesses the sensitivity of the results to modeling the amount of a positive transfer in levels rather than in logs. The main results for *Elite Reputation* and *Two-sided Reputation* are robust. In both treatments, predicted transfers remain substantially and significantly higher when the receiving politician chooses 0% rather than 72%, irrespective of the other politician's final tax rate. The levels specification also preserves the especially large predicted transfer in the unilateral low-tax profile in *Two-sided Reputation*, which rises slightly from 7.42 to 7.87 points. The principal difference concerns *No Reputation*. In this treatment, the predicted transfer after coordinated low final tax rates falls from 3.94 to 2.36 points, while the predicted transfer in the unilateral low-tax profile rises from 2.61 to 3.45 points. Consequently, the estimated rewards

for choosing 0% rather than 72% are less precise and are not statistically significant at the 5% level in *No Reputation*. Thus, modeling positive transfers in levels weakens the evidence for a systematic low-tax reward in *No Reputation*, but leaves the central findings for the two reputation treatments unchanged.

**Table C3. Predicted transfers with positive transfers in levels**

*Notes:* The table reports predicted transfers from the elite voter, estimated using a hurdle model with a logit equation for whether the elite voter makes a positive transfer and a linear equation for the amount transferred. Both equations include treatment indicators interacted with the receiving politician's final tax rate, the other politician's final tax rate, and their interaction. The model includes elite-voter random effects in both equations and clusters standard errors at the society level. Each cell reports the predicted transfer from the elite voter to a given politician for the indicated combination of final tax rates. Standard errors are in parentheses.

| Final tax rate of receiving politician | Final tax rate of other politician | *No Reputation* | *Elite Reputation* | *Two-sided Reputation* |
|---|---|---|---|---|
| 72% | 72% | 0.07 | 1.18 | 1.11 |
| | | (0.22) | (0.30) | (0.66) |
| 72% | 0% | 0.83 | 1.01 | 0.10 |
| | | (0.58) | (0.33) | (0.13) |
| 0% | 72% | 3.45 | 3.77 | 7.87 |
| | | (1.93) | (0.99) | (1.08) |
| 0% | 0% | 2.36 | 4.60 | 5.61 |
| | | (1.93) | (1.03) | (0.96) |

Table C4 reports the hurdle regression underlying the predicted transfers for low- and high-tax societies presented in the main text. As in the baseline specification, the two equations are estimated jointly. Panel A reports logit coefficients for whether the elite voter makes a positive transfer to a politician, while Panel B reports linear coefficients for the log transfer amount conditional on a positive transfer. The principal difference from the baseline model is that the treatment indicators are divided according to whether a society is categorized as low-tax (average winning tax rate below 36%) or high-tax (average winning tax rate above 36%). Note that all societies in *No Reputation* are low-tax societies. In both equations, the resulting treatment–society categories are interacted with the receiving politician's final tax rate (labeled as "tax rate"), the other politician's final tax rate (labeled as "other's tax rate"), and the interaction between the two tax rates. The specification allows both the probability and conditional amount of a transfer, as well as their relationship with the complete final tax-rate profile, to differ between low- and high-tax societies within each treatment. The table places the coefficients for low- and high-tax societies in separate columns for readability, but all coefficients come from a single jointly estimated model. Both equations include elite-voter random effects to account for persistent unobserved heterogeneity in repeated transfer choices; these random effects are allowed to be correlated, and standard errors are clustered at the society level. Panel

C reports the corresponding variance components.

**Table C4. Hurdle regressions of transfer choices for high-tax and low-tax societies**

*Notes:* The table reports estimates from a single jointly estimated hurdle model. Panel A reports logit coefficients for whether the elite voter makes a positive transfer. Panel B reports linear coefficients for the log transfer amount conditional on a positive transfer. Societies are classified as low-tax if their average winning tax rate is below 36% and as high-tax otherwise. The columns separate the corresponding coefficients for presentation; they do not represent separate regressions. Note that all societies in *No Reputation* are classified as high-tax. Both equations include elite-voter random effects, which are allowed to be correlated. Standard errors clustered at the society level are in parentheses. $^{*}$, $^{**}$, and $^{***}$ denote statistical significance at the 10%, 5%, and 1% levels, respectively.

| | High-tax societies | Low-tax societies |
|---|---|---|
| *Panel A. Positive transfer: logit coefficients* | | |
| *Elite Reputation* | −4.61 | −0.58 |
| | (3.30) | (1.10) |
| *Two-sided Reputation* | 1.81** | 0.59 |
| | (0.83) | (0.95) |
| *No Reputation* × tax rate | | −6.15*** |
| | | (0.89) |
| *Elite Reputation* × tax rate | 2.34 | −4.60*** |
| | (3.94) | (1.78) |
| *Two-sided Reputation* × tax rate | −8.68*** | −12.84*** |
| | (0.08) | (3.06) |
| *No Reputation* × other's tax rate | | −1.56 |
| | | (1.97) |
| *Elite Reputation* × other's tax rate | 5.53 | 1.67*** |
| | (3.78) | (0.49) |
| *Two-sided Reputation* × other's tax rate | −2.52 | 1.96*** |
| | (2.69) | (0.64) |
| *No Reputation* × tax rate × other's tax rate | | 1.96 |
| | | (1.84) |
| *Elite Reputation* × tax rate × other's tax rate | −6.07 | −0.71 |
| | (5.84) | (1.09) |
| *Two-sided Reputation* × tax rate × other's tax rate | 7.68 | 7.28* |
| | (4.74) | (3.76) |
| Constant | 1.64** | |
| | (0.75) | |

**Table C4. Hurdle regressions by society-level tax classification *(continued)***

| | High-tax societies | Low-tax societies |
|---|---|---|
| *Panel B. Positive-transfer amount* | | |
| *Elite Reputation* | 2.19*** | 0.53*** |
| | (0.72) | (0.20) |
| *Two-sided Reputation* | 0.23 | 0.14 |
| | (0.54) | (0.23) |
| *No Reputation* × tax rate | | −0.35 |
| | | (1.04) |
| *Elite Reputation* × tax rate | −3.61*** | −0.49 |
| | (1.11) | (0.62) |
| *Two-sided Reputation* × tax rate | 0.10 | −1.12** |
| | (1.24) | (0.46) |
| *No Reputation* × other's tax rate | | −0.23 |
| | | (0.46) |
| *Elite Reputation* × other's tax rate | −3.60*** | −0.18 |
| | (1.06) | (0.27) |
| *Two-sided Reputation* × other's tax rate | −0.86 | 0.74*** |
| | (1.13) | (0.12) |
| *No Reputation* × tax rate × other's tax rate | | −1.32 |
| | | (2.35) |
| *Elite Reputation* × tax rate × other's tax rate | 4.05*** | −0.07 |
| | (1.55) | (1.35) |
| *Two-sided Reputation* × tax rate × other's tax rate | 0.78 | −1.03 |
| | (2.46) | (1.04) |
| Constant | 1.49*** | |
| | (0.20) | |
| *Panel C. Variance components* | | |
| Variance of random effect: positive transfers | 2.19*** | |
| | (0.84) | |
| Variance of random effect: transfer amount | 0.21* | |
| | (0.11) | |
| Covariance of elite-voter random effects | 0.31 | |
| | (0.24) | |
| Residual variance: transfer amount | 0.28*** | |
| | (0.05) | |
| Observations | 1200 | |
| Positive-transfer observations | 493 | |
| Societies | 24 | |