

Influence without Bribes: A Noncontracting Model of Campaign Giving and Policymaking

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Efforts to find empirical evidence that campaign money impacts policymaking choices have offered scant support for interest group influence. A possible explanation is that the hypothesis that those receiving campaign monies should adjust their policy choices to favor their donor requires the untenable assumption that interest groups and legislators can implement contracts. We develop a new, alternative, model in which legislators and interest groups cannot engage in any form of contracting, and legislators care about both the policy and fundraising implications of their policy choices. In our model, an interest group gives only to those it believes shares its policy preferences. Nonetheless, we show that the group's giving impacts incumbent policy choices. Importantly, when groups ideologically match, the relationship between actual contributions and bias is not straightforward. As long as a group is uncertain about a member's primitive policy preference, it can influence her policymaking even when it contributes to her challenger or abstains from giving altogether.

1 Introduction

For several decades, scholars have investigated whether campaign giving by interest groups successfully influences legislative policy choices, typically in the U.S. Congress. The most common approach is to regress campaign donations on roll call voting behavior. However, most of the time, the estimated coefficients from these models have either been insignificant or wrongly signed (e.g., Milyo, Primo, and Groseclose 2000; Ansolabehere, de Figuerido, and Snyder 2003). Given the intuitive expectation that donations and actions should be linked, these findings have drawn considerable attention.

A variety of inferences could be drawn from the aggregate results of this research program. One is that favor buying occurs, but that our research designs are not sophisticated enough to pick up its effects.¹ As such, if we just modify our research design or estimation technique appropriately, we will uncover unambiguous evidence of group influence. For example, if we look at actions in committees rather than on the floor (Hall and Wayman 1990), or if we incorporate fixed effects in our estimation (Wawro 2001), we will discover unambiguous evidence of quid pro quos consistent with anecdotal descriptions.

Alternatively, another inference that can be drawn is that motivations for giving are consumption (Ansolabehere et al. 2003) or election oriented (Gopoian 1984; Poole, Romer, and Rosenthal 1987)

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¹Several papers that model the process by which interest groups buy policy favors illustrate that detecting the impact of money on policy may be difficult with standard research designs (e.g., Grossman and Helpman 1994; Dal Bó 2007). For example, Dal Bó (2007) explores a model in which an interest group seeks to affect a committee's decision. In an equilibrium, the group is able to influence the committee's policy choice yet pays out essentially nothing. In such a setting, even though a form of vote buying occurs, detecting it would be exceedingly difficult with a standard empirical research design.

and not instrumental in terms of guiding policy choices. Stated differently, we realize insignificant and conflicting results because the pleasure that donors get out of the act of giving or their beliefs that selecting an incumbent with the correct policy preferences are of paramount importance. Hence, we should assume that donations are aimed principally to enhance or to reduce the electoral prospects of existing allies or enemies (and are not intended to influence the policy choices of lawmakers).

Not inconsistent with this last point, a third inference that we might draw is that the theoretical assumption that many influence models seemingly rest on—that interest groups and politicians can commit to fulfilling their respective ends of a quid pro quo via some form of contracting—is untenable. Although a wealth of prominent theoretical models assume that contracting is possible (e.g., Grossman and Helpman 1994; Dal Bó and Di Tella 2003), the lack of a clear enforcement mechanism makes the applicability of such frameworks to the modern legislature tenuous (McCarty and Rothenberg 1996). Rather, if we want insights into the role of campaign monies within the context of the legislative process, it would seem that models not relying upon such a strong assumption would be preferable.

If it is true that commitment is not possible either via contracts or some other mechanism (notably repeated play),² and matching models (i.e., models in which groups use their money to help elect ideological allies) are the most appropriate, it might appear that the question of whether donations change postelection legislator behavior to favor interest groups is moot. In both the theoretical and empirical literatures, it appears to be assumed, sometimes implicitly and other times explicitly, that a necessary condition for donations to influence behavior is that the money in question be allocated for that instrumental purpose (e.g., Wright 1985; Bronars and Lott 1997; Levitt 1998). As one leading scholar of campaign finance has put it, “[t]wo necessary (but not sufficient) conditions for [political action committee (PAC)] contributions to influence roll call votes are that PACs allocate money with the intent of influencing roll calls, and congressmen are aware of this intent” (Wright 1985, 79). By this logic, if donations are to influence the policies pursued by incumbents, they must be given with the aim of influencing the policies pursued by incumbents.

However, as we show, this need not be the case: Even in a model of donations based on ideological matching, without contracting or other commitment mechanisms, the incumbent’s strategic need to shape the contribution process can induce bias in her policy choices. Specifically, we present a formal model of campaign giving that differs from the previous literature in that it both rules out contracting and other commitment mechanisms and investigate what happens after a member is elected and is making policy choices. We demonstrate that there are a set of very reasonable conditions under which, even if an interest group is not seeking to buy policy favors, the incumbent’s behavior is altered due to the group’s giving.

In particular, our analysis suggests that the key for money to bias member behavior in a world without commitment is that interest groups be uncertain of the underlying policy preferences of incumbent lawmakers. As long as the interest group has some uncertainty about an incumbent’s underlying ideology, then the donation process can result in policy bias. Strikingly, this uncertainty results in a setting in which an interest group can influence an incumbent without giving, as an incumbent may cater to a group not to receive a donation, but simply to mitigate the group’s incentive to give to her opponent.³

The essential logic of our model is the following: The interest group uses the incumbent’s policy choices to draw inferences about the incumbent’s underlying ideology. In an equilibrium, by catering to the group, the incumbent signals that she likely shares the group’s policy preferences. Hence, by catering to the interest group, the incumbent maximizes the group’s incentive to fund her own campaign and minimizes the group’s incentive to fund her opponent’s campaign. Consequently, the group’s uncertainty about the incumbent’s policy preferences, combined with the group’s desire to elect an ideological ally, results in a setting in which the group’s campaign giving increases the net electoral benefit of catering to the group vis-a-vis a world in which group giving is prohibited. Although such dynamics may seem

²Theoretically, repeated play may sustain cooperation because the threat of terminating future dealings could provide interest groups and legislators an incentive to follow through on their respective ends of a deal today (Kroszner and Stratmann 1998). However, for repeated play to even be a possible solution to the commitment problem requires that the discount rates of neither groups nor legislators be too great. If either places too much emphasis on the present, then the incentive to renege will dominate.

³Mayhew (1975, 41) is the first we are aware of to note this possibility, arguing that an “incumbent not only has to assure that his own election funds are adequate, he has to try to minimize the probability that actors will bankroll an expensive campaign against him.” Although this logic has been formalized in a contracting setting (Dal Bó and Di Tella 2003), no model has elucidated this possibility in an environment in which contracting is not possible.

natural, they do not arise in existing models of campaign finance, as no model with campaign giving allows for uncertainty about a politician's underlying stance.

In short, our contributions are as follows: First, in providing a new model of campaign giving, we illustrate that, contrary to claims by leading scholars of campaign finance, the giving of groups that use their resources exclusively to aid the electoral prospects of ideological allies can distort the behavior of incumbent lawmakers. In doing so, we offer an *alternative mechanism* by which money can influence incumbent behavior, one that does not rely upon vote buying (or any form of contracting). Thus, our analysis suggests that even if one could empirically prove that quid pro quos never occur, money could still be biasing the policy choices of lawmakers. Therefore, it should not be surprising that, even in the absence of systematic evidence that interest groups are able to buy policy favors, there is a widespread perception that policymakers are nevertheless responsive to the needs of big donors (Persily and Lammie 2004).⁴ Second, we establish that, in contrast to groups that seek to buy policy favors from lawmakers, the influence of groups that seek to elect ideological allies extends beyond those to whom they donate. Hence, when a group ideologically matches, even lawmakers who never receive the group's campaign funds may be affected by the group's campaign giving. As such, the canonical approach to estimating interest group influence empirically, which presumes only those receiving group funds are affected by its giving, may seriously underestimate the scope of a group's influence on lawmaker behavior.

The remainder of our analysis proceeds as follows. After initially surveying the theoretical literature, we lay out our donation-bias model and some basic properties of the equilibria that result. We then derive propositions showing how the need to fundraise can bias incumbent behavior in the absence of contracting and how such bias can occur even net of an actual donation being observed. Before concluding, we explore the robustness of our main results, detailing how uncertainty, whether it exists and to what extent, and the degree of issue salience condition bias toward an interest group. Finally, in the conclusion, we discuss our model's implications for campaign finance jurisprudence and campaign finance regulation.

2 Theoretical Perspectives on Donations and Bias

The literature on campaign finance is replete with formal models of campaign giving (about which we will not be exhaustive). Most of the papers in this literature consider models in which lawmakers and politicians are able to engage in some form of contracting. In such models, public policy is literally for sale, as groups and politicians are able to engage in explicit quid pro quos (e.g., Grossman and Helpman 1994, 1996; Dal Bó, Dal Bó, and Di Tella 2006; Chamon and Kaplan 2007). Although some work has relaxed the contracting assumption, such research focuses exclusively on the effects of campaign giving on the platforms pursued by candidates running for elective office (Austen-Smith 1987; Baron 1994; Bennedsen 2003; Besley and Coate 2008). Missing from the formal literature on campaign finance, then, is an examination of how fundraising considerations influence the policy choices of existing office holders when contracting is not possible.

As mentioned, contracting is an extremely strong assumption given the lack of a clear enforcement mechanism. Furthermore, with or without contracting, the stances candidates take during an election campaign are unlikely to correspond directly to the kinds and gamut of choices that such candidates will face as sitting representatives. For one thing, the nature of electoral promises will rarely translate directly into choices between specific proposals and the status quos that elected officials confront. Also, in their role as candidates rather than lawmakers, politicians have considerable freedom in choosing which issues to deal with and which to stay away from. Consequently, unless we accept claims that contracting is possible in equilibrium and that choices regarding party platforms or other similar vehicles comprehensively cover all issues that incumbents deal with while in office, there is a considerable gap in the literature. It is this gap that our paper seeks to fill: We provide the first formal model examining the effects of campaign giving on postelection policymaking when contracting is not possible.

In order to construct a model of postelection policymaking in the absence of contracting, we build upon the political agency literature in which voters attempt to draw inferences about an incumbent's

⁴For example, in a 2002 survey, 55% of respondents thought that "big contributions to political parties" have a great deal of influence "on decisions made by the federal government." In the same survey, 82% of respondents believed that a \$50,000 contribution to a campaign would likely result in special consideration of one's opinions. See Persily and Lammie (2004, 140–41) for more details.

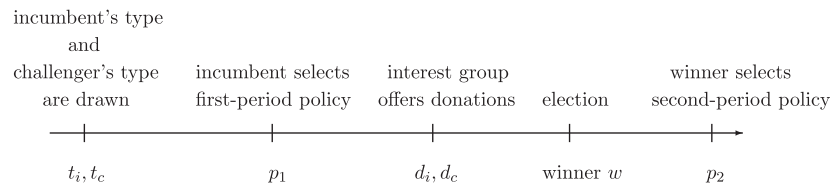


Fig. 1 Timeline of policymaking game.

characteristics—such as her underlying competence (e.g., *Canes-Wrone et al. 2001*) or her underlying policy preferences (e.g., *Coate and Morris 1995*; *Cho 2009*)—based upon her policy choices. In this literature, an incumbent’s policy choice serves as a signal, albeit a sometimes noisy one, of her underlying type. Whereas prior models of political agency focus on how voters react to the policy choices of incumbents, we develop a model in which an incumbent must consider the reaction of *both* voters and an interest group to the signals conveyed by her policy choices.⁵ It is to specifying such a model that we now turn our attention.

3 The Model

For the sake of parsimony, our model analyzes two periods of policymaking with a single interest group, an incumbent, and a challenger. (The basic results hold for multiple periods, interest groups, or legislators.) Politicians care about policy and holding office and the interest group cares about policy and the cost of its campaign outlays. The key feature of this strategic setting is that the interest group is uncertain about the incumbent’s underlying policy preferences, meaning that the group has the opportunity to learn about the incumbent’s goals from her first-period policy choice. Although the model formulated posits that policy-making occurs on an issue of “low salience” to the public in that voters will not directly change their assessment of the incumbent based on her vote choice over policy, we will later show that our basic insights hold for “high salience” concerns that engage voters as well.

3.1 Timing and Information

In each of two periods, a policy from the set $\{x, y\}$ is selected. An existing incumbent, i , selects the first-period policy, p_1 . Upon this choice of p_1 , an interest group, g , decides whether to donate to the incumbent or her challenger, c , and an election is then held between the two. The election winner, $w \in \{i, c\}$, subsequently selects the second-period policy, p_2 . Figure 1 depicts the policymaking model’s timing.

As campaign spending influences the election’s outcome, in determining her first-period policy choice, the incumbent must consider its impact on the interest group’s campaign giving. This involves taking into account not only the ramifications of her policy choice for her own fundraising but also for her challenger’s. Specifically, group g , preferring policy x , finances the spending of each politician. Although each politician is aware of g ’s preference for x , the interest group is uncertain of the incumbent’s policy preference; we also allow the group to be uncertain of the challenger’s policy preference.⁶

More formally, let $d_i \geq 0$ and $d_c \geq 0$ denote donations to (or, equivalently, spending on behalf of) the incumbent and challenger, respectively. As implied, because the interest group monitors the incumbent’s first-period activity, the group conditions its campaign giving upon the incumbent’s first-period policy choice. The incumbent’s probability of reelection, given by a continuously differentiable function $r(d_i, d_c)$, is assumed to be increasing in d_i and decreasing in d_c . Note that the only channel by which the incumbent’s policy choice affects her reelection prospects is via its effect on the group’s campaign giving—this captures the notion that the issue being decided is one of low salience to the (unmodeled) electorate.⁷

⁵A key difference between an interest group and a voter is that an interest group’s action space is much richer. Although a voter can only vote for or against the incumbent, an interest group has to make two decisions: whom to support and how much support to give.

⁶Although uncertainty about the incumbent’s preference is critical for group influence net of contracting, uncertainty about the challenger’s preference is not. Also, by uncertainty about preferences, we are talking about an incumbent’s or challenger’s primitive preferences and not merely preferences that are measured by a consistent set of behaviors such as roll call votes.

⁷Low salience issues are not necessarily unimportant for voters. For example, at least before the meltdown of the banking industry in 2008, the citizenry gave banking regulation little attention, despite the very obvious impact it would later have on its welfare.

Although the incumbent’s desire to be reelected gives her an incentive to consider the interest group g ’s preferences when making her first-period policy choice, she and her challenger are assumed to care about policy outcomes as well. Specifically, each player in the model is endowed with a type $t \in (-\infty, \infty)$ that characterizes its preference over policies x and y . In any given period, the utility agent j receives from policy p when her type equals t is denoted as $z(p; t)$, where

$$z(p; t) = \begin{cases} t & \text{if } p = x, \\ 0 & \text{if } p = y. \end{cases} \tag{1}$$

Thus, agents whose types are positive (negative) receive positive (negative) utility when x is implemented, whereas all agents receive zero utility when y is implemented. Consequently, those agents for whom $t > 0$ prefer x , those for whom $t < 0$ prefer y , and those for whom $t = 0$ are indifferent between x and y .

To model the interest group’s uncertainty about the policy preferences of politicians, we assume that a politician’s type is her private information.⁸ Although the group is uncertain of each politician’s type, the group knows the prior distributions from which the incumbent’s type and challenger’s type are drawn: The group knows the incumbent’s type, t_i , and the challenger’s type, t_c , are independent draws from density functions f_i and f_c , respectively, where the support of f_i is the real line.⁹ Finally, to capture the fact that politicians know the interest group’s policy aims, we assume that the interest group’s type, $t_g > 0$, is common knowledge. Although the assumption that politicians know the exact intensity of the group’s preference for policy x is a strong one, relaxing it does not substantively effect our main results.

3.2 Payoffs

Having laid out the timing and information for our game, we now turn to detailing each player’s payoff function. As payoffs depend on histories, let history h denote a list that specifies a first-period policy, the interest group’s donation pair, the election winner, and a second-period policy. We denote $U_j(h; t_j)$ as the payoff that agent j receives from history h .

To see how h affects the incumbent’s payoff, recall that the incumbent values holding office in addition to achieving her desired policy. Specifically, she receives a wage of $\rho > 0$ during periods in which she is in office and a wage of zero otherwise. Hence, we specify her payoff function, U_i , as the sum of her per-period policy and office utilities:

$$U_i(h; t_i) = \begin{cases} z(p_1; t_i) + z(p_2; t_i) + 2\rho & \text{if } w = i, \\ z(p_1; t_i) + z(p_2; t_i) + \rho & \text{if } w = c. \end{cases} \tag{2}$$

Analogously, we specify the challenger’s payoff function, U_c , as:

$$U_c(h; t_c) = \begin{cases} z(p_1; t_c) + z(p_2; t_c) & \text{if } w = i, \\ z(p_1; t_c) + z(p_2; t_c) + \rho & \text{if } w = c. \end{cases} \tag{3}$$

Note that, similar to the incumbent, the challenger cares about holding office and the policy selected in each period. In light of the above formulation, the absolute value of the incumbent’s type, $|t_i|$, measures the intensity of her policy preference.

⁸In addition to implying that the interest group is uncertain of each politician’s type, the assumption that a politician’s type is private information also implies that each politician is uncertain of the other politician’s type. Although that latter seems reasonable on epistemic grounds (as the only person who knows a person’s true preferences is the person herself), our results go through even when each politician knows the type of the other politician.

⁹Requiring f_i to have full support (i.e., $f_i(t) > 0$ for all $t \in \mathbb{R}$) is not necessary for the results that follow. This assumption, however, simplifies the analysis of the model.

Turning to the interest group, in addition to policy, the group cares about the size of its campaign outlays. The cost to the interest group of offering donation pair (d_i, d_c) , given by a continuously differentiable function $m(d_i, d_c)$, is nonnegative and increasing in both d_i and d_c . Accordingly, the interest group's payoff function, U_g , is specified as the sum of its per-period policy utilities minus the cost of its campaign outlays:

$$U_g(h; t_g) = z(p_1; t_g) + z(p_2; t_g) - m(d_i, d_c). \quad (4)$$

3.3 The Game and Definition of Equilibrium

Analysis of our two-period incomplete information model is considerably simplified by reelection considerations not impinging upon the second-period policy choice. This follows because the election winner, be it the incumbent or challenger, is not subject to reelection. (Our principal results do not change if we allow subsequent reelection.) As such, we assume that the election winner picks her preferred policy in the second period which, in turn, allows us to focus on analyzing the strategic interaction between the incumbent and the interest group.

As a politician's type determines her second-period policy choice, the interest group needs to draw inferences about the incumbent's and the challenger's types prior to its donation allocation decision. Because the challenger takes no actions prior to the election, the group has no information upon which to update its initial assessment of its ideological congruence with her. Hence, the group anticipates that the challenger, if elected, will implement policy x with probability $\pi_c \equiv \int_0^\infty f_c(t) dt$. In contrast, the group can update its initial assessment of its ideological congruence with the incumbent based upon the incumbent's first-period policy choice. Let $\pi_i \equiv \int_0^\infty f_i(t) dt$ denote the group's initial assessment of its ideological congruence with the incumbent and let $\pi_i(p_1)$ denote the group's updated assessment that the incumbent shares its preference for policy x . Note that this updated assessment can be conditioned on the incumbent's first-period policy choice.

Given that we are solving an incomplete information model, perfect Bayesian equilibrium is the appropriate solution concept.¹⁰ (In what follows, perfect Bayesian equilibria are referred to simply as equilibria.) A candidate for an equilibrium consists of strategies for the incumbent and the interest group as well as a belief function for the interest group. A strategy for the incumbent is a rule specifying a policy choice for each possible realization of her type. A strategy for the interest group is a rule specifying how much the group will donate to the incumbent and how much the group will donate to the challenger for each possible first-period policy. Finally, for each first-period policy, the interest group's belief function assigns an updated assessment of its ideological congruence with the incumbent.¹¹ In an equilibrium, each incumbent type's policy choice maximizes her expected payoff given the interest group's strategy and, for each first-period policy, the interest group's donation pair maximizes its expected payoff given its updated assessment of its ideological congruence with the incumbent, where this assessment is derived via Bayes's rule from the incumbent's strategy whenever possible.

4 Preliminary Results: Equilibria Properties

Prior to addressing whether interest group campaign giving can bias incumbent behavior in the absence of contracting, we establish some preliminary results pertaining to the key incentives facing each of our model's actors.

Property 1. (Incumbent sorting). For each equilibrium of the model, there is an associated cutpoint, t^* , such that any incumbent whose type t_i is greater than t^* chooses x , and any incumbent whose type t_i is less than t^* chooses y . Moreover, in any equilibrium in which the incumbent maximizes her probability of reelection by selecting x (y), this cutpoint is negative (positive).

¹⁰A more formal exposition is provided in the Appendix, available online.

¹¹Technically, the interest group's belief function maps each incumbent policy choice into a density function on the real line. However, because the sign of the incumbent's type uniquely determines her second-period policy choice, the interest group's payoff from the incumbent's reelection depends solely on the sign of her type. As such, in the main text of the paper, we focus on how the incumbent's policy choice affects the probability that the group attaches to the incumbent's type being positive as opposed to how it affects the weight the group assigns to the incumbent's type taking on a particular realization.

Proof. See Appendix. □

Property 1 follows from the trade-off that an incumbent might face in the first period between selecting her preferred policy today and maximizing the probability that she holds office tomorrow. Note that incumbent type t^* defines the incumbent type that is exactly indifferent between selecting her preferred policy and maximizing her probability of reelection. Because incumbent type t^* is indifferent between x and y , any incumbent type whose preference for x is stronger than t^* 's—that is, those for whom $t > t^*$ —will select x .

Property 2. (Interest group learning). In any equilibrium, the interest group's updated assessment of its ideological congruence with the incumbent is greater when x is selected than when y is selected: $\pi_i^*(x) > \pi_i > \pi_i^*(y)$.

Proof. See Appendix. □

As Property 2 states, interest group learning regarding ideological congruence occurs after the incumbent's initial policy choice. Because the incumbent's equilibrium strategy is characterized by cutpoint t^* , the incumbent's policy choice correlates with her underlying policy preference. This implies that the interest group will infer that an incumbent who chooses x in the first period is more likely to share its preference for x than an incumbent who does not.

Property 3. (Interest group matching). In any equilibrium of the model, for a given first-period policy, if the interest group offers a donation, the donation is offered to the politician the interest group believes more likely shares its preference for policy x .

Proof. See Appendix. □

The matching process that Property 3 highlights is a consequence of the fact that the group decides how to allocate its resources after the incumbent's first-period policy choice. Thus, the only effect the group's resources can have at that point is in influencing who holds office in period two. Because the interest group anticipates that the election winner's type will uniquely determine her second-period policy choice, the group is better off when a candidate sharing its preference for x wins the election. As such, the group donates to at most one candidate, with this candidate being the one that the group deems more likely to favor x .

Given matching, we can now characterize the effect of the incumbent's policy choice on how much the interest group donates in equilibrium. However, doing so requires some additional notation and definition. Let $d_j^{p_1^*}$ denote the interest group's equilibrium donation to politician j when the first-period policy is p_1 and define an equilibrium as *nontrivial* if the interest group's spending is positive for at least one of the incumbent's policy choices.¹²

Property 4. (Donation monotonicity). In any nontrivial equilibrium of the model, $d_i^{x^*} \geq d_i^{y^*}$ and $d_c^{y^*} \geq d_c^{x^*}$, where at least one of these inequalities is strict.

Proof. See Appendix. □

Property 4 means that, by selecting x , the incumbent maximizes the size of the donation she gets and minimizes the size of the donation her challenger receives. Thus, in any nontrivial equilibrium, the incumbent maximizes her reelection prospects by catering to the interest group (in fact, this maximization is strict). The basic logic behind donation monotonicity is simple: Because selecting x maximizes the incumbent's reputation for sharing the group's policy preference, the group's net benefit to having the incumbent reelected (challenger elected) is maximized (minimized) when x is selected. This being such, the interest group's willingness to spend on behalf of the incumbent (challenger) is maximized when $p_1 = x$ ($p_1 = y$).

¹²Although conditions exist in which the interest group never donates regardless of the policy chosen, such equilibria are uninteresting and can be easily ruled out. For example, if we assume that r is strictly concave in d_i and strictly convex in d_c and that the marginal cost of the first unit of campaign spending is approximately 0 (i.e., for each $j \in \{i, c\}$, $\lim_{d_j \rightarrow 0} \frac{\partial m(0,0)}{\partial d_j} = 0$), then all equilibria are nontrivial.

5 Analysis of Model: How Ideological Matching Leads to Policy Bias

Having characterized the incentives facing the interest group and the incumbent, we now present our two central results. First, even in a polity in which quid pro quos never occur, fundraising considerations can lead incumbents to select policies that differ from those they would select in a world in which campaign giving was prohibited by law. Second, even if the incumbent knows that the interest group will always donate to her opponent, the group's giving can still bias the incumbent's policy choice.

5.1 Policy Bias with Electorally Motivated Giving

Letting t^o denote the equilibrium cutpoint when donations are prohibited and t^* denote the equilibrium cutpoint when donations are allowed, we get Proposition 1's finding about policy bias with electorally motivated giving.

Proposition 1. (Influence in the absence of contracting). In any nontrivial equilibrium, $t^* < t^o = 0$. Hence, fundraising considerations increase the equilibrium probability that the incumbent caters to the interest group despite the absence of any form of contracting.¹³

Proof. An immediate consequence of Properties 1–4. □

The import of Proposition 1 is not that campaign contributors can bias the behavior of incumbents. As mentioned earlier, there are numerous models of campaign finance in which campaign giving alters equilibrium policy. Instead, the import of Proposition 1 is in establishing that this influence can arise even in a setting in which quid pro quos do not—and by assumption can not—occur. As such, Proposition 1 establishes that a group need not intend to bias the policy choice of incumbents for its giving to have such an effect, a point often overlooked in the campaign finance literature (e.g., Wright 1985; Bronars and Lott 1997; Levitt 1998). More generally, Proposition 1 illustrates that fundraising considerations can taint incumbent behavior even in a world in which the promises of both politicians and interest groups are noncredible (i.e., neither has access to any form of commitment technology).

To see why we have policy influence net of contracting, we consider first the case when donations are prohibited and then contrast it with the case when donations are allowed. Regarding when donations are banned, the incumbent's probability of reelection is independent of her policy choice given low issue salience. As the incumbent has no electoral incentive to veer from her policy preference, each incumbent type selects her preferred policy in the first period, so $t^o = 0$.

In the case when donations are permitted, because the interest group is uncertain of the incumbent's policy preference, it uses the incumbent's first-period policy choice to predict her second-period policy choice. As the incumbent maximizes her reputation for sharing the group's preference for policy x by selecting x , doing so maximizes the group's incentive to finance her campaign and minimizes the group's incentive to finance her opponent's campaign. Consequently, in any nontrivial equilibrium, the incumbent strictly maximizes her reelection probability by selecting x . This electoral incentive to cater to the group—an incentive generated by the group's attempt to elect an ideological ally—biases the policy choice of each incumbent whose type lies in the interval $(t^*, 0)$ relative to what they would choose if donations were banned. When donations are banned, these incumbent types select their preferred policy, y , in each period. However, when donations are allowed, they select x in the first period and y in the second period. Figure 2 graphically characterizes Proposition 1, showing how the possibility of donations induces some types of incumbents to change the policy that they select in equilibrium. Thus, the group's attempt to elect an ideological ally leads incumbent types whose preference for y over x is not too strong to select the group's preferred policy, policy x ; in doing so, such incumbent types are able to pool with those incumbent types that actually prefer policy x .

¹³As shown in Section B of the Appendix, if the marginal productivity of interest group spending is strictly decreasing (i.e., r is strictly concave in d_i and strictly convex in d_c) and the marginal cost of interest group spending is nondecreasing (i.e., m is convex in its arguments), then a unique equilibrium exists.

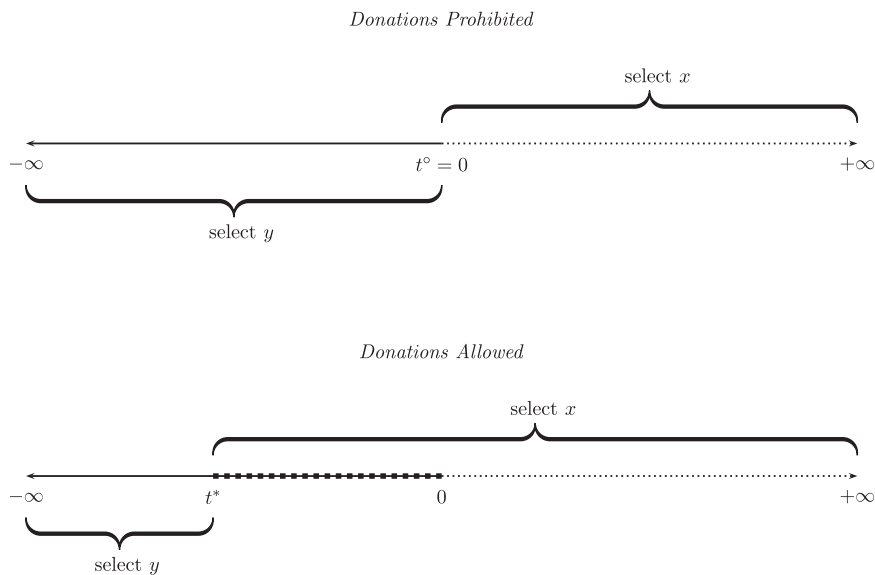


Fig. 2 Fundraising considerations and incumbent equilibrium strategy.

Note. Horizontal lines for both when donations are prohibited and allowed represent the incumbent’s type space. In this illustration, the policy choices of those incumbents whose type lies in the interval $(t^*, 0)$ are affected by the interest group’s campaign giving.

To reiterate, in an equilibrium with campaign giving, the incumbent’s reelection prospects are maximized by catering to the group even though there is no quid pro quo (whether explicit or implicit) between them. Bias is a result of the interplay between the interest group’s learning about the incumbent’s underlying policy preference from her past policy choices and the group’s desire to elect an ideological ally. Even though donations are not offered with the intent of affecting incumbent behavior, the result—in terms of the incumbent’s policy choice—is akin to as if they were. In short, Proposition 1 establishes that the effect of a group’s giving is distinct from its motive for contributing.

5.2 *Influence in the Absence of an Incumbent Donation*

Although Proposition 1 establishes that campaign giving in the absence of contracting can bias incumbent policy choices, Proposition 2 shows that there can be influence even net of an incumbent donation. In delinking the receipt of campaign funds from policy bias, Proposition 2 implies that a group’s influence extends beyond those to whom it donates.

Proposition 2. (Influence in the absence of a donation). An interest group that donates only to ideological allies can influence an incumbent’s policy choice without donating to the incumbent.

Proof. See Appendix. □

To see why this result holds, consider the situation in which the interest group knows that the challenger shares its preference for policy x : $\pi_c = 1$. In this instance, regardless of the incumbent’s policy choice, the group will never donate to her. Nonetheless, in any nontrivial equilibrium, the incumbent has an electoral incentive to cater to the group, as the group gives more to the challenger when y is chosen than when x is chosen (indeed, opting for x could result in neither candidate receiving funds). That the group gives more to the challenger when $p_1 = y$ is due to the fact that the group infers that an incumbent who selects policy y in the first period is more likely to be hostile to its policy aims—and thus more likely to select policy y in the second period—than an incumbent who selects policy x in the first period. Accordingly, even when the incumbent knows that she will never receive the group’s financial backing, the desire to minimize the intensity of the group’s support for her opponent can have the effect of biasing her policy choice.

5.3 Discussion

Proposition 1, together with the fact that the election winner always selects her preferred policy in the second period, implies that in any nontrivial equilibrium, all incumbents for whom $t < t^*$ will select policy y in each period and all incumbents for whom $t > t^o = 0$ will select x in each period. In contrast, each incumbent for whom $t \in (t^*, t^o)$ will select x in period one and y in period two. It is this class of incumbent types whose behavior is affected by the interest group's attempt to elect an ideological ally. Consequently, a natural metric of interest group influence is $\chi^* \equiv \int_{t^*}^{t^o} f_i(t) dt$. In words, χ^* is the ex ante probability that the group's giving biases the incumbent's policy choice. As χ^* increases, so does the probability that the incumbent *panders toward the interest group*—favoring the group in period one and opposing the group in period two. Thus, in a world in which observed behavior was generated by this paper's model, one could gauge the degree to which an interest group biased incumbent behavior by observing the fraction of incumbents that pander toward it. If this fraction is small, this would suggest that the group's giving has a minimal or null effect on incumbent behavior. In contrast, if this fraction is large, this would suggest that the group's attempt to elect ideological allies has a nontrivial effect on incumbent behavior.¹⁴

In light of the above, a research design with the potential to detect the influence of a group that ideologically matches would be one that examines the variation in the roll call voting behavior of lawmakers between their penultimate and final terms in office on matters of importance to that group. Vis-a-vis their final term, one would expect lawmakers to be more sensitive to fundraising considerations—and thus be more likely to cater to potential financial backers—in their next-to-last term.¹⁵ For instance, one might focus on overtime variation in the behavior of legislators on legislation pertaining to gun control if one wanted to get a sense of the extent to which the National Rifle Association's attempt to elect ideological allies biased incumbent behavior.

One potential problem with the proposed research design is that observed pandering toward a given group (i.e., voting for the group's preferred policy in one's penultimate term and opposing the group in one's final term) could be due to the group in question using its resources to buy policy favors from lawmakers. In that case, money would influence policy, but not for the reasons theorized in this paper. In fact, Bronars and Lott (1997) and Bergan (2010) have employed a related research design—one that exploits variation in the voting behavior of lawmakers between their penultimate and final terms—to detect vote buying.¹⁶

One way to untangle contracting from matching within the above framework might be to restrict attention to lawmakers who failed to receive a given group's financial backing over the course of their careers. In canonical contracting theories (e.g., Snyder 1991), interest groups can only influence those to whom they contribute. In contrast, our model suggests that groups that give with the aim of electing ideological allies can affect the behavior of both those to whom they do and do not contribute (Proposition 2). Thus, among lawmakers never receiving a particular group's financial backing, contracting theories suggest that one's behavior (on issues of concern to the group) should be essentially the same across one's penultimate and final terms, whereas our matching theory suggests that there should be some variation.

A final observation concerning the possibility of untangling contracting from matching: In many judicial elections, candidates are shielded from the identity of their campaign donors. The idea behind such donor anonymity is to undercut the possibility of groups buying policy favors from judges. Ayers and Bulow (1998) have proposed that similar donor anonymity be required for legislative elections. If

¹⁴Although the next section considers the case in which the incumbent faces a tension between pleasing her constituents and raising campaign funds, we note now that pandering toward the group in such a setting continues to be indicative of the group's giving biasing the incumbent's policy choice. In contrast, if public opinion coincides with the group's policy goals, regardless of whether campaign giving is permitted, selecting the group's preferred policy would presumably maximize the incumbent's reelection probability; consequently, in this setting, pandering toward the group would no longer be indicative of the group's giving biasing incumbent behavior because, even if campaign giving was prohibited, one would expect some incumbent types to select the group's preferred policy in period one and then oppose the group in period two.

¹⁵Concerns that retirements are not exogenous events might be attenuated by conducting such a study in a setting, such as certain state legislatures, in which legislators are term limited.

¹⁶The central innovation in these studies is, in effect, identifying potential instruments for the campaign contributions lawmakers receive. In Bronars and Lott, this instrument is a lawmaker's voluntary retirement. In Bergan, it is whether a given lawmaker is being termed out of office (Bergan studies the California State Assembly, whose members can serve at most three terms). In neither study do campaign contributions appear to drive legislative behavior, and thus neither study offers much support for the notion that interest groups buy favors with their donations.

such a proposal were ever adopted, contracting would presumably be undermined, and so the observation of lawmakers catering toward wealthy special interests in their penultimate terms but not their final terms would constitute rather compelling evidence of interest group matching biasing incumbent behavior.

We conclude our discussion of the baseline model by pointing out that even in a world in which incumbents win reelection with a relatively high frequency due to an incumbency advantage, interest group matching can still bias incumbent behavior. To see this, define $r(0, 0)$ as the incumbent's *baseline probability of reelection*. This probability can be large or small, and when $r(0, 0) > 1/2$, the incumbent has an electoral advantage vis-a-vis the challenger. Note, however, that what matters for interest group influence—that is, the magnitude of χ^* —is not the magnitude of this baseline probability of reelection but the sensitivity of the incumbent's probability of reelection to campaign spending. When this sensitivity is high, the group will condition its campaign giving on the incumbent's policy choice (i.e., equilibria will be nontrivial). Thus, even in a world in which incumbents tend to have various structural advantages over their opponents, groups may be quite willing to fund their opponents provided that doing so meaningfully impacts the probability with which incumbents win. Consequently, even when incumbents are seemingly safe, an interest group may condition its campaign giving on their policy choices, which implies that their policy choices may be tainted by fundraising considerations.¹⁷

6 Uncertainty and Issue Salience

In this section, we discuss the consequences of relaxing two of the assumptions made earlier: The assumption that the interest group is uncertain of the incumbent's policy preferences and the assumption that the incumbent's policy choice does not have a direct effect on her reelection prospects (i.e., the issue being decided is of low salience to the electorate).

6.1 The Role of Uncertainty about Incumbent Preferences

Uncertainty about the incumbent's policy preferences is crucial for our analysis. Absent such uncertainty, the campaign giving of an interest group that ideologically matches need not bias incumbent behavior.¹⁸ To show this formally, we consider a variant of our model in which the incumbent's type is known by the interest group. In analyzing this variant of our model, due to the group's perfect information about the incumbent's type, our solution concept is subgame perfect equilibrium.

Proposition 3. (Equilibrium without uncertainty). Suppose the incumbent's policy preference is known (i.e., f_i is concentrated at some $t \in T$) and a subgame perfect equilibrium exists. Then, there exists a subgame perfect equilibrium in which the incumbent's behavior is unaffected by the group's campaign giving (i.e., the policy the incumbent chooses when donations are banned is identical to that when donations are allowed).

Proof. See Appendix. □

Sketching the proof to Proposition 3 makes it clear why no uncertainty can result in no bias. Given that the group knows the incumbent's type, it can predict how the incumbent behaves in period two without error. This means that the incumbent's first-period policy choice has no effect on the interest group's incentives to spend on behalf of the incumbent or the challenger. Consequently, conditional upon existence, there is a subgame perfect equilibrium in which the group's spending is independent of the incumbent's first-period decision [i.e., $(d_i^{x*}, d_c^{x*}) = (d_i^{y*}, d_c^{y*})$]. In such an equilibrium, the incumbent's optimal response is to select her preferred policy—behavior that is identical to that when campaign donations are prohibited. Thus, when the incumbent's type is known, the interest group's giving need not, and does not if the equilibrium is unique, affect incumbent behavior.

¹⁷See Section C of the Appendix for a numerical illustration of how the sensitivity of election outcomes to campaign spending mediates interest group influence.

¹⁸In contrast, interest group uncertainty about the challenger's policy preferences is not central to our results about ideological matching and policy bias.

To ensure that there is a unique subgame perfect equilibrium, it is sufficient to assume that the marginal productivity of group spending is strictly decreasing (i.e., r is strictly concave in d_i and strictly convex in d_c) and that the marginal cost of group spending is nondecreasing (i.e., m is convex in both d_i and d_c).^{19,20} Such an assumption captures a world in which the first unit of spending is more effective than the second and the cost of raising the first unit of resources is less than the second. Importantly, whenever the preceding convexity restrictions on r and m are satisfied, if interest group matching is to bias incumbent behavior, then there must be some uncertainty about the incumbent's policy preferences.

Given uncertainty's key role, and what happens if we assume that uncertainty does not exist, one might question the applicability of our analysis to the empirical world. Is assuming uncertainty about an incumbent reasonable? Indeed, it might seem that an interest group would know an incumbent's preference, particularly as a member accrues seniority. However, this intuition is probably not correct, as our model is making an assumption about a member's primitive policy preference and not, for example, her induced preference that is derived from roll call voting patterns (e.g., Poole and Rosenthal 1997). Even for a politician who has served many terms, there may still be considerable uncertainty about her underlying values (i.e., her type t_i). Political expediency, such as the desire to induce contributions or to win constituents' favor, could lead a politician to mask her true preferences throughout her entire career or to change her purported views overtime.²¹ Thus, although uncertainty about a politician's type may be reduced over the years, it may never be completely eliminated. Legislators have strategic reasons to obfuscate and are subject to many pressures to behave in ways that may hide their true beliefs.²²

We now examine how group influence is affected by reducing the variance of the distribution from which the incumbent's type is drawn. Given that when the incumbent's type is known, equilibria always exist in which the group has no influence, one might anticipate that as the variance decreases, interest group influence, as measured by χ^* ,²³ diminishes. In fact, the opposite can be the case.

The key to understanding why this is so rests with recognizing that the group's giving can only affect incumbent types who have a relatively weak preference for policy y over policy x . Thus, changes in the distribution of incumbent types that increase (decrease) the ex ante probability the incumbent is a type who has a weak preference for y over x increases (decreases) the potential for the group's giving to affect incumbent behavior. For instance, consider the special case in which the incumbent's type is drawn from a normal distribution with mean 0. As the variance decreases, the fraction of incumbent types with a weak preference for y over x increases. Provided that moving from a situation of higher variance to lower variance does not substantially impact the cutpoint of the incumbent's equilibrium strategy, such a move will increase χ^* . As the top panels of Fig. 3 indicate, lower variance translating into greater influence can obtain even when the mean of the distribution from which the incumbent's type is drawn differs from 0. As we move from panel (i) to panel (ii), we move from a situation of higher variance to lower variance. Yet, interest group influence is higher in panel (ii) than in panel (i). In contrast, the bottom panels of Fig. 3 depict how decreasing the variance of the distribution from which the incumbent's type is drawn can decrease the interest group's influence. In particular, as we move from panel (iii) to panel (iv), both the variance of the distribution of incumbent types and interest group influence decrease.

Proposition 4. (Variance and bias). A decrease in the variance of the distribution from which the incumbent's type is drawn has an ambiguous effect on χ^ , the ex ante probability that the group's giving affects the incumbent's policy choice.*

¹⁹Existence and uniqueness under these convexity requirements follows from the results in Section B of the Appendix.

²⁰Such assumptions are standard in the formal literature on campaign finance. That said, even under these convexity assumptions, there may exist Nash equilibria in which group giving affects incumbent behavior. Such equilibria are unappealing, however, as they rely upon the interest group making "noncredible" threats.

²¹For one example in this vein, Al Gore evolved from a staunch gun control opponent in the 1970s, while representing a rural Tennessee congressional district, to a strong proponent when he ran for president in 1988 (Dao 2000). Determining whether either of these stands represented Gore's primitive preference at the time is extremely problematic.

²²The strong probability that groups will not know an incumbent's preferences with certainty is also consistent with a long literature on electoral behavior suggesting that only imperfect information is typically available to voters (e.g., Bartels 1986; Alvarez 1997; Tomz and Van Houweling 2009).

²³Recall $\chi^* = \int_r^r f_i(t)dt$.

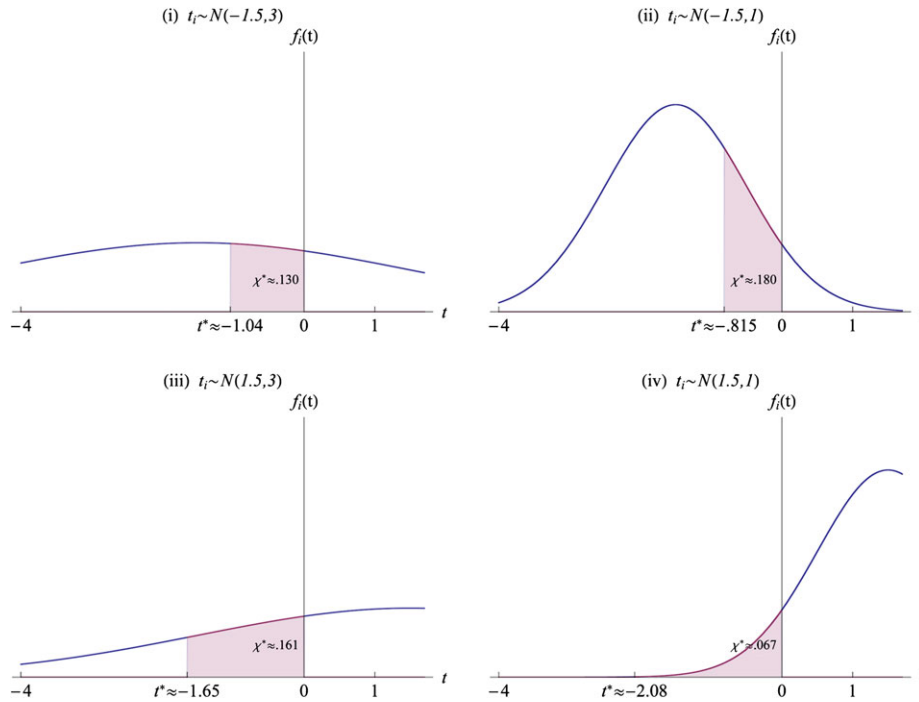


Fig. 3 Interest group influence as a function of the variance of the distribution of incumbent types.

Note. All examples take $r(d_i, d_c) = \frac{.5+d_i}{1+d_i+d_c}$, $m(d_i, d_c) = d_i + d_c$, $\rho = 5$, $\pi_c = .5$, $t_g = 10$ and assume that the incumbent's type t_i is a draw from a normal distribution with mean θ and variance v . In the upper panels, $\theta = -1.5$ and in the lower panels $\theta = 1.5$. Moving left to right moves from the case in which $v = 3$ to $v = 1$. For each panel, we numerically calculate t^* , the equilibrium cutpoint of the incumbent's strategy when donations are allowed, and χ^* , the ex ante probability that the group's giving biases the incumbent's policy choice (which for a given panel equals the area of that panel's shaded region). Panels (i) and (ii) illustrate how a decrease in the variance of the distribution from which the incumbent's type is drawn can result in an increase in χ^* . In contrast, panels (iii) and (iv) illustrate how a decrease in the variance from which the incumbent's type is drawn can result in a decrease in χ^* .

Proof. See Fig. 3. □

6.2 Issue Salience

Thus far, we have established that interest groups that ideologically match can bias the behavior of incumbents on issues of low salience. In the spirit of work by [Denzau and Munger \(1986\)](#), it might appear that an increase in issue salience, and therefore of voter monitoring of incumbent choices, would undermine the likelihood of policy bias. This, however, is not necessarily so in our environment. Specifically, we show that bias remains even with voter monitoring of incumbent policy choices; we also show that there is no general relationship between bias induced by possible donations and the level of issue salience.

To make these points, we focus on the case in which the policy goals of the incumbent's constituents diverge from the interest group's—that is, the incumbent's constituents prefer policy y , whereas the group prefers policy x . As such, the incumbent faces a tension between pleasing the group and pleasing her constituents. This tension is modeled by allowing the incumbent's probability of reelection to depend not only upon the interest group's campaign giving but also upon the probability η that her constituents assign to her sharing the group's preference for x . In particular, the incumbent's probability of reelection is now given by

$$h(d_i, d_c, \eta; \alpha) = (1-\alpha)r(d_i, d_c) + \alpha g(\eta), \tag{5}$$

where g is decreasing in η (i.e., the perception of alignment with the interest group is costly), $g(\eta) \in [0,1]$, $\alpha \in [0,\kappa]$, and $\kappa \in (0,1)$. Thus, when $\alpha = 0$, the incumbent's reelection prospects depend solely on the

group's spending. However, when $\alpha = \kappa$, the incumbent's reelection is also influenced by the direct effect that her policy choice has on her constituents' belief concerning her policy preferences.²⁴ Hence, we can think of α as measuring the first-period policy's salience to the incumbent's constituents. To capture the potential dependency of the incumbent's equilibrium strategy on the salience level α , we denote the cut-points for when donations are banned and allowed— $t^o(\alpha)$ and $t^*(\alpha)$, respectively—as functions of α .

As a comparison for the situation when group giving is allowed and salience is high ($\alpha = \kappa$), we begin by considering what happens when donations are banned and $\alpha = \kappa$. Not surprisingly, in this setting, the incumbent maximizes her reelection prospects by maximizing her reputation for sharing her constituents' preference for policy y . As this is accomplished by selecting $p_1 = y$, when donations are banned, $t^o(\kappa) > 0$: some incumbent types that prefer x nonetheless select y in the first period. Now consider what happens when donations are allowed. As when $\alpha = 0$, by selecting x , the incumbent maximizes the size of the donation she receives and minimizes the size that her opponent receives. This is because, even though $\alpha = \kappa$, selecting policy x continues to signal policy agreement with the interest group. Accordingly, when $\alpha = \kappa$, the group's giving reduces the electoral cost of going against constituent opinion and, as a result, increases the fraction of incumbent types willing to do so: $t^*(\kappa) < t^o(\kappa)$.²⁵ Summarizing, we have:

Proposition 5. (Influence and salience). Suppose that the incumbent's probability of reelection is given by equation (5). In addition, assume that $\alpha = \kappa$, so the issue being decided is of high salience. When donations are banned, $t^o(\kappa) > 0$. And when donations are allowed, in any nontrivial equilibrium, $t^*(\kappa) < t^o(\kappa)$.

Proof. See Appendix. □

Thus, this proposition establishes that even when public opinion is at cross-purposes with the group's policy goals, the potential for group giving continues to affect incumbent behavior. Who the group's giving affects is what distinguishes low salience issues ($\alpha = 0$) from high salience issues ($\alpha = \kappa$). Interestingly, although potential group giving only impacts incumbents not sharing its policy goals when $\alpha = 0$, potential group giving affects the behavior of those who share its goals when $\alpha = \kappa$.²⁶

The importance of Proposition 5 might be diminished if the group's influence was decreasing in issue salience. However, in our setting, an increase in issue salience can sometimes increase group influence. This stems from the fact that the group's giving affects those incumbent types whose equilibrium payoff from policy y in a world without campaign giving is not too much greater than that which would result from selecting x . On an issue of low salience ($\alpha = 0$), such incumbent types are found near $t^o(0) = 0$. On an issue of high salience ($\alpha = \kappa$), such incumbent types are found near $t^o(\kappa)$, where $t^o(\kappa) > 0$. As such, whether group influence is greater when salience is low than when it is high depends, in part, upon the density of f_i in the neighborhoods of $t^o(0)$ and $t^o(\kappa)$, respectively. The upper panels of Fig. 4 depict a scenario in which the distribution of incumbent types is such that an increase in issue salience from $\alpha = 0$ to $\alpha = .2$ results in an increase in interest group influence. The exact opposite scenario is depicted in the lower panels of Fig. 4. Summarizing, we have:

Proposition 6. (Salience and degree of bias). Moving from an issue of lower salience ($\alpha = 0$) to higher salience ($\alpha = \kappa$) has an ambiguous effect on χ^* , the ex ante probability that the group's giving biases the incumbent's policy choice.

Proof. See Fig. 4. □

7 Conclusions

Theoretically, we offer the first model that examines how interest group campaign giving affects the policy choices of incumbents in a setting in which all forms of contracting between politicians and interest groups are ruled out. Instead of assuming that interest groups use their resources to buy policy favors from incumbents, as

²⁴In an equilibrium, we require that η be derived from the incumbent's strategy via Bayes's rule.

²⁵Put differently, absent campaign giving, incumbent type $t^o(\kappa)$ is indifferent between selecting her preferred policy, x , and maximizing her reelection probability by selecting policy y . However, when donations are allowed, because the group's giving reduces the net electoral benefit of selecting y , incumbent type $t^o(\kappa)$ is no longer indifferent and, instead, favors x .

²⁶Namely, suppose $\alpha = \kappa$ and consider those incumbents for whom $t \in (\max\{0, t^*(\kappa)\}, t^o(\kappa))$. Such incumbents prefer policy x , but when donations are prohibited, they select policy y . In contrast, when campaign giving is permitted, they select policy x .

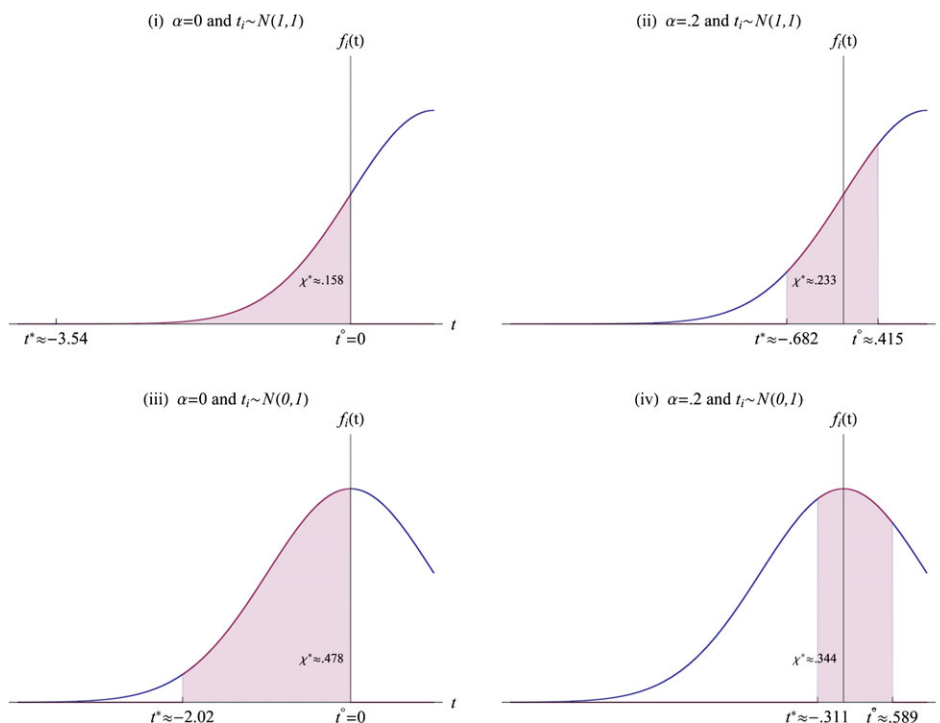


Fig. 4 Interest group influence as a function of issue salience.

Note. All examples take $h(d_i, d_c, \eta; \alpha) = (1-\alpha)\left(\frac{5+d_i}{1+d_i+d_c}\right) + \alpha\left(1-\frac{\eta}{\eta+\pi_c}\right)$, $m(d_i, d_c) = d_i + d_c$, $\rho = 10$, $\pi_c = .5$, $t_g = 10$ and assume that the incumbent's type t_i is a draw from a normal distribution with mean θ and variance 1. In the upper panels, $\theta = 1$ and in the lower panels $\theta = 0$. Moving left to right moves from the case in which $\alpha = 0$ to $\alpha = .2$: we move from a situation of lower salience to higher salience. For each panel, we numerically calculate t^o and t^* , the cutpoints of the incumbent's equilibrium strategy when donations are prohibited and allowed, respectively. In addition, for each panel, we calculate χ^* , the ex ante probability that the group's giving biases the incumbent's policy choice (which for a given panel equals the area of that panel's shaded region). Panels (i) and (ii) illustrate how an increase in issue salience can result in an increase in χ^* . In contrast, panels (iii) and (iv) illustrate how an increase in issue salience can result in a decrease in χ^* .

in earlier work, we assume that interest groups use their resources to aid the electoral prospects of perceived ideological allies—that is, interest groups ideologically match. We believe that this model approximates key aspects of the world that incumbents live in, which is one in which enforceable contracts are not the norm but where concerns about policymaking and fundraising are intimately intertwined.

Our theoretical framework generates a variety of insights that have either not been recognized or fully appreciated. For one thing, we have shown that contractual arrangements, such as vote buying, are not needed for fundraising considerations to taint policy choices. In particular, ideological matching can also bias incumbent behavior. Hence, our model provides a potential explanation for the widespread belief that campaign giving biases the policy choices of lawmakers despite the absence of systematic evidence of quid pro quos between politicians and interest groups.

Moreover, the possibility that groups can influence lawmakers without explicit or implicit quid pro quos has implications for both campaign finance jurisprudence and campaign finance regulation. Regarding the former, the Supreme Court has held that restrictions on the financing of campaigns are constitutional only if they prevent “corruption and the appearance of corruption” (Buckley v. Valeo, 1975) and has said that money corrupts when “[e]lected officials are influenced to act contrary to their obligations of office by the prospect of . . . infusions of money into their campaigns” (Federal Election Commission v. National Conservative Political Action Committee, 1984, 497). Thus, the distortions in incumbent behavior that arise from interest group matching in our model should concern the Court, as the incumbent in our model adjusts her behavior to influence the interest group's campaign giving. Yet, the Court has generally neglected the mechanism by which group giving biases incumbent behavior outlined

here, focusing instead upon bias that results from quid pro quos (“[t]he hallmark of corruption is the financial quid pro quo: dollars for political favors”; *Federal Election Commission v. National Conservative Political Action Committee*, 1984, 497). This focus on quid pro quos has led the Court to uphold limitations on direct campaign giving but reject limitations on independent expenditures on the basis that such expenditures—if truly independent—are unlikely to result in (or be the result of) money for policy quid pro quos. In our model of ideological matching, however, the means by which a group spends its resources is irrelevant—both direct campaign giving and independent expenditures can bias incumbent behavior. Thus, if the Court were to recognize the potential distorting effects of ideological matching on behavior, it might be less comfortable distinguishing independent expenditures from direct campaign giving and, as a result, might be more receptive to future attempts to regulate the former.

With respect to campaign finance regulation, a central thrust of many reform proposals is to undercut the possibility of quid pro quo corruption. As mentioned, *Ayers and Bulow (1998)* propose to shield lawmakers from the identity of their donors in order to undermine the possibility of quid pro quos. However, donor anonymity would do little to short circuit the mechanism by which ideological matching biases incumbent behavior. Thus, even in a world in which lawmakers were uncertain of the identity of those who funded their campaigns, lawmakers would in all likelihood continue to be overly sensitive to the needs of wealthy special interests that use their resources to bankroll candidates deemed to share their policy goals. An alternative policy proposal that has been floated to undercut the possibility of quid pro quo corruption involves various matching fund schemes (e.g., *Hall and Lin 2002*).²⁷ However, one can easily imagine such matching funds amplifying the influence of interest groups which rely heavily upon bundling small donations from its membership base.

Finally, our model suggests that the scope of an interest group’s influence may be far wider than that suggested by canonical models of contracting. In particular, we have shown that groups that ideologically match can bias the behavior of even those they do not contribute to. More generally, the results of our analysis suggest that anytime a politician’s action affects her reputation about her policy preferences, that action (whether it be a vote on a bill, the introduction of an amendment, effort at the committee stage, etc.) may be influenced by the group’s anticipated giving. Furthermore, the influence of groups that ideologically match can manifest in nonobvious ways. For instance, an ambitious local or state official, in deciding how to resolve some local issue, might take account of the needs of interest groups that are active only at the national stage, anticipating that should she ascend to the national legislature, a national group may review her past record to try to form beliefs about her underlying policy predispositions. Additionally, because a group may use a legislator’s entire roll call history to draw inferences about her type, the group’s attempt to elect an ideological ally may cause incumbents to alter their positions on issues that the group does not have a direct stake in.

In short, once we move away from implicitly or explicitly assuming contracting, it becomes clear that detecting the impact of interest group spending on policy choices requires an empirical research design that moves beyond the standard approach of contrasting the behavior of those who receive interest group money with those who do not. And once one acknowledges that the policy choices of incumbents can be influenced by groups that seek to elect ideological allies, the efficaciousness of various campaign finance regulations and legal distinctions between forms of campaign giving can be seen in a new light.

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²⁷Standard matching fund programs limit the amount of money participating candidates can raise from individuals and PACs. For example, a program might require that participating candidates raise no more than \$100 from a given donor. In exchange for abiding by such limits, each dollar a candidate raises from a private donor would be matched with a fixed number of dollars from some public fund.

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