Too close for comfort? Politician - interest group relations under voters' supervision

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Abstract
This article analyzes the dynamics of electoral promises towards the population and interest groups, focusing on the reaction of voters to the proximity of a candidate to interests groups. In a two-period electoral competition model, we show that a (re)election seeking politician must consider the inherent characteristics of voters whilst making announcements and seeking financial support or implementing policies, not to be penalized by strategic voters.

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1. Introduction

It would seem that the role of interest groups in election campaigns is becoming more pervasive. The American presidential campaign of 2008 has confirmed this fact once again; as private contributions (mainly from lobbyists, but also the public) exceeded the levels previously achieved. The substantial financial and logistical support provided by private contributions even allowed one of the candidates the opportunity to decline public financing of his campaign.¹

There is an abundant amount of literature (albeit largely recent) modeling the relationship between politicians and interest groups. However, one area of politico-economic relationships is largely ignored, as noted by Snyder and Ting (2008, p. 482): "How should strategic voters vote when they know that interest groups are trying to skew policies in ways the voters do not like? (…) Existing models focus on the calculations and strategic interactions of interest groups and politicians. As a result, these models treat voters as a black box".

Therefore, it is important to analyze whether a candidate is not at risk of losing an election despite, or rather because of, her high level of campaign resources. The trade-off that the candidate will need to perform can then be analyzed, subject to changes in the formal framework defined in particular by Grossman and Helpman (1994, 1995), which has become one of the main models of analysis in the relationship between interest groups and politicians.

The aim of this paper is to show how the relationship between interest groups and candidates can influence voters; and, retroactively, the initial behavior of candidates when their time horizon includes the prospect of a possible second term.

We propose here a different view of the traditional approaches of political support, by assuming: (i) that voters form an unfavorable image of politicians who are notoriously close to private interests; and (ii) that many interest groups sometimes contribute less to obtain support for policies, than to avoid certain unfavorable policies if the candidate least close to their concerns were elected.²

The contribution of the paper is therefore to incorporate the ambiguous impact of contributions (which increase political support by manipulating the preferences of uninformed voters, and which decrease this support in showing politicians’ submissions to interest groups).

The remainder of the paper is organized as follows. Section 2 details the model's assumptions and structure. Section 3 solves the politicians' maximization program and presents some first interpretations. Section 4 concludes.

¹ See, amongst others, Kimball (2009), Abrams and Settle (2004), or Ansolabere et al. (2003) for details of legislation on campaign finance in the United States.
² Note that the recent decision by the US Supreme Court (Citizens United v. Federal Election Commission, January 2010) softens the legislation, which will make private contributions more and more important. This evolution reinforces the strength of our argument, as it allows firms to contribute to candidate, which could, according to the Senator Robert Menendez, give them "an outsized role" and "will only mean citizens get heard less" (http://www.huffingtonpost.com/2010/01/21/supreme-court-rolls-back_n_431227.html).
2. The model

2.1. Assumptions

We consider the election to be run on real and/or anticipated economic competence, delivered either to the voters or to the interest groups. Each kind of competence is normalized to belong to the \([0;1]\) interval. It corresponds to the quality of the answer to a group’s expectations. Thus if none of a group’s expectations are satisfied, the elected representative’s competence will be perceived by the group members as equal to naught. Let \(e\) be the competence implemented in favor of the population, meaning the electorate (\(e\) therefore represents the efficiency of the economic policy) and \(e^a\) the competence announced during the election campaign. We then use \(l\) as the competence implemented in favor of the (representative) interest group; \(l\) represents the sectoral policy, and \(l^e\) its announcement to the interest group before the election takes place.

We normalize the contributions made to candidates by special interest groups so they are between 0 and 1.\(^3\) As is traditional in the literature on lobbying (see Grossman and Helpman 1994, and Ederington and Minier 2008, for a generalized framework), contributions depend on the announcements made to interest groups (\(l^e\)). The link between the two represents a “contribution plan”. We do not explicitly model the challenger's behavior, as (i) we focus on open-seat elections (and there is therefore no reason to suppose different behavior from the two candidates) and (ii) it is more and more common for interest groups to contribute to both candidates. This behavior is interpreted as a guarantee for the interest group (so that after the election, it does not find itself up against a government that does not owe it anything\(^4\)).

Applying the same logic, we assume that, ceteris paribus, an interest group will be more inclined to contribute to a candidate if she has a strong chance of being elected. As the probability of election ultimately depends on contributions, we will consider that contributions in part depend upon the inherent popularity of the candidate amongst the electorate (including reputation for honesty, which can be evidenced by opinion polls). Let \(\phi\) be the parameter between 0 and 1 corresponding to this state of public opinion towards the candidate. Contributions are therefore a combination of announcements to interest group and the state of opinion. We consider a simple form: \(C = \phi \cdot l^e\). So if \(\phi\) and \(l^e\) equal one, we also have \(C = 1\).

\(^3\) Which can be written as: \(\frac{c}{1+c}\), where \(c\) represents the value of contributions.

\(^4\) A political party may receive favors from two competing groups, and a group can also contribute to two competing political parties. On this point see Helpman (1997). Moreover, as noted by Mueller and Stratmann (1994, pp. 63-64) on a theoretical level, if the contribution results in a change of positions of candidates, it is rational for the lobbyists to contribute to both candidates.
Unfortunately, as most of the groups seek influence, they distract resources from potentially more useful allocations. What Bhagwati (1982) named the "directly unproductive profit-seeking activities" (DUPs) have since been proven as costly.\(^5\) The DUPs here have two consequences. First, as \(l\) "deteriorates" \(e\) as a direct effect of the DUPs, we have: 
\[ e + l = k < 2. \]
Second, as the relations with interest groups are not secret, the effects of announcements to voters are discounted; using a higher factor the closer the politician is from the interest groups. Theoretically, everything happens as if the informed voters were explicitly taking into account the DUPs. To simplify, as we consider an open-seat election, we assume that the informed voters are as numerous as the uninformed ones. As a consequence, we write \(\tilde{e}^a\) to show the competence actually received by voters, and which is therefore different from the announcements. The difference between these two values stems from announcements made to interest groups, discounted by a gamma factor:
\[ \tilde{e}^a = \frac{e^a}{2} + \frac{e^a - \gamma \cdot l^a}{2} = e^a - \frac{\gamma \cdot l^a}{2} \]
where \(\gamma \in [0,1]\) is the impact of the voters’ perception of a close proximity between candidates and interest groups. The first term, \(\frac{e^a}{2}\), corresponds to the behavior of the 50% of uninformed voters, while the other term corresponds to the behavior of the informed voters.

The parameter \(\gamma\) corresponds to the novel hypothesis of this article, namely the ambiguous impact of contributions (which increase political support by manipulating the preferences of uninformed voters, and which decrease this support when observing a politician's allegiance to interest groups).

### 2.2. Electoral support and its evolution

The probability of being elected (\(\rho\)) ex ante depends on the promises made by the candidates to the electorate and to interest groups, and depends on the contributions they receive.\(^6\) This probability also depends on previous deception and on other exogenous parameters (notably the population’s perception of a candidate's personal characteristics, such as morality, honesty…).

This can be written as
\[ \rho = \rho(C, W, \tilde{e}^a, \phi) \]
where \(W\) is the perception of previous lies by the population, \(\tilde{e}^a\) the effect of the announced policy and \(\phi\) summarizes the other exogenous parameters. For the sake of simplicity, we consider equal weights for the two effects that this function includes. As \(W = 0\) in the first period and \(C\) includes \(\phi\), we write\(^7\):
\[ \rho_t = \frac{1}{2}(C_t + \tilde{e}^a_t) \]  \(1\)
which generalizes Brock and Magee (1978), where the more the lobbies contribute, the higher is the probability of election of the politicians defending their claim.

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\(^5\) For a recent evaluation see e.g. Horgos and Zimmermann (2009).
\(^6\) The contributions are dedicated to influence voters’ preferences; if voters were unable to be influenced, we would be in Black’s (1948) theoretical case, with only informed voters and no lobbies.
\(^7\) We can check that when each variable is at its theoretical maximum, then \(\rho = 1\).
Considering lies allows us to incorporate potential sanctions in the following campaign period, which constitute a strong reminder of demagogic commitments in an inter-temporal time frame. In the first period, the probability of election depends on contributions and pledges to voters, the electorate’s overall assessment of the candidate (popularity, $\phi$). In the second period, the probability of election depends on the change in contributions, announcements to voters, the popularity of the candidate ($\phi$) and also lies.

Combining the variation of contributions and perceived deception by the electorate determines the evolution of political support (hence, the variation of the probability of being reelected). Backward induction by the politicians forces them to consider this evolution when announcing policies in the first period. The likeliness of reelection for the outgoing candidate (incumbent)’s election thus reads:

$$\rho_{t+1} = \rho_t \left( \rho_t, \Delta C_t, \Delta W_t, \Delta \hat{e}_t^a \right)$$

As $e^a$ depends on the characteristics of the median informed voter (and on other exogenous parameters), we write $\Delta \hat{e}_t^a = 0$. Hence, focusing on the variation of political support, we have

$$\dot{\rho}_{t+1} = \dot{\rho}_{t+1} \left( C_{t+1}, W_{t+1} \right)$$

Considering equal weights for the two effects, we have:

$$\dot{\rho}_{t+1} = \frac{1}{2} \left( C_{t+1} + W_{t+1} \right)$$

(2)

where $W_{t+1} = \frac{\nu}{1+C} (e-e^a)$ and $C_{t+1} = \mu (l-l^a)$.

$W_{t+1}$ is the perception in $t+1$ of the lie in $t$ by the population and $C_{t+1}$ extends Callander and Wilkie’s (2007) micro-foundations, where actors react to a difference between the optimal policy and the implemented policy. $\mu$ is a positive parameter representing the interest groups' sensitivity to deception (the gap between promises and achievements), and $\nu$ is a positive parameter representing voters’ sensitivity to deception. Any incumbent will be considered in a relatively harsher way, as she will have promised much. As contributions are designed to alter voters’ perceptions, we consider that the effect of $\nu$ becomes weaker when contributions are higher ($\frac{1}{1+C}$).

We consider that, in the case of a deception, half of the electorate would be sensitive to contributions (a consequence of the assumption of an equal share of informed and uninformed voters: if contributions reach their theoretical maximum, then uninformed voters are completely influenced, and the overall sensitivity of the electorate comes down to the sensitivity of informed voters, which is reduced by half).

Let $\hat{\nu}$ be the actual sensitivity of the electorate to deception, including the effect of contributions. We assume that the sensitivity of voters and interest groups to unfulfilled commitments is the same (both interest groups and the electorate are composed of individuals). We therefore have $\hat{\nu} = \mu$. If contributions are equal to zero, we assume that the sensitivity of informed voters ($\nu_{inf}$) and the sensitivity of uninformed voters ($\nu_{un.inf}$) are identical. However, when contributions become positive, the sensitivity of the uninformed electorate decreases, as they are bound to influence the perceptions of voters.
We therefore have $\tilde{\nu} = \frac{1}{2} \cdot (\nu_{inf} + \nu_{un.inf})$, with $\nu_{inf} = \nu_{un.inf} = \nu$ when contributions are equal to zero. However, when contributions are maximized, then $\nu_{n.inf} = 0$; when $\tilde{\nu} = \frac{1}{2} \cdot (\nu_{inf})$.

When contributions vary, we have: $\tilde{\nu} \in \left[\frac{\nu}{2}, \nu\right]$. As $\tilde{\nu} = \mu$, we also have $\mu \in \left[\frac{\nu}{2}, \nu\right]$ and therefore: $\nu > \mu$. At the maximum ($C = 1$), due to the assumption of equal shares of informed and uninformed voters, the sensitivity of the electorate to unfulfilled commitments is reduced by half.

3. Results

3.1. The politician's program

The objective function $G$ is a combination of the probability of election and reelection (weighted by the discount rate of the candidate):

$$G = \rho_t + \beta \cdot \rho_{t+1}$$

where $\beta$ is the candidate's discount rate. In an expanded form, we therefore have:

$$G = \frac{1}{2} \left( C_t + \left( e_i^a - \frac{\gamma \cdot C_t}{2 \cdot \phi} \right) \right) + \beta \left( \mu \left( k - e_i^a - \frac{C_t}{\phi} \right) + \frac{\nu}{1 + C_t} \left( e_i - e_i^a \right) \right)$$

The constraint faced by the candidate concerns her reelection. Let $H$ be the function representing this constraint: $H = \rho_t(1 - K) - \frac{1}{2}$; with $K$ between 0 and 1, representing the safety margin.

The politician’s program is therefore: $\max_{e_i, e_i^a, C_t} G$, such that $H = 0$.

3.2. Too close for comfort?

We now analyze the influence of agents’ characteristics on the equilibrium of the model.

Preference for the present and risk aversion

We can begin by noting that, at the equilibrium, $\rho_t = \frac{1}{2 \cdot (1 - K)}$. We therefore have $\frac{d\rho_t}{dK} > 0$, which means that the higher the safety margin, the more likely the candidate is elected in $t$ (and therefore has a chance to qualify for reelection in $t + 1$). In contrast, $\beta$ corresponds to the candidate’s preference for the present: $K$ and $\beta$ are complementary. Risk aversion means that the election here is prioritized (to the detriment of the probability of reelection): $K$ and $\beta$ therefore vary inversely.

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8 $\beta$ is exactly half of the discounted parameter, since $\rho_{t+1} = \frac{1}{2} \left( C_{t+1} + W_{t+1} \right)$. However, showing the ratio does not change the results.
The relative sensitivity of agents to deception

\( \mu \) is the sensitivity of interest groups to unfulfilled commitments and \( \nu \) is the inherent sensitivity of the population to unfulfilled promises (i.e., without taking contributions into account). To study the effect of the difference between its sensitivities, we set \( \nu = \theta \mu \), with \( \theta > 1 \).

We check that \( \frac{\partial \rho_i}{\partial \theta} = 0 \): as \( \nu \) and \( \mu \) represent the intensity of reprisals, their relative intensity has no effect on the probability of reelection.

However, we have:

\[
\frac{d \rho_{r+1}}{d \theta} = \mu \frac{\nu}{\phi^2} \text{ which is negative. As the relative sensitivities of agents differ, the probability of reelection is smaller. This decrease is due to the fact that, under the constraint of a given level of } \rho_i \text{, maximizing } \rho_{r+1} \text{ requires a marginal balance between the satisfaction of the population and the ‘dissatisfaction’ of interest groups (or vice versa), in the same way as Peltzman (1976) (but with a translation into retaliatory political support). Since the sensitivities differ, reaching the marginal equilibrium requires a higher effort and the equilibrium reached for } \rho_{r+1} \text{ is therefore lower.}
\]

Contributions received

We then check that: \( \frac{\partial C}{\partial \mu} = - \frac{\nu}{\mu^2} < 0 \). When the sensitivity of interest groups to deception increases, they are promised less, so fewer contributions are collected. Fewer announcements to them and fewer contributions mean a decline in policies designed for interest groups. Through the DUPs, this allows policies designed for the population to be improved (\( \frac{\partial e}{\partial \mu} = \frac{\nu}{\phi \mu^2} > 0 \)).

Conversely, when the sensitivity of voter deception increases, political support is sought from interest groups by promising them more: \( \frac{\partial C}{\partial \nu} = \frac{1}{\mu} > 0 \). We find here the following phenomenon: when voters become more susceptible to deception and therefore the prospects of retaliation from them increases, the candidate offsets this by increasing her proximity to interest groups, which results in less effort on the population (\( \frac{\partial e}{\partial \nu} = - \frac{1}{\phi \mu} < 0 \)). The loss vis-à-vis the voters is matched by increased contributions, allowing in return for more influence on uninformed voters (and thus weakening the effect of \( \nu \)).

Campaign promises

Let \( T \) be deception vis-à-vis the electorate (\( T = e - e^\nu \)). We have \( T = \frac{1}{2} (-2 + \phi - \gamma) \frac{\nu}{\phi \mu} < 0 \), which means that the politician maximizes her political support by promising more than she expects to realize.

Concerning economic policy, we have \( \frac{\partial e}{\partial \gamma} = - \frac{1}{2 \phi} < 0 \), which means that the closer a candidate has been considered to interest groups, the less she will then do for the population (which justifies ex post the fears of the population towards the candidate).
Intuitively, we check that promises fall when sensitivity to lies increases \( \frac{\partial e^u}{\partial \gamma} = -\frac{1}{2} \cdot \frac{2\phi - \gamma}{\phi\mu}, \)

negative if \( \gamma \) is weak or zero. Similarly, the more popular the candidate is, the less she needs to promise: \( \frac{\partial e^u}{\partial \phi} = \frac{1}{2} \cdot \gamma \cdot \frac{\mu - \nu}{\phi^2\mu} < 0. \)

The politician must also take into account how voters perceive her relationships with interest groups. The more detrimental links with interest groups are, the more these need to be compensated with higher announcements: \( \frac{\partial e^u}{\partial \gamma} = -\frac{1}{2} \cdot \frac{\mu - \nu}{\phi\mu} > 0. \)

These results show that the politician must take careful account of the intrinsic characteristics of the voters when campaigning and seeking funds. Thus, the candidate must consider not only her perception by voters (popularity) in her campaign, but also informed voters’ acuteness for rejection of a candidate’s proximity to interest groups. This is especially so, as reprisals by informed voters, and thus resistance to relationships with interest groups, are an increasing function of deception. These elements therefore show that a candidate can neither afford nor promise everything without receiving negative reactions from the electorate. They therefore show that a degree of proximity to private interest groups exists, which is too close for comfort (i.e. to maintain the trust of voters). As such, the model and its results offer a view of voters that are no longer treated as a black box, or as myopic actors that respond only to the short-run campaign promises of the current election, offering a complementary approach to the one proposed by Snyder and Ting (2008), who do not take into account campaign promises.

4. Conclusion

Since voters are not considered myopic concerning the relationship between politicians and interest groups, they are able to anticipate the losses induced by the DUPs, a fact the politician has to take account of when campaigning. If we show that political support (a combination of the probability of election and reelection) is maximized for promises that are not completely kept, these deceptions must however be precisely calibrated to the characteristics of voters (voters’ sensitivity to lies, the perception of candidate popularity, resistance towards candidates close to similar interest groups).

Sensitivity to lies largely depends on the share of uninformed voters: if they coexist with informed voters, the politician must take into account the fact that closer ties with interest groups (more contributions) do not help towards a maximization of political support.

If it is a new process to model voters’ resistance to the proximity between politicians and interest groups (in the broad sense, i.e. including small contributors, since it is realistic that voters do not differentiate between the two types of private support), we can see that this was influential in the last U.S. presidential campaign.
Indeed, Barack Obama had initially claimed to refuse private funding (which would have been capped as he had accepted public financing), before reversing his position. We have therefore passed from one equilibrium to another: because of the confirmation of the candidate’s high popularity (\(\phi\)), it appeared to be more beneficial to refuse public finance, and therefore benefit from uncapped private funding (reinforcing his proximity to interest groups, and thus the defiance from voters, \(\gamma\)). Thus, the candidate could maximize partially indexed contributions on his popularity level by more than offsetting the effect of his apparent proximity to interest groups. In the case of Obama, who had initially ruled out financing from interest groups for ethical reasons, this compensation was deemed sufficiently large to also include the political cost of denial.
References


