Demanding More than What You Want

Supplemental Materials

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A Normalization of voter payoff

The payoff specification that we adopt in the text can be motivated as following from the slightly more general formulation

$$u(\varepsilon_i; x_i, c_i) = -\alpha_1|\pi_i| + \alpha_2 c_i + \alpha_3\epsilon_i,$$

where ϵ_i is uniformly distributed on $[-\frac{1}{2\psi}, \frac{1}{2\psi}]$ and where $\alpha_1 + \alpha_2 + \alpha_3 = 1$. In our results we are interested in the tradeoff between policy (distance to ideal point) and capability, for a fixed distribution of residual valence, ε. To focus attention on our comparisons of interest, we adopt the normalization

$$-(1 - \alpha_2 - \tfrac{1}{2})|\pi_i| + \alpha_2 c_i + \frac{1}{2}\epsilon_i = -(1 - \alpha)|\pi_i| + \alpha c_i + \varepsilon_i,$$

where $\alpha = 2\alpha_2$ and ε_i is uniformly distributed on $[-\frac{1}{\psi}, \frac{1}{\psi}]$. This normalization focuses our comparisons on how all-else-equal changes in the salience of competence influence campaign platforms, i.e., for a fixed distribution of residual valence, ε.

B Characterization of equilibrium

Proof of Lemma 1. By substitution for the voter's payoff function, the indifferent residual valence is characterized by

$$-(1 - \alpha)|\pi_L| + \alpha c_L = -(1 - \alpha)|\pi_R| + \alpha c_R + \epsilon^*.$$

which, after rearranging, yields expression (2). □

B.1 Proof of Proposition 1

We proceed backward, the voter's decision rule, ε^*, follows from Lemma 1. We proceed by first establishing the following:

Lemma B.1. *In any equilibrium* $y_L \leq \pi_L^* \leq 0 \leq \pi_R^* \leq y_R$.

Proof. Notice first that in cases: (i) $\pi_L < y_L$; (ii)$\pi_R > y_R$; or (iii) $\pi_R < \pi_L$, that L, R, and both, respectively, have straightforward incentives to deviate to something closer to their ideal point, contradicting that such equilibria could exist. We thus can focus on potential equilibria in which (iv) $\pi_R \geq \pi_L > 0$ or (v) $\pi_L \leq \pi_R < 0$.

For (iv), suppose that there exists an equilibrium where $\pi_R \geq \pi_L > 0$. Then, since $\Delta(\pi_L, \pi_R) = |\pi_R| - |\pi_L| = \pi_R - \pi_L$, the probability L wins is

$$P(\varepsilon \leq \varepsilon^*) = \min\left\{1, \max\left\{0, \frac{\psi((1-\alpha)(\pi_R - \pi_L) + \alpha\gamma) + 1}{2}\right\}\right\},$$

which (weakly) increases as π_L decreases on the interval $[0, \pi_L]$. Thus, for any $\pi_L > 0$, any $\pi_L' \in [0, \pi_L)$ is a profitable deviation, and since π_L was arbitrary, this contradicts that such an equilibrium exists.

Finally, for (v) suppose that there exists an equilibrium where $\pi_L \leq \pi_R < 0$. Then,

$$\Delta(\pi_L, \pi_R) = |\pi_R| - |\pi_L| = \pi_L - \pi_R,$$

and the probability L wins the election is

$$\min\left\{1, \max\left\{0, \frac{\psi((1-\alpha)(\pi_L - \pi_R) + \alpha\gamma) + 1}{2}\right\}\right\}.$$

Let

$$\overline{\pi}_L = \frac{1 - \alpha\gamma\psi + \psi(1-\alpha)\pi_R}{\psi(1-\alpha)}, \tag{B.1}$$

and consider two cases:

(i) If $\pi_L < \overline{\pi}_L$, the probability L wins is less than 1, and the probability L wins is (weakly) decreasing in π'_R on the interval $[\pi_R, 0]$. Thus, any $\pi'_R \in (\pi_R, 0]$ is a profitable deviation for R, contradicting that π_R was part of an equilibrium.

(ii) If $\pi_L \geq \overline{\pi}_L$, L wins with probability 1. For any $\pi_L > y_L$, L can deviate to a $\pi'_L \in [y_L, \pi_L)$ without a loss in the probability of winning, contradicting that π_L was part of an equilibrium. If $y_L = \pi_L$, then, although there is no profitable deviation for L, since $\overline{\pi}_L$ is strictly increasing in π_R, R can profitably deviate to some π'_R such that

$$\pi'_R > y_L - \frac{1 - \alpha\gamma\psi}{\psi(1-\alpha)},$$

thereby strictly increasing her probability of winning, contradicting that π_R was part of an equilibrium.

These two cases complete the proof. □

Given Lemma B.1, we can focus our analysis on when $\pi_L \leq 0 \leq \pi_R$, in which case:

$$\Delta(\pi_L, \pi_R) = |\pi_R| - |\pi_L| = \pi_L + \pi_R.$$

For politician L, her platform choice problem is given by

$$\max_{x_L \in [y_L, 0]} \; - P(\varepsilon \geq \varepsilon^*)|y_L - \pi(x_i; c_i, s)| - (1 - P(\varepsilon \geq \varepsilon^*))|y_L - \pi(x_i; c_i, s)|.$$

Recalling the change of variables, $\pi_i = \pi(x_i; c_i, s)$, applying Lemma B.1, and from (3), L's problem can be simplified to

$$\max_{\pi_L \in [y_L, 0]} \frac{\psi((1-\alpha)(\pi_L + \pi_R) + \alpha\gamma) + 1}{2}(\pi_R - \pi_L).$$

The first-order condition associated with this problem is

$$\frac{\psi(1-\alpha)}{2}(\pi_R - \pi_L) - \frac{\psi((1-\alpha)(\pi_L + \pi_R) + \alpha\gamma) + 1}{2} = 0$$

which reduces to

$$-\frac{\alpha}{1-\alpha}\gamma - \frac{1}{\psi(1-\alpha)} = 2\pi_L,$$

and thus,

$$\pi_L^* = -\frac{\psi\alpha\gamma + 1}{2\psi(1-\alpha)}. \tag{B.2}$$

From this, the equilibrium platform, x_L^*, is implicitly defined by the x_L that solves

$$\pi_L^* = \pi(x_L; c_L, s),$$

which is unique by the strict monotonicity of π.

Moving on, and noting that when between 0 and 1, the probability R wins is

$$\frac{1 - \psi((1-\alpha)(\pi_L + \pi_R) + \alpha\gamma)}{2},$$

we write R's problem as

$$\max_{\pi_R \in [0, y_R]} \frac{1 - \psi((1-\alpha)(\pi_L + \pi_R) + \alpha\gamma)}{2}(\pi_R - \pi_L).$$

Similar calculations as for L show that R's first-order condition reduces to

$$\pi_R^* = \frac{1 - \psi\alpha\gamma}{2\psi(1-\alpha)}.$$

When $\alpha \leq \frac{1}{\gamma\psi}$, we have that $\pi_R^* \geq 0$, and this characterizes R's policy. Instead, when

$\alpha > \frac{1}{\gamma\psi}$, we see that R's constraint binds and $\pi_R^* = 0$. Putting these together we have

$$\pi_R^* = \begin{cases} \frac{1-\alpha\gamma\psi}{2\psi(1-\alpha)} & \text{if } \alpha \leq \frac{1}{\gamma\psi} \\ 0 & \text{if } \alpha > \frac{1}{\gamma\psi}. \end{cases} \tag{B.3}$$

From this, the equilibrium platform, x_R^*, is implicitly defined by the x_R that solves

$$\pi_R^* = \pi(x_R; c_R, s),$$

which is unique by the strict monotonicity of π. The last parts of the formulas follow by applying Lemma B.1.

C Populism, Extremism, and the Status quo Effect

C.1 Proof of Proposition 2

Observe that π_L^* and π_R^*, which are pinned down in Proposition 1, are constant in the status quo, s, and in x. Define $\underline{s}$ as the value of the status quo, s, that solves

$$\pi_L^* = \pi(0; c_L, s),$$

and $\overline{s}$ as the value of the status quo, s, that solves

$$\pi_R^* = \pi(0; c_R, s).$$

Existence of each is ensured since $\pi(0; c_L, s) \to \pm\infty$ as $s \to \pm\infty$, and the Intermediate Value Theorem, which also guarantees uniqueness since π is strictly monotone in s. Moreover, since $\pi_L^* < \pi_R^*$, and since π strictly increases in s, it must be that $\underline{s} < \overline{s}$.

If $s < \underline{s}$, since π increases in s and x, to maintain the equality in

$$\pi_L^* = \pi(x_L^*; c_L, s),$$

it must be that $x_L^* > 0$, and similarly for x_R^*. Now suppose that $x_L^* \geq x_R^*$, and from Lemma B.1,

$$\pi(x_L^*; c_L, s) = \pi_L^* \leq \pi_R^* = \pi(x_R^*; c_R, s),$$

contradicting that $c_L > c_R$.

Similarly, if $s > \overline{s}$, then to maintain the equality in

$$\pi_R^* = \pi(x_R^*; c_R, s),$$

it must be that $x_R^* < 0$, and similarly for x_L^*.

Finally, to conclude, notice that if $s \in [\underline{s}, \overline{s}]$, then by strict monotonicity, and the preceding arguments, $x_L^* < 0 < x_R^*$.

C.2 Proof of Proposition 3

Since $s = 0$, by Proposition 2, $x_L^* < 0 < x_R^*$ as 0 is always contained in $(\underline{s}, \bar{s}]$. Let $\alpha = 0$. Then, by (5) and (6), $|\pi_L^*| = \pi_R^*$. Since $c_L > c_R$ and $s = 0$, we have that $x_R^* > |x_L^*|$ when $\alpha = 0$. Because π_L^* and π_R^* are continuous in α, this implies that $x_R^* > |x_L^*|$ for α close to 0, i.e., there exists an $\hat{\alpha}$, with $0 < \hat{\alpha} \leq 1$, such that R's platform is more extreme relative to the voter than L's platform if $\alpha < \hat{\alpha}$.

D Empirical Implications

D.1 Proof of Proposition 4

Note that, for L, since

$$\begin{aligned}\frac{d\frac{\frac{1}{\psi}+\alpha\gamma}{2(1-\alpha)}}{d\alpha} &= \frac{\gamma 2(1-\alpha)-(\frac{1}{\psi}+\alpha\gamma)(-2)}{4(1-\alpha)^2} \\ &= \frac{\gamma(1-\alpha)+\frac{1}{\psi}+\alpha\gamma}{2(1-\alpha)^2} = \frac{\gamma+\frac{1}{\psi}}{2(1-\alpha)^2} > 0,\end{aligned} \tag{D.1}$$

whenever interior, π_L^* is strictly decreasing in α. Similarly, for R, note that since

$$\begin{aligned}\frac{d\frac{\frac{1}{\psi}-\alpha\gamma}{2(1-\alpha)}}{d\alpha} &= \frac{-\gamma 2(1-\alpha)-(\frac{1}{\psi}-\alpha\gamma)(-2)}{4(1-\alpha)^2} \\ &= \frac{-\gamma(1-\alpha)+\frac{1}{\psi}-\alpha\gamma}{2(1-\alpha)^2} = \frac{-\gamma+\frac{1}{\psi}}{2(1-\alpha)^2},\end{aligned} \tag{D.2}$$

whenever interior, π_R^* is strictly decreasing in α when $\gamma > \frac{1}{\psi}$ and increasing otherwise, completing the proof.

D.2 Proof of Proposition 5

Total differentiation in $\pi_i^* = \pi(x_i^*; c_L, s)$, yields

$$\frac{\partial x_i^*}{\partial\alpha} = \frac{\frac{\partial\pi_i^*}{\partial\alpha}}{\frac{\partial\pi(x_i^*;c_i,s)}{\partial x}}, \tag{D.3}$$

and since $\frac{\partial\pi(x_i^*;c_i,s)}{\partial x} > 0$, we have that $sign\left(\frac{\partial x_i^*}{\partial\alpha}\right) = sign\left(\frac{\partial\pi_i^*}{\partial\alpha}\right)$.

From (D.1), (D.2), and (D.3), we have that π_L^* and x_L^* are strictly decreasing in α and that π_R^* and x_R^* are strictly decreasing in α whenever $\gamma > \frac{1}{\psi}$ and increasing otherwise.

D.3 Proof of Proposition 6

Total differentiation in $\pi_L^* = \pi(x_L^*; c_L, s)$, yields

$$\frac{\partial x_L^*}{\partial c_L} = -\frac{\frac{\partial \pi(x_L^*;c_L,s)}{\partial c_L} - \frac{\partial \pi_L^*}{\partial c_L}}{\frac{\partial \pi(x_L^*;c_L,s)}{\partial x}},$$

which, by substitution, is

$$\frac{\partial x_L^*}{\partial c_L} = -\frac{\frac{\partial \pi(x_L^*;c_L,s)}{\partial c_L} + \frac{\alpha}{2(1-\alpha)}}{\frac{\partial \pi(x_L^*;c_L,s)}{\partial x}}.$$

First, note that $\frac{\partial \pi(x_L^*;c_L,s)}{\partial x} > 0$. Therefore, in order to sign the derivative it suffices to sign the numerator. We will argue that the numerator is increasing in s. Differentiating the numerator with respect to s yields

$$\frac{\partial}{\partial s}\left(-\frac{\partial \pi(x_L^*;c_L,s)}{\partial c_L} - \frac{\alpha}{2(1-\alpha)}\right) = -\frac{\partial^2 \pi}{\partial c_L \partial x_L}\frac{\partial x_L^*}{\partial s} > 0.$$

because $\frac{\partial x_L^*}{\partial s} < 0$ and $\frac{\partial^2 \pi}{\partial c_L \partial x_L} > 0$. Taken together, we get that x_L^* is decreasing in c_L if and only if s is not too far to the right. Assuming $\pi_R^* > 0$, total differentiation in $\pi_R^* = \pi(x_R^*; c_R, s)$, yields

$$\frac{\partial x_R^*}{\partial c_L} = \frac{\frac{\partial \pi_R^*}{\partial c_L}}{\frac{\partial \pi(x_R^*;c_R,s)}{\partial x}},$$

Since $\frac{\partial \pi(x_L^*;c_L,s)}{\partial x} > 0$, and since $\frac{\partial \pi_R^*}{\partial c_L} = -\frac{\alpha}{2(1-\alpha)} < 0$, then x_R^* is decreasing in c_L.

Similarly, considering changes in c_R, total differentiation in $\pi_L^* = \pi(x_L^*; c_L, s)$, yields

$$\frac{\partial x_L^*}{\partial c_R} = \frac{\frac{\partial \pi_L^*}{\partial c_R}}{\frac{\partial \pi(x_L^*;c_L,s)}{\partial x}},$$

and since $\frac{\partial \pi(x_L^*;c_L,s)}{\partial x} > 0$, and $\frac{\partial \pi_L^*}{\partial c_R} = \frac{\alpha}{2(1-\alpha)} > 0$, then x_L^* is increasing in c_R. Assuming

$\pi_R^* > 0$, total differentiation in $\pi_R^* = \pi(x_R^*; c_R, s)$, yields

$$\frac{\partial x_R^*}{\partial c_R} = -\frac{\frac{\partial \pi(x_R^*; c_R, s)}{\partial c_R} - \frac{\partial \pi_R^*}{\partial c_R}}{\frac{\partial \pi(x_R^*; c_R, s)}{\partial x}},$$

where $\frac{\partial \pi_R^*}{\partial c_R} = \frac{\alpha}{2(1-\alpha)} > 0$. Now, as above, $\frac{\partial \pi(x_R^*; c_R, s)}{\partial x} > 0$, $\frac{\partial \pi(x_R^*; c_R, s)}{\partial c_R} < 0$ when $x_R^* < s$, and $\frac{\partial \pi(x_R^*; c_R, s)}{\partial c_R} > 0$ when $x_R^* > s$. Finally, note that because $\pi(x; c, s)$ is increasing in s, x_R^* is decreasing in s. Together with the fact that $\frac{\partial^2 \pi}{\partial c \partial x_R} > 0$, we get that x_R^* is increasing in c_R if and only if s is not too far to the left. This naturally implies that x_R^* is decreasing in $-c_R$ if and only if s is not too far to the left.

E General Setup

In this section we extend our main analysis and develop a more general version of our main model. Suppose that as a function of politician i's platform choice, x_i, the status quo, s, and i's level of capability, c_i, the representative voter's expected ideological payoff from politician i is $U_i(x_i; s, c_i)\colon \mathbb{R} \times \mathbb{R} \times [0,1] \to \mathbb{R}$, which is smooth and its derivative has full rank. The representative voter's expected payoff from i being elected is then

$$u(\varepsilon_i; x_i, c_i) = -(1-\alpha)U_i + \alpha c_i + \varepsilon_i, \tag{E.1}$$

where the other terms are defined as in the main text.

As in the main model, politicians differ in their ideological preferences, where i's ideological position is characterized by her ideal point y_i, where $y_L < 0 < y_R$. Politician i's indirect expected payoff, as a function of the representative voter's expected ideological payoff from j being elected, U_j, is

$$v_i(y_i, U_j),$$

which is single-peaked, smooth almost everywhere, and maximized at y_i. Our main model follows from this formulation where $U_i = |\pi_i|$, and for the politicians, $v_L(y_L, U_j) = |y_L + U_j|$ and $v_R(y_R, U_j) = |y_R - U_j|$.

As in our main analysis, we define the *ideological policy gap*, in terms of the representative voter's expected ideological payoff, as

$$\Delta(U_L, U_R) = U_R - U_L.$$

Recalling that the voter's private residual valence is given by $\varepsilon = \varepsilon_R - \varepsilon_L$, for fixed ideological platforms, (x_L, x_R), and fixed capabilities, (c_L, c_R), the residual valence for which the decisive voter is indifferent between L and R, denoted by ε^*, solves

$$u(\varepsilon^*; U_L, c_L) = u(\varepsilon^*; U_R, c_R).$$

Recalling that the capability gap is represented by $\gamma = c_L - c_R$, we can state the following:

Lemma E.1. *For fixed ideological platforms, (x_L, x_R), and fixed capabilities, (c_L, c_R), the representative voter's vote choice, v, is determined by the decision rule characterized by a cutoff residual valence:*

$$\varepsilon^*(U_L, U_R; \gamma) = \alpha\gamma + (1 - \alpha)\Delta(U_L, U_R), \tag{E.2}$$

where

$$v = \begin{cases} L & \text{if } \varepsilon \leq \varepsilon^*(U_L, U_R; \gamma) \\ R & \text{if } \varepsilon > \varepsilon^*(U_L, U_R; \gamma). \end{cases}$$

By substitution for the voter's payoff function, the indifferent residual valence is characterized by

$$-(1-\alpha)U_L + \alpha c_L = -(1-\alpha)U_R + \alpha c_R + \epsilon^*.$$

which, after rearranging, yields expression (2). Lemma E.1 implies that if the voter's residual valence is to the left, specifically, $\varepsilon < \varepsilon^*$, then she strictly prefers the leftist politician, and similarly, if the voter's residual valence is to the right, i.e., $\varepsilon > \varepsilon^*$, then she strictly prefers the rightist politician.

Moving on the the first stage of the game where politicians choose their platforms, by a similar change of variables as in the main analysis, Politician i's problem can be written as

$$\min_{U_i} P(i \text{ wins} \mid \varepsilon^*(U_L, U_R; \gamma)) \cdot v_i(y_i, U_i) + (1 - P(i \text{ wins} \mid \varepsilon^*(U_L, U_R; \gamma))) \cdot v_i(y_i, U_j). \quad \text{(E.3)}$$

Denote a solution to (E.3) as $U_i^*(U_{-i})$, and U_i^* as the solution to the fixed point problem $U_i^* = U_i^*(U_{-i}^*(U_i^*))$. An equilibrium to this game form is thus a triple, $(U_L^*, U_R^*, \varepsilon^*(U_L, U_R; \gamma))$. It is straightforward to show an analog result to Lemma B.1, noting that the result will be with respect to the space of voter expected ideological payoffs rather than policy (since the policy dimension has been suppressed).

As an example, suppose that policy implementation depends on stochastic factors, where any policy between x_i and s are possible and π_i is a continuous random variable with support on $[x_i, s]$ when $x_i \leq s$, and on $[s, x_i]$ otherwise. Our results follow by applying common representation theorems (e.g., Milgrom 1981) and the Constant Rank Theorem. As another example, suppose that policy is determined by a Bernoulli random variable where x_i is implemented with probability c_i and the status quo, s, remains in place with probability $1 - c_i$. All results with the exception of Proposition 2 follow in this example. Ultimately, this last setup is highly stylized, or artificial, relative to the above extension because the nature of how politicians accomplish their goal is all-or-nothing. While in the main model, the extremism of platforms was not a relevant concern for voters, and hence was not of normative concern, if policies are stochastic, this no longer holds as extreme policies would be implemented with positive probability.

References

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