Supplementary Materials for "Strategic Abstention in Proportional Representation Systems (Evidence from Multiple Countries)"

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July 15, 2018

1 Construction of variables and descriptive statistics.

This section describes the variables used in the regressions. It also shows its descriptive statistics.

1. **Variables common to all:**[1]

   Difference in support for two most likely coalitions: 'Support for most likely coalition' - 'Support 2nd most likely'. Values between 0 and 10.

   Difference in sympathy for two most preferred parties: 'Sympathy for preferred' - 'Sympathy for 2nd most preferred'. Values between 0 and 10.

   Other controls: Max. sympathy for a party ($\in [0, 10]$), mean sympathy for all parties ($\in [0, 10]$), maximum support for a given coalition ($\in [0, 10]$), age, gender.

2. **Austria 2006:**

   Likelihood of voting: 1=certain not to vote 5=certain to vote. Normalized to takes values between 0 (surely not) and 1 (for sure).

   Chances of party j entering parliament: 0=no chances 3=for sure. Normalized to take values between 0 and 100. Used to construct 'Difference in chances to enter parliament between preferred party and most likely party to enter parliament' which takes values from -100 to 0.

   Other controls: education (1=primary, 7=university or higher), interest in politics (1=not at all, 5=very strong), political knowledge ($\in [0, 3]$), employed (0=no, 1=partially, 2=fully), # people in the household, Carinthia (Y/N), strength of party identification (0=none, 5=very strong).

3. **Austria 2013:**

   Likelihood of voting: 0=certain not to vote 10=certain to vote. Normalized to takes values between 0 and 1.

   Other controls: education (1=did not finish any, 13=PhD), interest in politics (1=not at all, 4=very interested), political knowledge ($\in [0, 7]$), unemployed (Y/N), single (Y/N), # kids in the household, language spoken at home not German (Y/N), born in Austria (Y/N), protestant (Y/N), strength of party identification (0=not close to any party, 3=very close).

4. **Germany 2009:**

   Likelihood of voting 1=certain not to vote 5=certain to vote (includes "I have already sent off my postal vote"). Normalized to takes values between 0 and 1.

   Chances of party j entering parliament: 0=very unlikely 3=very likely. Normalized to take values between 0 and 100. Used to construct 'Difference in chances to enter parliament between preferred party and most likely party to enter parliament' which takes values from -100 to 0.

   Other controls: education (1=no certificate, 5=higher qualification), interest in politics (1=not at all, 5=very interested), political knowledge (1=knows threshold for entering Bundestag, 0=does not), born in Germany (Y/N), born in former RDA (Y/N), size of town of residence (1=under 20,000 inhabitants, 8=over 500,000 inhabitants), strength of party identification (0=none, 5=very strong).

5. **Germany 2013:**

   Likelihood of voting 1=certain not to vote 5=certain to vote (includes "I have already sent off my postal vote"). Normalized to takes values between 0 and 1.

   Chances of party j entering parliament: 0=very unlikely 4=very likely. Normalized to take values

[1] All support and sympathy variables take values between 1 and 10 for Israel.

between 0 and 100. Used to construct 'Difference in chances to enter parliament between preferred party and most likely party to enter parliament' which takes values from -100 to 0.
Other controls: education (1=no certificate, 5=higher qualification), interest in politics (1=not at all, 5=very interested), political knowledge ($\in [0,3]$), born in Germany (Y/N), lives in former RDA (Y/N), # people in the household, strength of party identification (0=none, 5=very strong).

6. **Israel 2006:**
Likelihood of voting 0=certain not to vote, 1=undecided, 2=certain. Normalized to takes values between 0 and 1.
Other controls: education (in years of schooling), political knowledge ($\in [0,3]$), born in Israel (Y/N), religious observance (1=not at all, 4=all of it), democracy is the best system (1=definitely disagree, 4=definitely agree), strength of party identification (0=not a supporter or activist, 1=supporter but not a member, 2=member, 3=active member, 4=member and holds a position).

Table 1: Descriptive Statistics, by country-election

Variable	Mean	St. Dev.	Min.	Max.	N
Austria 2006					
Likelihood Vote	4.77	0.77	1	5	1,939
ΔChances 2 most likely coal.	0.06	0.16	0	1	1,937
ΔSupport 2 most likely coal.	1.67	3.56	-10	10	1,836
Max. sympathy for a party	8.49	1.72	0	10	1,922
Mean sympathy all parties	4.25	1.35	0	10	1,922
# DK 'Support Top Likely Coalition'	0.03	0.27	0	6	1,951
# Coalitions DK Chances	0.35	1.32	0	7	1,951
Age	47.59	17.65	18	97	1,951
Female	0.53	0.50	0	1	1,951
Strength of party ID	2.58	2.01	0	5	1,787
Political interest	3.47	1.12	1	5	1,949
Political knowledge	1.15	0.91	0	3	1,951
Austria 2013					
Likelihood Vote	7.91	2.96	0	10	3,113
ΔChances 2 most likely coal.	0.14	0.20	0	1	3,228
ΔSupport 2 most likely coal.	1.72	3.58	-10	10	2,912
Max. sympathy for a party	7.37	1.99	0	10	3,166
Mean sympathy all parties	3.78	1.31	0	10	3,166
# DK 'Support Top Likely Coalition'	0.02	0.19	0	4	3,216
# Coalitions DK Chances	0.36	1.03	0	4	3,216
Age	45.67	19.44	16	96	3,266
Female	0.51	0.50	0	1	3,266
Strength of party ID	0.93	1.03	0	3	2,812
Political interest	2.38	0.93	1	4	3,257
Political knowledge	4.24	1.85	0	7	3,266
Germany 2009					
Likelihood Vote	4.03	1.31	1	5	2,092
ΔChances 2 most likely coal.	0.05	0.06	0	0.5	1,997
ΔSupport 2 most likely coal.	1.90	3.79	-10	10	1,962
Max. sympathy for a party	7.42	2.01	0	10	4,235
Mean sympathy all parties	4.45	1.51	0	10	4,235
# DK 'Support Top Likely Coalition'	0.05	0.34	0	6	2,032
# Coalitions DK Chances	0.63	1.65	0	6	2,173
Age	50.34	18.27	16	94	4,288
Female	0.52	0.50	0	1	4,288
Strength of party ID	2.37	1.84	0	5	3,963
Political interest	2.78	1.04	1	5	4,274
Political knowledge	0.67	0.47	0	1	4,288
Germany 2013					
Likelihood Vote	4.25	1.21	1	5	1,948
ΔChances 2 most likely coal.	0.10	0.14	0	1	1,873
ΔSupport 2 most likely coal.	0.97	4.03	-10	10	1,836
Max. sympathy for a party	7.81	1.91	0	10	3,854
Mean sympathy all parties	4.80	1.54	0	10	3,854
# DK 'Support Top Likely Coalition'	0.03	0.31	0	6	1,892
# Coalitions DK Chances	0.46	1.41	0	6	2,003
Age	56.08	18.55	16	99	3,911
Female	0.50	0.50	0	1	3,911
Strength of party ID	2.80	1.74	0	5	1,750
Political interest	2.86	1	1	5	3,906
Political knowledge	1.07	1.27	0	3	3,911
Israel 2006					
Likelihood Vote	1.76	0.54	0	2	1,856
ΔChances 2 most likely coal.	0.04	0.12	0	1	1,919
ΔSupport 2 most likely coal.	1.06	3.11	-9	9	1,108
Max. sympathy for a party	7.85	2.20	1	10	1,879
Mean sympathy all parties	4.09	1.36	1	8.5	1,879
# DK 'Support Top Likely Coalition'	.	.	.	.	.
# Coalitions DK Chances	.	.	.	.	.
Age	44.67	17.61	18	90	1,906
Female	0.52	0.50	0	1	1,919
Strength of party ID	0.46	0.75	0	4	1,907
Political interest[1]	1.61	0.69	0	2	1,783
Political knowledge	1.23	1.01	0	3	1,871

ΔChances 2 most likely coal.: 'Chances most likely coalition' - 'Chances 2nd most likely coalition'. ΔSupport 2 most likely coal.: 'Support for most likely coalition' - 'Support for 2nd most likely coalition'. # DK 'Support Top Likely Coalition': Number of most likely coalitions for which the respondent cannot assess own support (answers 'Don't know' in the survey). # Coalitions DK Chances: Number of coalitions for which the respondent cannot assess its chances of being formed after the elections (answers 'Don't know' in the survey). For all surveys, Strength of party ID=0 means no party identification. (1) No 'Political Interest' question in Israel 2006: hence, proxied by past vote in the 2001 prime ministerial and 2003 legislative elections.

2 Theoretical framework

2.1 Theoretical framework: the decision of the voter

As noted in Section 2 in the main manuscript, the literature has shown that voters consider many dimensions when they cast a vote: the expressive ("sincere") utility of voting for a given party, the policy implications, or the potential parliamentary legislative action of voting for a party are usually the most cited ones. Whereas a full model should include all these considerations and put different weights to them, the framework I propose here assumes for simplicity of exposition that voters care only about the policy implications of their vote —i.e., all voters are strategic. Section 2.2 shows how all predictions can be generalized to a model in which voters are partially sincere and partially strategic.

Let i be a potential voter. $\mathcal{J}$ is the set of parties $\mathcal{J} = \{j, k, h, ..., \mathbb{J}\}$. $\mathcal{C}$ is the set of all possible coalitions, $\mathcal{C} = \{a, b, c, ..., \mathbb{C}\}$. p_g^j refers to the probability that coalition g is formed if i votes for j, whereas p_g is the probability of g forming if i abstains. Voters are coalition-pivotal if $p_g^j > p_g$ for some $j \in \mathcal{J}$, i.e., if their vote marginally increases the likelihood of a coalition. Let $\Delta p_g^j = p_g^j - p_g$. Following the literature on large Poisson games, the analysis relies on the relative magnitudes Δp_g^j, Δp_f^j, which can vary by orders of magnitude.

The agent's utility of turning out and voting for a given party j is constructed as follows. Suppose the following case in which i is considering whether to vote for j or abstain. Suppose there are three possible coalitions (this can be extended, but for ease of presentation I keep it at three): at least one includes j (coalition a), and one does *not* include j (coalition b). Cases in which all coalitions either include or not include j are not interesting. Assume throughout, without loss of generality, that $a \succeq b$ (i.e., for i, coalition a is preferred to coalition b). Let t be the costs of voting, U_g be the utility derived from coalition g's policies, and $E[v_j]$ the expected utility for i of voting for party j (note that for ease of exposition I omit subscript i throughout). Then, i will turn out and vote for j only if

$$E[v_j] = p_a^j U_a + p_b^j U_b + p_c^j U_c - t > p_a U_a + p_b U_b + p_c U_c = E[\textit{abstention}] \tag{1}$$

i.e., if the utility from the expected policy given that she votes for j minus the costs of voting is larger than the expected utility of government policies when she abstains. Using the fact that $\Delta p_g^j = p_g^j - p_g$ and re-arranging (1), we have that the condition can be written as follows:

$$\Delta p_a^j U_a + \Delta p_b^j U_b + \Delta p_c^j U_c > t \tag{2}$$

Note that $\Delta p_a^j + \Delta p_b^j + \Delta p_c^j = 0$. Hence, $\Delta p_c^j = -\left(\Delta p_a^j + \Delta p_b^j\right)$. Therefore (2) is equivalent to

$$\Delta p_a^j U_a + \Delta p_b^j U_b - \left(\Delta p_a^j + \Delta p_b^j\right) U_c > t \tag{3}$$

Dividing both sides by Δp_a^j, we have that i will turn out and vote only if there exists a party j such that

$$U_a + \frac{\Delta p_b^j}{\Delta p_a^j} U_b - \frac{\left(\Delta p_a^j + \Delta p_b^j\right)}{\Delta p_a^j} U_c = U_a + \frac{\Delta p_b^j}{\Delta p_a^j} U_b - \left(1 + \frac{\Delta p_b^j}{\Delta p_a^j}\right) U_c > \frac{t}{\Delta p_a^j} \tag{4}$$

which shows that the relative magnitudes of the different pivotal events determine whether i will turn out and vote.

In particular, suppose that, by voting for j, the likelihood of c changes by a arbitrarily small amount. As a result, the probabilities of a and b are altered in opposite directions, with the size of the change being virtually identical. Formally,

$$
\begin{aligned}
&(i) \qquad \Delta p_c^j = \varepsilon > 0, \quad \text{where } \varepsilon \text{ is strictly positive but arbitrarily small} \\
&\Longrightarrow \\
&(ii) \qquad \Delta p_a^j \approx -\Delta p_b^j
\end{aligned} \tag{5}
$$

.

Plugging (5) in (4), we have that as $\varepsilon \to 0$ our condition becomes

$$
U_a + \frac{-\Delta p_a^j}{\Delta p_a^j} U_b - \left(1 + \frac{-\Delta p_a^j}{\Delta p_a^j}\right) U_c > \frac{t}{\Delta p_a^j} \tag{6}
$$

which can be simplified as follows

$$
U_a - U_b - \Big(1 - 1\Big) U_c = U_a - U_b > \frac{t}{\Delta p_a^j} \tag{7}
$$

That is, i will turn out and vote for j only if

$$
\Delta p_a^j \big(U_a - U_b\big) > t \tag{8}
$$

which is the same expression as (3) in the main manuscript. Note that we have reached the same conclusion even if in this case the probability of c forming is effectively altered (in the main manuscript, it is assumed that the probabilities of c forming are not altered when i votes for j). That is, generically, if for any pair of coalitions $\{g, f\}$, Δp_g^j is orders of magnitude smaller than Δp_f^j, then we can *de facto* discard U_g for utility computations.

2.2 Extension to including sincere utility in the vote

To see how this model can be generalized to include sincere voters, assume all voters derive some "expressive" / "sincere" utility from voting for a given party, and also derive utility from government policies. Let ω_s and ω_p be the weights they give to each component, where $\omega_s \geq 0$ and $\omega_p \geq 0$, and $\omega_s + \omega_p = 1$. Denote with v_j the sincere utility derived from voting for party j. Then, i will turn out and vote only if there exists some party j such that

$$
\omega_s v_j + \omega_p \Big(p_a^j U_a + p_b^j U_b + p_c^j U_c\Big) - t > \omega_p \Big(p_a U_a + p_b U_b + p_c U_c\Big) \tag{9}
$$

Hence, expression (4) becomes

$$
\frac{\omega_s v_j}{\Delta p_a^j} + \omega_p \left(U_a + \frac{\Delta p_b^j}{\Delta p_a^j} U_b - \left(1 + \frac{\Delta p_b^j}{\Delta p_a^j}\right) U_c\right) > \frac{t}{\Delta p_a^j} \tag{10}
$$

Note that the main predictions from the model remain unchanged: incentives to vote depend on the perceived pivotal probabilities in the same direction as before. However, as ω_p grows smaller, turnout decisions depend much less on coalition-pivotal considerations and much more on the sincere utility of voting.

Focusing on the case in which a vote for j alters only the probabilities of a and b forming, we find that i will turn out and vote only if there exists some party j such that

$$
\omega_s v_j + \omega_p \Big(\Delta p_a^j \big(U_a - U_b\big)\Big) > t \tag{11}
$$

Predictions 1 and 2 still hold. However, as ω_s grows larger the predictions should be harder to observe

empirically.

If we assume that voters are *either* sincere ($\omega_s = 1$) *or* strategic ($\omega_p = 1$), and that voting costs t are strictly positive (however small), then this simplified model can help us estimate the lower and upper bounds of strategic voters in the population. According to the model, voters for whom $\omega_s = 1$ should vote if and only if there exists a party from which they derive a strictly positive sincere utility. Otherwise, they should abstain.

Taking the pooled sample as the base case (Figure 2f in the main manuscript), we can see that when the difference in support for the two leading coalitions is zero, turnout is around 85%. Given the assumptions just made, this implies that these voters do not take the policy component into consideration (otherwise they would be abstaining). This determines the lower bound of sincere voters —i.e., the proportion of sincere voters is *at least* 85%. In other words, the proportion of strategic voters is bounded above at 15%. By country, Germany would have the higher upper bound (at around 25%) whereas Austria (in 2006) would have the smallest (5%). (Note that we also need to assume that the distribution of perceived pivotal probabilities is independent and identically distributed across sincere and strategic voters).

2.3 A note on small parties

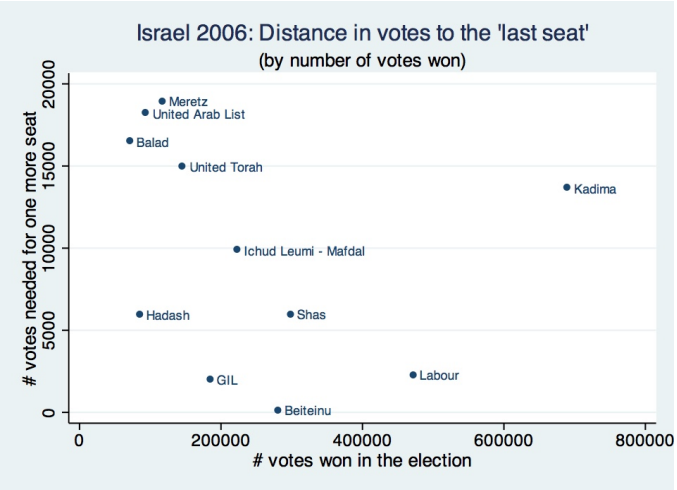
In PR systems, the probability of being pivotal for the last seat between any two parties j, k is orthogonal to the number of votes that these parties effectively get (conditional on both entering parliament). Figure 1 below shows the case for Israel 2006. The x-axis represents number of votes won in the elections, whereas the y-axis represents number of votes that each party would have needed to win one extra seat in those elections. One can clearly see that there is no pattern. The story is different, though, for parties which do not make the cut: even if one only considers parties that come reasonably close to making the electoral threshold, these are on average much further away from getting 'one more seat' than the average party that indeed enters parliament.

As a result, for any instrumental agent i, her perceived pivotal probability for the last seat between two parties she expects to make the cut is on average larger than the perceived pivotal probability for the last seat between two parties, one of which is not expected with certainty to make the cut.

Hence, supporters of smaller parties may be more prone to feel their vote could be 'wasted' and therefore not turn out. For this reason, even if the goal of this paper is not to assess how perceived probabilities of entering parliament affect turnout, it is important to include them as a control. In particular, 'chances of favorite party entering government' are included. If two or more parties are the most preferred, chances of the most likely are taken into account. The values range from 1 (surely not/very unlikely) to 4 (surely/very likely).[2]

[2] 1 to 5 for Germany 2013. The survey for Israel 2006 asks about 'expected seats to be won' for small parties only if the respondent states that (s)he will vote for such party. Hence, this variable cannot be used for that case. Similarly, the survey for Austria 2013 does not include any information on that respect.

Figure 1: Israel 2006: Distance to the last seat (won by Likud), for all parties that won representation in the Knesset (threshold: 2%).



3 Robustness checks

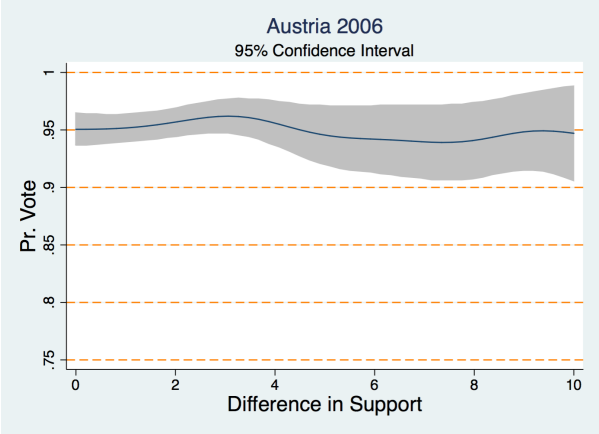
This section shows the results for several robustness checks.

Figure 2 replicates Figure 2 in the main manuscript using a narrower estimation bandwidth. We can see that all results hold.

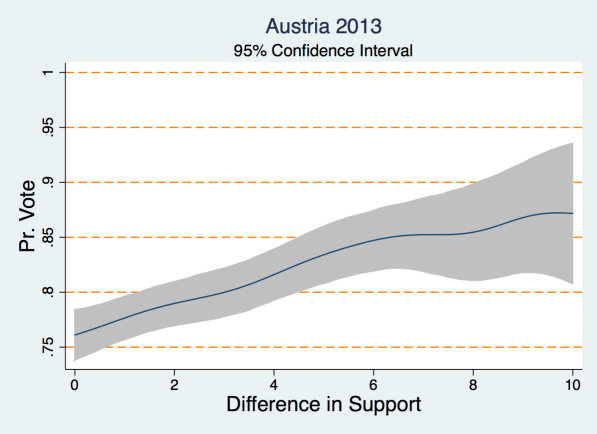
Figure 3 replicates Figure 2 in the main manuscript but expands the sample to include those who gave highest chances to one and only one coalition, but perceived the second most likely as very close in the race — i.e., only lagging a few percentage points behind. The exact specification of 'very close' depends on the election, as each survey had a different scale and number of coalitions mentioned. The precise numbers for each case are given in the Figure. As a rule of thumb, each regression expands the initial sample to include those 10%-15% of respondents for whom the coalition race was not neck-and-neck but very close to being so. All results hold.

Figure 4 focuses on the pooled sample. It shows the results when the sample includes *only* voters who believe that one coalition was strictly ahead in the race, but a second coalition was very close behind. In other words, the sample does *not* include voters who believe two coalitions were leading the race with exact same chances. By comparing Figures 4a and 4b to Figure 2f in the main manuscript, we can see that results hold when using these slightly different samples.

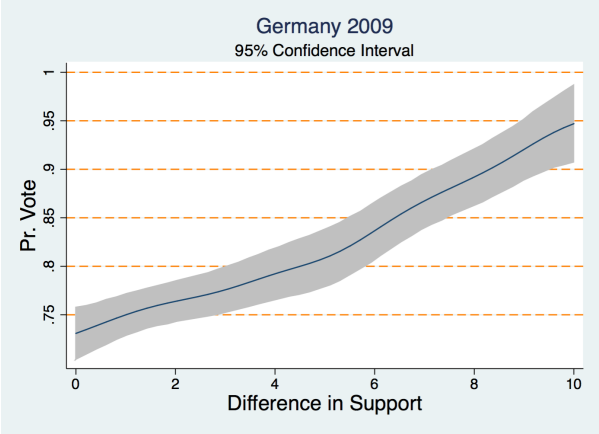
Figure 2: Figure 2 in the main manuscript with narrower estimation bandwidth: Turnout probability for individuals who believe at least two coalitions have maximum (equal) chances of being formed after the elections (i.e. 'Chances most likely = Chances 2nd most likely').



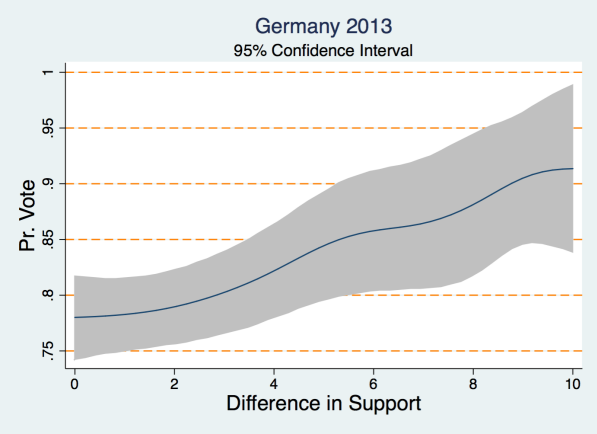
(a) N=1,079 (58.8% of the sample).



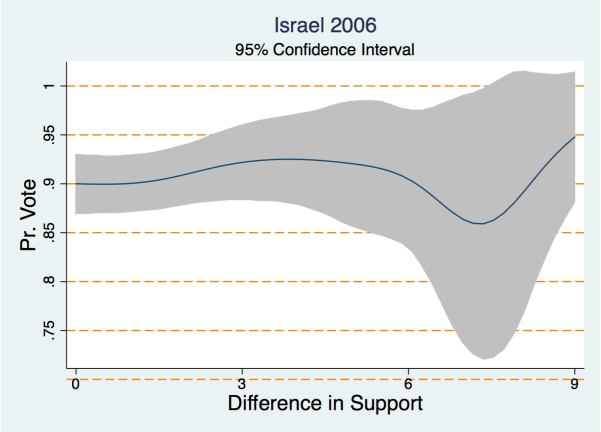
(b) N=1,143 (39.3% of the sample).



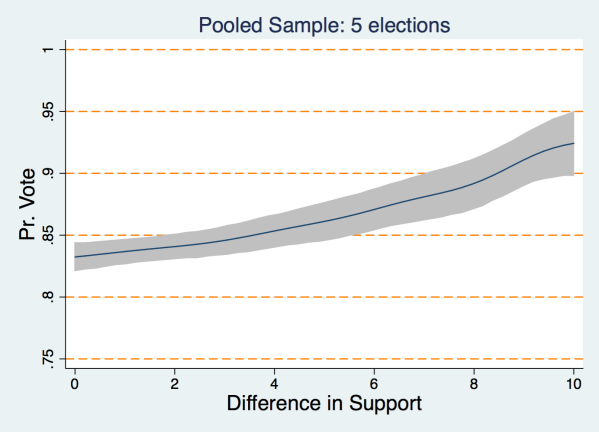
(c) N=949 (48.4% of the sample).



(d) N=343 (18.7% of the sample).



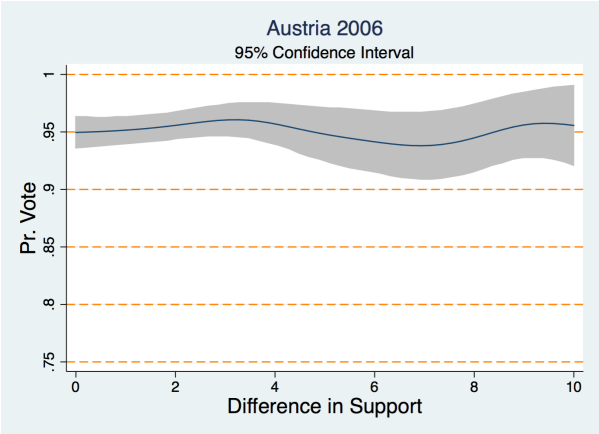
(e) N=369 (33.3% of the sample).



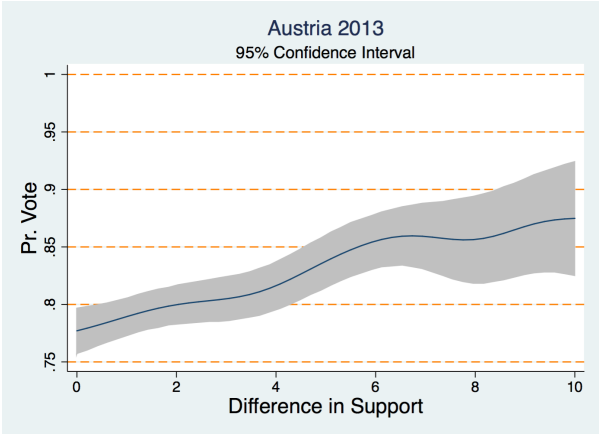
(f) N=3,896 (41.2% of the sample).

'Difference in Support': 'Support for most preferred among the most likely coalitions' - 'Support for second most preferred among the most likely coalitions'.
Estimation: partially linear estimation using Robinson's (1988) double residual semiparametric regression estimator (half-bandwidth=1). The shaded areas represent 95% confidence intervals. See expression 3 for the exact regression specification, and Section 1 above for details regarding the controls.

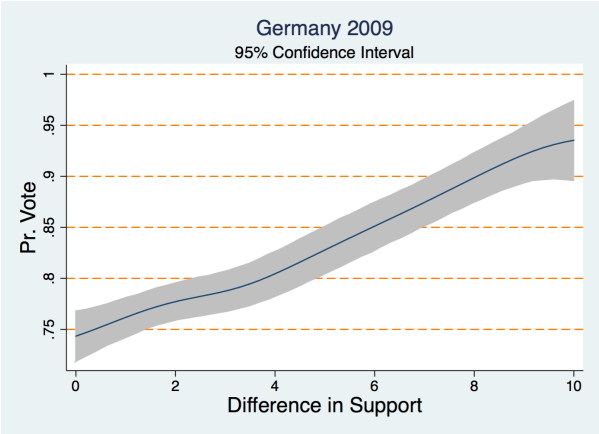
Figure 3: Turnout probability for individuals who believe that the difference in chances for the two most likely coalitions is *at most* x%.



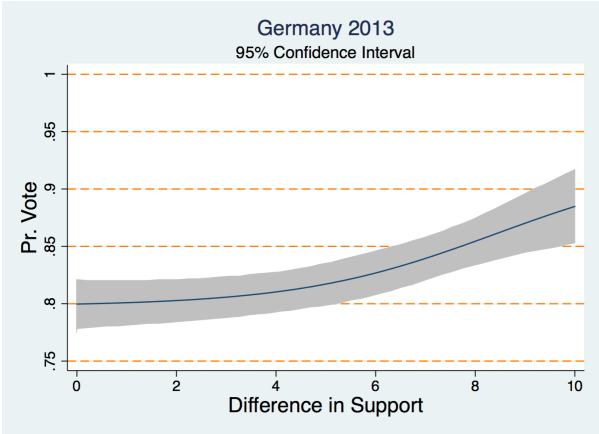
(a) 'Chances most likely - Chances 2nd most likely' at most 10%. N=1,249 (68% of the sample).



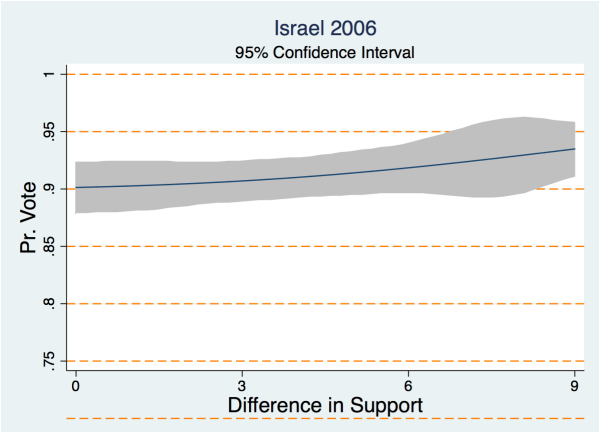
(b) 'Chances most likely - Chances 2nd most likely' at most 15%. N=1,546 (53.1% of the sample).



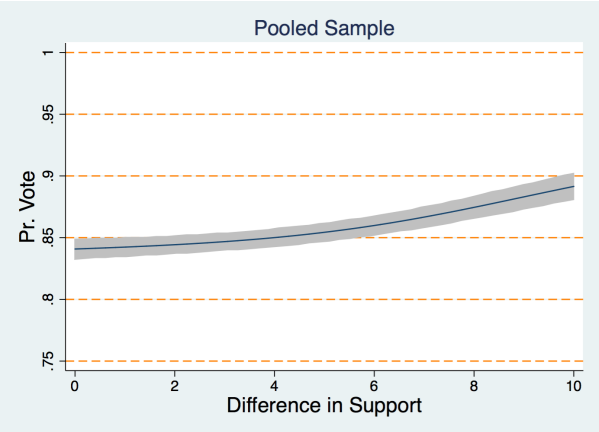
(c) 'Chances most likely - Chances 2nd most likely' at most 7%. N=1,208 (61.6% of the sample).



(d) 'Chances most likely - Chances 2nd most likely' at most 4%. N=592 (32.2% of the sample).



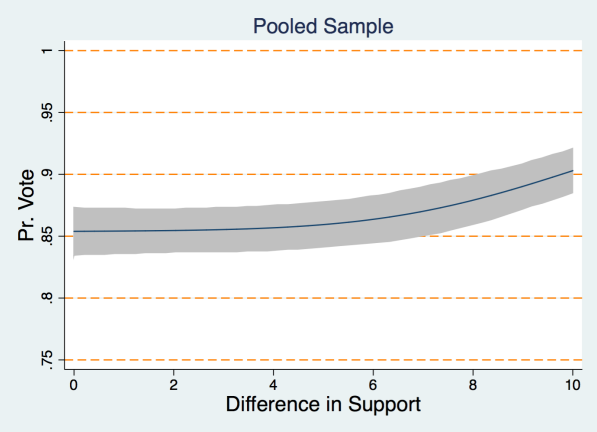
(e) 'Chances most likely - Chances 2nd most likely' at most 3%. N=561 (50.6% of the sample).



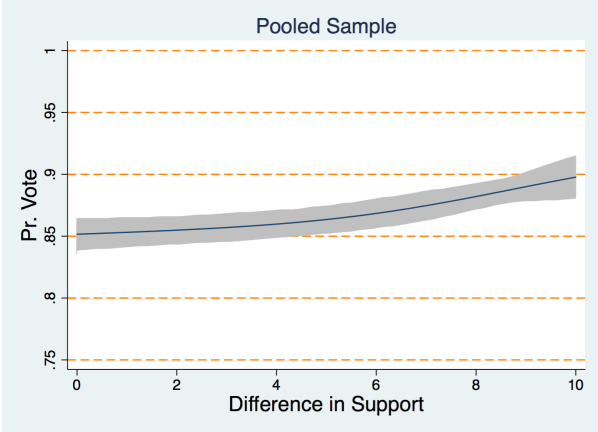
(f) 'Chances most likely - Chances 2nd most likely' at most 5%. N=4,626 (53.3% of the sample).

'Difference in Support': |'Support for most likely coalition' - 'Support for second most likely coalition'| (i.e. absolute value). In case two or more are considered to be in the set of 'second most likely coalitions', this value is the difference between the most likely and the most preferred among the second most likely coalitions. Estimation: partially linear estimation using Robinson's (1988) double residual semiparametric regression estimator (half-bandwidth=1). The shaded areas represent 95% confidence intervals. See expression 4 in the main manuscript for the exact regression specification, and Section 1 above for details regarding the controls.

Figure 4: Turnout probability for individuals who believe that the difference in chances for the two most likely coalitions is *strictly more than 0* and *at most* x%.



(a) 'Chances most likely' > 'Chances 2nd most likely', the perceived difference being at most 5%. N=730 (8.4% of the sample).



(b) 'Chances most likely' > 'Chances 2nd most likely', the perceived difference being at most 10%. N=1962 (22.6% of the sample).

'Difference in Support': |'Support for most likely coalition' - 'Support for second most likely coalition'| (i.e. absolute value). In case 2 or more are considered to be in the set of 'second most likely coalitions', this value is the difference between the most likely and the most preferred among the second most likely coalitions.
Estimation: partially linear estimation using Robinson's (1988) double residual semiparametric regression estimator (half-bandwidth=1). The shaded areas represent 95% confidence intervals. See expression 4 in the main manuscript for the exact regression specification, and Section 1 above for details regarding the controls.

4 The role of information

This section extends the analysis on uninformed voters in Section 6 in the main manuscript and contributes to the debate on whether political sophistication increases turnout. As in that section, the sample used includes only voters who perceived a neck-and-neck race between the two leading coalitions. Here I further restrict the analysis to those voters who do not express any party identification and are politically uninformed relative to the majority of the population. I use the following specification:

$$Pr.(vote_i) = \alpha + X_i\beta + POL_i\gamma + \delta D_i + \varepsilon_i \quad \Big| \; p_{ia} = p_{ib} \geq p_{ic} \text{ for some } a, b \text{ and } \forall \; c \in \mathcal{C} \tag{12}$$

where D_i is a dummy that takes value one if the respondent (i) expresses no party ID; (ii) is able to answer correctly fewer questions regarding political knowledge than the median voter; (iii) believes at least two leading coalitions have equal chances of being formed after the elections; and (iv) has no strict preference between such two coalitions.[3] X_i and POL_i capture the same variables as throughout the paper. In particular, political knowledge, strength of party ID and coalition preferences are included in the regression. Panel A in Table 2 shows the results.

Results are ambivalent: certainly, non-partisan uninformed voters seem to be less predisposed to turn out and vote. However, this result is only significant for Germany 2009 and for the pooled sample. Furthermore, uninformed independent voters are *more* prone to casting a vote in Austria 2006.

As a further check, I slightly relax the construction of D_i, by first modifying (iv), so that voters who express a strict preference for one coalition of *at most* one point in the scale 0 to 10 are included in the sample; and second, by further changing (ii), so that the lower 66 percentiles in terms of political knowledge are included (instead of only the lower 50 percentiles as above). Panels B and C in Table 2

[3] Or, if more than two are perceived to have maximum chances, i is indifferent between the top two most preferred.

show the results. Half the coefficients are significant in Panel B, and the unexpected result of Austria 2006 disappears. Nonetheless, Panel C reveals that expanding the definition to include slightly more politically sophisticated agents completely dilutes the effect. Overall, evidence does not strongly support that non-partisan uninformed coalition-pivotal voters turn out less. This is in line with Sobbrio and Navarra (2010), who find similar patterns without conditioning on the set of coalition-pivotal voters. That is, Sobbrio and Navarra (2010) look at the effects of information and partisanship on turnout. They find that both factors independently increase turnout. However, they find that there is no joint effect: non-partisan uninformed voters are not significantly more likely to abstain.

Table 2: Effect on turnout of simultaneously (*i*) having no party ID; (*ii*) having no or little political knowledge; and (*iii*) not having a strict preference for any of the most likely coalitions (sample: individuals for whom 'Chances most likely coalition'='Chances 2nd most likely coalition').

	Austria		Germany		Israel	Pooled
	2006	2013	2009	2013	2006	sample
Panel A: main definition						
Little Pol. knowledge × No Party ID	0.51**	-0.033	-0.118**	-0.059	-0.104	-0.033*
× No strict preference (a)	(0.252)	(0.064)	(0.057)	(0.100)	(0.078)	(0.018)
Controls	YES	YES	YES	YES	YES	YES
R^2	0.07	0.18	0.39	0.44	0.15	0.24
Panel B: looser definition						
Little Pol. knowledge × No Party ID	0.038	-0.026	-0.099**	-0.129	-0.175**	-0.027*
× No strict preference (b)	(0.024)	(0.047)	(0.048)	(0.080)	(0.077)	(0.015)
Controls	YES	YES	YES	YES	YES	YES
R^2	0.07	0.18	0.39	0.44	0.15	0.24
Panel C: looser (alternative) definition						
Little Pol. knowledge × No Party ID	0.028	-0.052	-0.057	-0.055	-0.042	0.005
× No strict preference (c)	(0.26)	(0.037)	(0.045)	(0.063)	(0.082)	(0.013)
Controls	YES	YES	YES	YES	YES	YES
R^2	0.07	0.19	0.38	0.44	0.15	0.24
Observations	1079	1143	949	343	369	3896

Standard errors are in parentheses. $^{***}p < 0.01$ $^{**}p < 0.05$ $^{*}p < 0.1$

Dependent variable: Pr. (vote)
Sample: subset of voters who believe the (two or more) leading coalitions are equally likely.
Little Pol. knowledge × No Party ID × No strict preference:
(Panel A) *(i)* Party ID = None; *(ii)* At most able to answer 50% of the questions regarding political knowledge; *(iii)* Equal support for two most likely coalitions.
(Panel B) *(i)* Party ID = None; *(ii)* At most able to answer 50% of the questions regarding political knowledge; *(iii)* Difference in support for two most likely coalitions *at most* 1 (support $\in [0, 10]$).
(Panel C) *(i)* Party ID = None; *(ii)* At most able to answer 66.6% of the questions regarding political knowledge; *(iii)* Difference in support for two most likely coalitions *at most* 2 (Support $\in [0, 10]$).
All regressions include as controls strength of party ID, political knowledge and difference in support between top two most likely coalitions. Other controls: age, gender, political interest, level of education, born in country, maximum support for a party, average support for all parties, difference in support for two most preferred parties, chances of entering parliament for the most supported party (the last one, not for Israel, Austria 2013 or the pooled sample). Support $\in [1, 10]$ for Israel. See expression (12) for the exact regression specification and Section 1 in the Supplementary Materials for more details on the controls.

References

Sobbrio, Francesco, and Pietro Navarra. "Electoral participation and communicative voting in Europe." European Journal of Political Economy 26, no. 2 (2010): 185-207.