The Psychological Partisan Effect of Electoral Systems: How Ideology Correlates with Strategic Voting

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Appendix

Appendix A. Viability variable

Figure A1 reports the overall distribution of the viability variable calculated as presented in the text for all party-district combinations. It shows that the distribution is bimodal with a mean of 0.57, a median of 0.76 and a standard deviation of 0.43. N=6,318.

Figure A2 reports the distribution of the viability variable where we separate parties that receive at least one seat in the district at the election (Y=1, N=1,001) and parties that do not (Y=0, N=775). It shows that the regression model fits very well the data as the mean of the variability variable is 0.89 in the first group (median=0.99) and 0.14 in the second group (median=0.05).

Figure A3 reports the distribution of the viability variable broken down by district size: small districts=district magnitude \leq Q1 (N= 440), large districts=district magnitude \geq Q3 (N= 566). It shows that there are many more non-viable parties in small districts (mean=0.29 and median=0.05) compared to large districts (mean=0.81 and median=0.997).

Figure A1. Overall distribution



Figure A2. Distribution broken down by the value of Y







Appendix B. Descriptive statistics

Table B1 presents the descriptive statistics of the variables of interest used to test H1 for the entire sample.

Table B2 presents the descriptive statistics of the variables of interest used to test H2 for the sample of potential strategic voters.

Variable	Ν	Mean	Std. Dev.	Min	Max
Potential Strategic Voter	63,968	0.05	0.22	0	1
Left-Right (Continuous)	59,146	0.52	0.23	0	1
Left-Right (Categorical)					
0	62,030	0.04	0.18	0	1
1	62,030	0.03	0.16	0	1
2	62,030	0.06	0.24	0	1
3	62,030	0.10	0.30	0	1
4	62,030	0.1	0.31	0	1
5	62,030	0.24	0.42	0	1
6	62,030	0.1	0.30	0	1
7	62,030	0.13	0.33	0	1
8	62,030	0.1	0.30	0	1
9	62,030	0.03	0.17	0	1
10	62,030	0.04	0.18	0	1
Don't Know	62,030	0.05	0.21	0	1

 Table B1. Descriptive statistics (entire sample)

Table B2. Descriptive statistics (potential strategic voters)

Variable	Ν	Mean	Std. Dev.	Min	Max
Strategic Voter	2,645	0.24	0.42	0	1
Left-Right (Continuous)	2,534	0.45	0.23	0	1
Left-Right (Categorical)					
0	2,597	0.06	0.24	0	1
1	2,597	0.05	0.21	0	1
2	2,597	0.09	0.29	0	1
3	2,597	0.12	0.33	0	1
4	2,597	0.12	0.32	0	1
5	2,597	0.23	0.42	0	1
6	2,597	0.10	0.30	0	1
7	2,597	0.11	0.31	0	1
8	2,597	0.05	0.22	0	1
9	2,597	0.02	0.13	0	1
10	2,597	0.02	0.15	0	1
Don't Know	2,597	0.02	0.15	0	1
Intensity of Preferences	2,626	2.47	1.82	1	10

Appendix C. Full regression results of main analysis

Table C1 presents the full regression results of the main analysis presented in the text to test H1.

Table C2 presents the full regression results of the main analysis presented in the text to test H2.

	(H1,	(H1,	(H1,	(H1,
$\mathbf{L} = \mathbf{C} \left(\mathbf{r} + \mathbf{L} + \mathbf{c} \right)$	<u>continuous</u>)	<u>continuous</u>)	categorical)	categorical)
Left-right (continuous)	-0.058***	-0.05/***		
Laft might (astagomiaal)	(0.004)	(0.004)		
Leit-right (categorical)			0.021***	0.024***
0			(0.021^{+++})	(0.024^{-101})
1			(0.003)	(0.003)
1			0.024***	0.026***
3			(0.000)	(0.000)
2			0.02***	0.02***
3			(0.004)	(0.005)
3			0.004	0.004
			(0.004)	(0.004)
4			(ref)	(ref)
5			-0.003	-0.001
			(0.003)	(0.003)
6			-0.008**	-0.008**
			(0.004)	(0.004)
7			-0.014***	-0.014***
			(0.004)	(0.004)
8			-0.027***	-0.026***
			(0.004)	(0.004)
9			-0.028***	-0.027***
			(0.006)	(0.006)
10			-0.025***	-0.02***
			(0.005)	(0.005)
Don't know			0.005	0.008
			(0.005)	(0.005)
Age (16-99)		< 0.001***		< 0.001***
		(<0.001)		(<0.001)
Gender (0=Female, 1=Male)		-0.001		-0.002
		(0.002)		(0.002)
Education (categorical)				
None (0,1)		(ref)		(ref)
Primary (0,1)		0.005		0.006
		(0.006)		(0.006)
Secondary (0, 1)		0.005		0.006

Table C1. Test of H1, full regression results

		(0.006)		(0.006)
Post-Secondary (0,1)		0.018***		0.017***
		(0.007)		0 (0.006)
University (0,1)		0.018***		0.019***
		(0.006)		(0.006)
Other (0,1)		0.003		0.007
		(0.009)		(0.009)
Constant	0.256***	0.268***	0.218***	0.229***
	(0.009)	(0.012)	(0.009)	(0.011)
Election fixed effects	YES	YES	YES	YES
Ν	59,146	58,831	62,030	61,692

Table C2. Test of H2, full regression results

	(H2,	(H2,	(H2,	(H2,
	continuous)	continuous)	categorical)	categorical)
Left-right (continuous)	0.069*	0.062*		
	(0.036)	(0.036)		
Left-right (categorical)				
0			-0.063	-0.065
			(0.041)	(0.041)
1			0.024	0.024
			(0.045)	(0.045)
2			0.038	0.038
			(0.035)	(0.036)
3			0.040	0.041
			(0.033)	(0.033)
4			(ref)	(ref)
5			0.086***	0.081***
			(0.029)	(0.029)
6			0.052	0.053
			(0.035)	(0.035)
7			0.041	0.040
			(0.035)	(0.035)
8			0.040	0.029
			(0.043)	(0.043)
9			0.072	0.077
			(0.066)	(0.068)
10			-0.007	-0.014
			(0.058)	(0.058)
Don't know			0.139**	0.123**
			(0.059)	(0.059)
Age (16-99)		0.001*		0.001
		(0.001)		(0.001)
Gender (0=Female, 1=Male)		0.036**		0.038**
		(0.017)		(0.017)
Education				
None (0,1)		(ref)		(ref)
Primary (0,1)		0.011		0.031
- · ·		(0.083)		(0.082)
Secondary (0, 1)		-0.027		-0.001

		(0.083)		(0.082)
Post-Secondary (0,1)		-0.033		-0.007
		(0.084)		(0.083)
University (0,1)		-0.033		-0.010
		(0.083)		(0.082)
Other (0,1)		-0.044		-0.049
		(0.108)		(0.106)
Constant	0.209***	0.181*	0.201***	0.148
	(0.042)	(0.099)	(0.044)	(0.098)
Election fixed effects	YES	YES	YES	YES
Ν	2,534	2,516	2,597	2,579

Appendix D. Logit regressions

Table D1 reproduces the main analysis for H1 using a logit regression instead of an OLS regression with linear probability.

Table D2 reproduces the main analysis for H2 in the main text using a logit regression instead of an OLS regression with linear probability.

	(H1,	(H1,	(H1,	(H1,
Laft right (continuous)			categorical)	categorical)
Len-right (continuous)	-0.041	$-0.040^{-0.040}$		
Laft right (catagorical)	(0.005)	(0.005)		
			0.015***	0.018***
0			(0.015)	(0.005)
1			0.018***	0.003)
1			(0.018)	(0.019)
2			0.003)	(0.003)
2			(0.004)	(0.004)
2			(0.004)	(0.004)
5			(0.003)	(0.003)
4			(0.003)	(0.003)
4				
5			-0.002	-0.001
C C			(0.002)	(0.002)
6			-0.006**	-0.006**
-			(0.003)	(0.003)
7			-0.010***	-0.010***
			(0.003)	(0.003)
8			-0.021***	-0.020***
			(0.003)	(0.003)
9			-0.021***	-0.020***
			(0.004)	(0.003)
10			-0.018***	-0.014***
			(0.003)	(0.003)
Don't know			0.007	0.010**
			(0.005)	(0.005)
Age (16-99)		<0.000***		< 0.000***
-		(0.000)		(0.000)
Gender (0=Female, 1=Male)		-0.001		-0.002
		(0.001)		(0.001)
Education (categorical)				
None (0, 1)		(ref)		(ref)
Primary (0, 1)		0.007*		0.008**
		(0.004)		(0.004)
Secondary (0, 1)		0.009**		0.009**

Table D1. Test of H1 with logit regressions

		(0.004)		(0.004)
Post-Secondary (0, 1)		0.017***		0.016***
		(0.005)		(0.004)
University (0,1)		0.017***		0.017***
		(0.004)		(0.004)
Other (0,1)		0.007		0.010
		(0.006)		(0.006)
Election fixed effects	YES	YES	YES	YES
N	59,146	58,831	62,030	61,692

Note: Entries are marginal effects from logit regressions predicting the probability of being a potential strategic voter. Standard errors are in parentheses. *p<0.10, ** p<0.05, *** p<0.01 (two-tailed). The continuous ideology variables has been divided by 10, which means that the coefficient reports the effect of going from extreme-right (=0) to extreme-left (=10).

Table D2. Test of H2 with logit regressions

	(H2,	(H2,	(H2,	(H2,
	continuous)	continuous)	categorical)	categorical)
Left-right (continuous)	0.069*	0.063*	. ,	
-	(0.036)	(0.036)		
Left-right (categorical)				
0			-0.055*	-0.057*
			(0.033)	(0.033)
1			0.025	0.026
			(0.044)	(0.044)
2			0.039	0.040
-			(0.035)	(0.035)
3			0.042	0.044
			(0.033)	(0.033)
4			(ref)	(ref)
5			0.087***	0.082***
			(0.028)	(0.029)
6			0.054	0.056
			(0.035)	(0.036)
7			0.043	0.042
			(0.034)	(0.034)
8			0.041	0.031
			(0.043)	(0.042)
9			0.072	0.077
			(0.068)	(0.070)
10			-0.001	-0.006
			(0.051)	(0.050)
Don't know			0.132**	0.113*
			(0.063)	(0.062)
Age (16-99)		0.001*		0.001*
		(0.001)		(0.001)
Gender (0=Female, 1=Male)		0.038**		0.039**
		(0.017)		(0.017)
Education (categorical)		()		()
None $(0, 1)$		(ref)		(ref)
Primary (0, 1)		0.023		0.036
		(0.076)		(0.072)
Secondary (0, 1)		-0.016		0.005
		(0.076)		(0.072)
Post-Secondary (0, 1)		-0.023		-0.003

		(0.077)		(0.073)
University (0,1)		-0.022		-0.006
		(0.076)		(0.072)
Other (0,1)		-0.033		-0.041
		(0.099)		(0.091)
Election fixed effects	YES	YES	YES	YES
Ν	2,534	2,516	2,597	2,579

Appendix E. Regressions without late surveys

Table E1 reproduces the main analysis for H1 by removing from the sample the surveys conducted more than six months after the election (Austria 2008, Greece 2012).

Table E2 reproduces the main analysis for H2 by removing from the sample the surveys conducted more than six months after the election (Austria 2008, Greece 2012).

	(H1,	(H1,	(H1,	(H1,
Laft right (continuous)	<u>Continuous</u>	<u>Continuous</u>	categorical)	categorical)
Len-fight (continuous)	-0.038****	-0.038****		
L off right (catagorical)	(0.004)	(0.004)		
			0.018***	0 022***
0			(0.005)	(0.022
1			0.025***	0.003)
1			(0.025)	(0.027)
2			0.000)	0.000)
Z			(0.020)	(0.020)
3			(0.00+)	(0.004)
5			(0.003)	(0.004)
1			(0.00+)	(0.00+)
7			(ICI)	(101)
5			-0.002	<0.000
-			(0.003)	(0.003)
6			-0.008**	-0.008**
			(0.004)	(0.004)
7			-0.015***	-0.015***
			(0.004)	(0.004)
8			-0.026***	-0.025***
			(0.004)	(0.004)
9			-0.028***	-0.028***
			(0.006)	(0.006)
10			-0.029***	-0.024***
			(0.005)	(0.005)
Don't know			0.005	0.008
			(0.005)	(0.005)
Age (16-99)		< 0.001***		< 0.001***
		(<0.001)		(<0.001)
Gender (0=Female, 1=Male)		-0.001		-0.001
		(0.002)		(0.002)
Education				
None (0,1)		(ref)		(ref)
Primary (0,1)		0.005		0.006
		(0.006)		(0.005)
Secondary (0, 1)		0.006		0.007

Table E1. Test of H1 without late surveys

		(0.006)		(0.006)
Post-Secondary (0,1)		0.019***		0.018***
		(0.006)		(0.006)
University (0,1)		0.021***		0.021***
-		(0.006)		(0.006)
Other (0,1)	0.004			0.004
		(0.009)		(0.008)
Constant	0.275***	0.282***	0.245***	0.251***
	(0.009)	(0.011)	(0.009)	(0.011)
Election fixed effects	YES	YES	YES	YES
Ν	57,634	57,353	60,389	60,090

Table E2. Test of H2 without late surveys

	(H2,	(H2,	(H2,	(H2,
	continuous)	continuous)	categorical)	categorical)
Left-right (continuous)	0.065*	0.060		
-	(0.038)	(0.038)		
Left-right (categorical)				
0			074*	077*
			(0.044)	(0.044)
1			.03	.034
			(0.047)	(0.047)
2			.031	.032
			(0.037)	(0.037)
3			.037	.039
4			(0.034)	(0.034)
4			(ref)	(ref)
5			0.081***	0.074**
			(0.03)	(0.03)
6			0.041	0.045
			(0.036)	(0.036)
7			0.037	0.040
			(0.036)	(0.036)
8			0.008	0.003
			(0.045)	(0.045)
9			0.075	0.082
10			(0.07)	(0.072)
10			0.007	-0.003
D			(0.065)	(0.065)
Don t know			0.142^{**}	0.120^{*}
A = (16.00)		0.001*	(0.004)	(0.004)
Age (10-33)		(0.001)		(0.001)
Gandar (0-Famala, 1-Mala)		0.001)		00.044**
Gender (G-Pennale, P-Male)		(0.043)		(0.044)
Education None (0,1)		(0.017)		(0.017)
Primary (0,1)		0.017		0.040
		(0.082)		(0.081)
Secondary (0, 1)		-0.030		-0.002
		(0.083)		(0.082)

Post-Secondary (0,1)		-0.026		0.001
-		(0.084)		(0.083)
University (0,1)		-0.037		-0.013
		(0.083)		(0.082)
Other (0,1)		0.014		0.008
		(0.113)		(0.111)
Constant	.148***	0.100	0.148***	0.076
	(0.042)	(0.099)	(0.044)	(0.098)
Election fixed effects	YES	YES	YES	YES
N	2,283	2,274	2,336	2,327

Appendix F. Regressions with alternative threshold

Table F1 reproduces the main analysis for H1 using an alternative threshold to separate viable and non-viable parties: more/less than 10% of chances of winning (rather than more/less than 25% of chances of winning in the main analysis). With this alternative threshold, there are 3.39% of potential strategic voters in the sample.

Table F2 reproduces the main analysis for H2 in the main text using the same alternative threshold to separate viable and non-viable parties.

	(H1, continuous)	(H1, continuous)	(H1, categorical)	(H1, categorical)
Left-right (continuous)	-0.041***	-0.04***	8 /	
	(0.003)	(0.003)		
Left-right (categorical)				
0			0.016***	0.018***
			(0.004)	(0.004)
1			0.019***	0.020***
			(0.005)	(0.005)
2			0.017***	0.017***
			(0.004)	(0.004)
3			0.003	0.003
			(0.003)	(0.003)
4			(ref)	(ref)
5			-0.001	< 0.001
			(0.003)	(0.003)
6			-0.004	-0.004
			(0.003)	(0.003)
7			-0.009***	-0.009***
_			(0.003)	(0.003)
8			-0.018***	-0.017***
_			(0.003)	(0.003)
9			-0.013***	-0.013***
10			(0.005)	(0.005)
10			-0.019***	-0.015***
5.1.1			(0.004)	(0.004)
Don't know			0.004	0.006
		0.001.000	(0.004)	(0.004)
Age (16-99)		< 0.001***		< 0.001***
		(<0.001)		(<0.001)
Gender (0=Female, 1=Male)		-0.003*		-0.003**
		(0.001)		(0.001)
Education				

Table F1. Test of H1 with alternative threshold

None (0,1)		(ref)		(ref)		
Primary (0,1)		0.002		0.003		
		(0.005)		(0.004)		
Secondary (0, 1)		0.003		0.003		
• • •		(0.005)		(0.005)		
Post-Secondary (0,1)		0.011**		0.010**		
• • •		(0.005)				
University (0,1)		0.010**		0.010**		
• • • •		(0.005)		(0.005)		
Other $(0,1)$		0.004		0.005		
		(0.007)		(0.007)		
Constant	0.138***	0.149***	0.114***	0.125***		
	(0.007)	(0.009)	(0.007)	(0.009)		
Election fixed effects	YES	YES	YES	YES		
Ν	59,146	58,831	62,030	61,692		

Table F2. Test of H2 with alternative threshold

	(H2, continuous)	(H2, continuous)	(H2, categorical)	(H2, categorical)
Left-right (continuous)	0.079*	0.064	8 /	<u> </u>
	(0.047)	(0.048)		
Left-right (categorical)				
0			-0.102**	-0.097*
			(0.052)	(0.052)
1			-0.028	-0.023
			(0.057)	(0.057)
2			0.07	0.072
			(0.045)	(0.045)
3			0.055	0.055
			(0.042)	(0.042)
4			(ref)	(ref)
5			0.031	0.027
			(0.037)	(0.037)
6			0.021	0.02
			(0.046)	(0.046)
7			0.033	0.030
			(0.046)	(0.046)
8			0.146**	0.130**
			(0.06)	(0.061)
9			0.097	0.099
			(0.082)	(0.083)
10			-0.087	-0.091
			(0.077)	(0.078)
Don't know			-0.005	-0.012
			(0.076)	(0.076)
Age (16-99)		0.001**		0.001**
		(0.001)		(0.001)
Gender (0=Female, 1=Male)		0.028		0.030
		(0.021)		(0.021)
Education				

None (0,1)		(ref)		(ref)
Primary (0,1)		0.008		0.008
-		(0.104)		(0.104)
Secondary (0, 1)		0.016		0.014
• • •		(0.104)		(0.104)
Post-Secondary (0,1)		-0.002		0.008
		(0.106)		(0.106)
University (0,1)		0.011		0.008
		(0.104)		(0.104)
Other $(0,1)$		0.003		-0.021
		(0.132)		(0.131)
Constant	0.149***	0.066	0.166***	0.080
	(0.057)	(0.127)	(0.060)	(0.127)
Election fixed effects	YES	YES	YES	YES
Ν	1,516	1,506	1,555	1,545

Appendix G. Regressions with alternative ways of addressing missing values

Table G1 reproduces the main analysis for H1 using an alternative ways of addressing missing values. For regressions without control variables (columns 1 and 3), we remove the observations that have a missing value for one of the control variables. For regressions with control variables (columns 2 and 4), we impute the missing values for control variables using the multiple imputation technique.

Table G2 reproduces the main analysis for H2 using an alternative ways of addressing missing values. For regressions without control variables (columns 1 and 3), we remove the observations that have a missing value for one of the control variables. For regressions with control variables (columns 2 and 4), we impute the missing values for control variables using the multiple imputation technique.

	(H1, continuous)	(H1, continuous)	(H1, categorical)	(H1, categorical)
Left-right (continuous)	-0.058***	-0.056***		0
	(0.004)	(0.004)		
Left-right (categorical)				
0			0.021***	0.023***
			(0.005)	(0.005)
1			0.025***	0.025***
			(0.006)	(0.006)
2			0.020***	0.020***
			(0.005)	(0.004)
3			0.004	0.004
			(0.004)	(0.004)
4			(ref)	(ref)
5			-0.003	-0.001
			(0.003)	(0.003)
6			-0.008**	-0.008**
			(0.004)	(0.004)
7			-0.014***	-0.014***
			(0.004)	(0.004)
8			-0.028***	-0.026***
			(0.004)	(0.004)
9			-0.029***	-0.026***

Table G1. Test of H1 with alternative ways of addressing missing values

			(0.006)	(0.006)
10			-0.025***	-0.021***
			(0.005)	(0.005)
Don't know			0.005	0.008*
			(0.005)	(0.005)
Age (16-99)		<0.001***		<0.001***
		(<0.001)		(<0.001)
Gender (0=Female, 1=Male)		-0.001		-0.002
		(0.002)		(0.002)
Education				
None (0,1)		(ref)		(ref)
D: (0.1)		0.004		0.007
Primary (0,1)		0.004		0.006
		(0.006)		(0.006)
Secondary (0, 1)		0.004		0.006
		(0.006)		(0.006)
Post-Secondary (0,1)		0.017***		0.016***
		(0.007)		(0.006)
University (0,1)		0.017***		0.018^{***}
		(0.006)		(0.006)
Other (0,1)		0.002		0.007
		(0.009)		(0.009)
Constant	0.256***	0.269***	0.218***	0.231***
	(0.009)	(0.012)	(0.009)	(0.011)
Election fixed effects	YES	YES	YES	YES
Ν	58.831	59,146	61.692	62.030

	(H2,	(H2,	(H2,	(H2,
	continuous)	continuous)	categorical)	categorical)
Left-right (continuous)	0.067*	0.064		
	(0.036)	(0.035)		
Left-right (categorical)				
0			-0.062	-0.066
			(0.041)	(0.041)
1			0.022	0.025
			(0.045)	(0.045)
2			0.037	0.038
			(0.036)	(0.035)
3			0.037	0.044
			(0.033)	(0.033)
4			(ref)	(ref)
5			0.086***	0.080***
			(0.029)	(0.029)
6			0.051	0.053
			(0.035)	(0.035)
7			0.037	0.043
			(0.035)	(0.035)
8			0.033	0.035
			(0.043)	(0.043)
9			0.082	0.064
			(0.068)	(0.066)

Table G2. Test of H2 with alternative ways of addressing missing values

10			-0.009	-0.013
			(0.058)	(0.058)
Don't know			0.138**	0.122**
			(0.059)	(.059)
Age (16-99)		0.001		0.001
		(0.001)		(0.001)
Gender (0=Female, 1=Male)		0.037*		0.039*
		(0.017)		(0.017)
Education (categorical)				
None (0,1)		(ref)		(ref)
Primary (0,1)		0.014		0.033
•		(0.083)		(0.081)
Secondary (0, 1)		-0.031		-0.005
•		(0.083)		(0.082)
Post-Secondary (0,1)		-0.038		-0.013
•		(0.084)		(0.083)
University (0,1)		-0.035		-0.013
• • •		(0.083)		(0.082)
Other $(0,1)$		-0.057		-0.056
		(0.107)		(0.105)
Constant	0.210***	0.186*	0.201***	0.153
	(0.042)	(0.099)	(0.044)	(0.097)
Election fixed effects	YES	YES	YES	YES
Ν	2.516	2.534	2.579	2.597

Appendix H. Regressions separating elections with low and high difference in district size

Table H1 reproduces the main analysis for H1 for elections in which the difference between the largest and smallest district is small (below the median, median=20). Table H2 does the same for elections in which this difference is large (above or equal to the median).

Table H3 reproduces the main analysis for H2 for elections in which the difference between the largest and smallest district is small (below to the median). Table H4 does the same for elections in which this difference is large (above or equal to the median).

	(H1,	(H1,	(H1,	(H1,
	continuous)	continuous)	categorical)	categorical)
Left-right (continuous)	-0.058***	-0.057***		
	(0.004)	(0.004)		
Left-right (categorical)				
0			0.021***	0.024***
			(0.005)	(0.005)
1			0.024***	0.026***
			(0.006)	(0.006)
2			0.020***	0.020***
			(0.004)	(0.005)
3			0.004	0.004
			(0.004)	(0.004)
4			(ref)	(ref)
5			-0.003	-0.001
5			(0.003)	(0.003)
6			-0.008**	-0.008**
			(.004)	(0.004)
7			-0.014***	-0.014***
			(0.004)	(0.004)
8			-0.027***	-0.026***
			(0.004)	(0.004)
9			-0.028***	-0.027***
			(0.006)	(0.006)
10			-0.025***	-0.020***
			(0.005)	(0.005)
Don't know			0.005	0.008
			(0.005)	(0.005)
Age (16-99)		< 0.001***		< 0.001***
		(<0.001)		(<0.001)

Table H1. Test of H1 for elections with small difference in district size

Gender (0=Female, 1=Male)		-0.001		-0.002
		(.002)		(0.002)
Education (categorical)				
None (0,1)		(ref)		(ref)
Primary (0,1)		.005		.006
		(.006)		(.006)
Secondary (0, 1)		.005		.006
		(.006)		(.006)
Post-Secondary (0,1)		.018***		.017***
		(.007)		(.006)
University (0,1)		.018***		.019***
		(.006)		(.006)
Other $(0,1)$.003		.007
		(.009)		(.009)
Constant	0.256***	0.268***	.218***	.229***
	(0.009)	(0.012)	(.009)	(.011)
Election fixed effects	YES	YES	YES	YES
Ν	59,146	58,831	62,030	61,692

Table H2. Test of H1 for elections with large difference in district size

	(H2, continuous)	(H2, continuous)	(H2, categorical)	(H2, categorical)
Left_right (continuous)	0.069*	0.062*	categorical)	categorical)
Lett-fight (continuous)	(0.00)	(036)		
Left-right (categorical)	(.050)	(.030)		
0			-0.063	-0.065
0			(0.041)	(0.041)
1			0.024	0.024
-			(0.045)	(0.045)
2			0.038	0.038
			(0.035)	(0.036)
3			0.04	0.041
			(0.033)	(0.033)
4			(ref)	(ref)
5			0.086***	0.081***
			(0.029)	(0.029)
6			0.052	0.053
			(0.035)	(0.035)
7			0.041	0.04
2			(0.035)	(0.035)
8			0.040	0.029
			(0.043)	(0.043)
9			0.072	0.077
			(0.066)	(0.068)
10			0007	-0.014
			(0.058)	(0.058)
Don't know			0.139**	0.123**
			(0.059)	(0.059)
Age (16-99)		0.001*		0.001
		(0.001)		(0.001)
Gender (0=Female, 1=Male)		0.036**		0.038**

		(0.017)		(0.017)
Education				
None (0,1)		(ref)		(ref)
Primary (0,1)		0.011		0.031
		(0.083)		(0.082)
Secondary (0, 1)		-0.027		-0.001
		(0.083)		(0.082)
Post-Secondary (0,1)		-0.033		-0.007
-		(0.084)		(0.083)
University (0,1)		-0.033		-0.010
• • •		(0.083)		(0.082)
Other $(0,1)$		-0.044		-0.049
		(0.108)		(0.106)
Constant	0.209***	0.181*	0.201***	0.148
	(0.042)	(0.099)	(0.044)	(0.098)
Election fixed effects	YES	YES	YES	YES
Ν	2,534	2,516	2,597	2,579

	(H1, continuous)	(H1, continuous)	(H1, categorical)	(H1, categorical)
Left-right (continuous)	.013	015	<u>.</u>	
	(0.048)	(0.049)		
Left-right (categorical)				
0			0.007	0.003
			(0.055)	(0.055)
1			0.047	0.065
			(0.055)	(0.056)
2			0.081*	0.090**
			(0.045)	(0.045)
3			0.026	0.033
			(0.040)	(0.040)
4			(ref)	(ref)
5			0.063*	0.053
			(0.037)	(0.037)
6			0.075*	0.077*
			(0.044)	(0.044)
7			-0.002	-0.006
			(0.044)	(0.044)
8			0.057	0.047
			(0.059)	(0.059)
9			0.107	0.068
			(0.098)	(0.098)
10			0.045	0.027
			(0.09)	(0.090)
Don't know			0.107	0.079
			(0.083)	(0.083)
Age (16-99)		0.002***		0.002***
		(0.001)		(0.001)
Gender (0=Female, 1=Male)		0.026		0.034
		(0.021)		(0.022)

Table H3. Test of H2 for elections with small difference in district size

Education (categorical)				
None (0,1)		(ref)		(ref)
Primary (0,1)		0.138		0.106
		(0.193)		(0.196)
Secondary (0, 1)		0.158		0.138
-		(0.193)		(0.196)
Post-Secondary (0,1)		0.169		0.147
• • • •		(0.195)		(0.197)
University (0,1)		0.097		0.071
•		(0.193)		(0.195)
Other $(0,1)$		0.345		0.337
		(0.267)		(0.272)
Constant	0.235***	-0.001	0.197***	-0.030
	(0.042)	(0.202)	(0.045)	(0.202)
Election fixed effects	YES	YES	YES	YES
Ν	1,206	1,204	1,232	1,230

	(H2,	(H2,	(H2,	(H2,
	continuous)	continuous)	categorical)	categorical)
Left-right (continuous)	0.113**	0.115**		
	(0.051)	(0.052)		
Left-right (categorical)				
0			-0.111*	-0.115*
			(0.060)	(0.061)
1			< 0.001	-0.013
			(0.071)	(0.071)
2			<0.001	-0.005
			(0.054)	(0.055)
3			.059	0.050
			(.053)	(0.053)
4			(ref)	(ref)
5			0.104**	0.097**
			(0.044)	(0.045)
6			0.028	0.024
			(0.054)	(0.055)
7			0.081	0.08
			(0.053)	(0.054)
8			0.031	0.021
			(0.063)	(0.063)
9			0.054	0.065
			(0.091)	(0.095)
10			-0.028	-0.031
			(0.077)	(0.078)
Don't know			0.160*	0.140*
		0.001	(0.083)	(.084)
Age (16-99)		< 0.001		<0.001
		(<0.001)		(<0.001)
Gender (0=Female, 1=Male)		0.044*		0.038
Education		(0.025)		(0.025)

Table H4. Test of H2 for elections with large difference in district size

None (0,1)		(ref)		(ref)
Primary (0,1)		0.009		0.040
• • •		(0.098)		(0.096)
Secondary (0, 1)		-0.082		-0.046
• • •		(0.099)		(0.097)
Post-Secondary (0,1)		-0.091		-0.060
• • • •		(0.101)		(0.099)
University (0,1)		-0.034		-0.007
•		(0.099)		(0.097)
Other $(0,1)$		-0.080		-0.084
		(0.126)		(0.123)
Constant	0.299***	0.336**	0.297***	0.314**
	(0.073)	(0.131)	(0.073)	(0.128)
Election fixed effects	YES	YES	YES	YES
Ν	1,328	1,312	1,365	1,349

Appendix I

Table I1 reproduces the structural equation model regression shown in Table 1 by using a categorical version of the variable left-right ideology.

	(Intensity of preferences)
Left-right (categorical)	
0	0.952***
	(0.167)
1	0.602***
	(0.182)
2	0.230
	(0.144)
3	-0.018
	(0.134)
4	(ref)
5	0.054
	(0.118)
6	-0.159
	(0.143)
7	-0.014
	(0.141)
8	-0.037
	(0.176)
9	0.463*
	(0.274)
10	0.918***
	(0.236)
Don't know	0.624**
	(0.250)
Age (16-99)	0.004*
	(0.002)
Gender (0=Female, 1=Male)	-0.109
	(0.067)
Education (categorical)	
None (0, 1)	(ret)
Primary (0, 1)	-0.309
	(0.330)
Secondary (0, 1)	-0.368
	(0.331)
Post-Secondary (0, 1)	-0.341
	(0.336)
University (0,1)	-0.505
	(0.331)
Other $(0,1)$	0.498
	(0.435)
	(Strategic voting)

Table I1: Structura	l equation n	nodel regression	with categorical	left-right variable
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Left-right (categorical)

0	-0.025
1	(0.040)
1	0.056
2	(0.043)
2	0.052
2	(0.034)
5	(0.042)
4	(0.054) (ref)
5	0.083***
	(0.028)
6	0.047
_	(0.034)
7	0.041
	(0.034)
8	0.032
0	(0.034)
9	0.100
10	(0.005)
10	0.022
Don't know	0.050)
	(0.060)
Intensity of preferences (1-10)	-0.051***
intensity of preferences (1 10)	(0.005)
Age (16-99)	0.001**
	(0.001)
Gender (0=Female, 1=Male)	0.030*
	(0.016)
Education (categorical)	
None (0, 1)	(ref)
Primary (0, 1)	0.008
	(0.079)
Secondary (0, 1)	-0.025
	(0.079)
Post-Secondary (0, 1)	-0.033
University (0,1)	(0.080)
University (0,1)	-0.042
Other $(0,1)$	(U.U/9) 0.000
	-0.008
Election fixed effects	(0.104) VFS
N	2 562
11	2,302

Note: Entries are coefficient estimates from a structural equation model OLS regression. The upper panel shows the results for the first part of the model predicting intensity of partisan preferences, and the lower panel shows the second part of the model predicting strategic voting, both conditional on being a potential strategic voter. Standard errors are in parentheses. *p<0.10, ** p<0.05, *** p<0.01 (two-tailed).