

Online Appendix

Electoral Reforms and the Representativeness of Turnout

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Definitions of Variables

- *Party Identification*: Question wording: “Which of the following parties corresponds most with your political opinion?” Answer categories: Social-Democratic Party (SP), Christian Democratic People’s Party (CVP), Free Democratic Party (FDP), Swiss People’s Party (SVP), Other.
- *Ideology*: Self-reported placement on left-right ideology scale. Question wording: “In politics people often talk of ‘left’ and ‘right’. If you use a scale from 0 to 10, where would you classify your own political views on this scale from left (0) to right (10)? The measure used in the analysis classifies individuals with a value from 0 to 3 as “Left”, those with a value from 4 to 6 as “Center”, and those with a value from 7 to 10 as “Right”.
- *Political Interest*: Binary indicator that distinguishes between respondents who report to be rather interested in politics (very interested or rather interested) and those who are not interested (rather not or not at all interested).
- *Political Knowledge*: Binary indicator that distinguishes between respondents who were able to answer two objective knowledge questions and those who were not. The first question asks respondents to name the title of each ballot proposition. The second question asks respondents to roughly describe the content of each proposition. We code respondents as knowledgeable if they answer both questions correctly.
- *Trust in Government*: Question wording: “Which of the following statements corresponds with your opinion about the federal government.” Answer categories: 1=“Most of the time I can count on our federal government. It acts in the interest of the greater good.”, 2=“The federal government increasingly decides against the people. They are not aware of our concerns.”
- *Age*: Age in years. For the aggregate-level analysis this variable measures the share of individuals 60 years of age or older.
- *Education*: Measures respondent’s highest level of completed education. Answer categories: Low (mandatory schooling and vocational training), Middle (high school and post-vocational training), High (university and university of applied sciences). For the aggregate-level analysis, this variable measures the share of individuals with a university degree.
- *Employment Status*: Binary indicator that distinguishes between respondents who are employed and those who are not.
- *Income*: Self-reported monthly household income. Low (<CHF 5,000); Medium (CHF 5,000-7,000); High (>CHF 7,000).
- *Language*: Binary indicator for native language that distinguishes between German and French/Italian.

- *Religion*: Religious denomination: protestant, catholic, other.
- *Residence*: Binary indicator for residence that distinguishes between respondents who live in urban as opposed to rural areas.

Appendix Tables

Table A.1: Introduction of Postal Voting in Switzerland

	Canton	Postal voting
1	Zuerich (ZH)	01.10.1994
2	Bern (BE)	01.07.1991
3	Luzern (LU)	01.10.1994
4	Uri (UR)	01.01.1995
5	Schwyz (SZ)	01.01.2000
6	Obwalden (OW)	01.12.1995
7	Nidwalden (NW)	29.06.1994
8	Glarus (GL)	01.07.1995
9	Zug (ZG)	01.04.1997
10	Fribourg (FR)	23.05.1995
11	Solothurn (SO)	01.01.1985
12	Basel-Stadt (BS)	30.12.1994
13	Basel-Landschaft (BL)	01.07.1978
14	Schaffhausen (SH)	01.08.1995
15	Appenzell Ausserrhoden (AR)	24.05.1988
16	Appenzell Innerrhoden (AI)	11.06.1979
17	St. Gallen (SG)	01.05.1979
18	Graubunden (GR)	01.01.1995
19	Aargau (AG)	01.01.1993
20	Thurgau (TG)	01.08.1985
21	Ticino (TI)	15.04.2005
22	Vaud (VD)	25.03.2002
23	Valais (VS)	01.01.2005
24	Neuchatel (NE)	01.01.2001
25	Geneva (GE)	01.01.1995
26	Jura (JU)	01.05.1999

Note: This table shows when cantons introduced postal voting defined as the first popular vote for which each eligible citizen automatically received the ballot by mail. Citizens can then either return the ballot by mail or at a polling station. Source: (Luechinger, Rosinger and Stutzer 2007).

Table A.2: Placebo Tests for Turnout and Postal Voting, 1981-2009 (Canton-level Referendum Data)

	(1)	(2)	(3)	(4)
Pre-treatment: $t - 5$	0.004 (0.016)	0.005 (0.015)	-0.000 (0.011)	0.000 (0.007)
Pre-treatment: $t - 4$	0.007 (0.028)	0.006 (0.027)	-0.009 (0.010)	-0.012* (0.006)
Pre-treatment: $t - 3$	-0.008 (0.019)	-0.010 (0.018)	-0.002 (0.009)	-0.005 (0.006)
Pre-treatment: $t - 2$	0.027 (0.027)	0.024 (0.027)	-0.011 (0.010)	-0.016** (0.007)
Pre-treatment: $t - 1$	0.006 (0.010)	0.002 (0.010)	-0.003 (0.008)	-0.009* (0.005)
Postal Voting	0.014 (0.012)	0.012 (0.014)	0.036*** (0.009)	0.033*** (0.008)
Postal Voting $t + 1$	0.016 (0.013)	0.014 (0.012)	0.032*** (0.006)	0.030*** (0.006)
Postal Voting $t + 2$	0.036*** (0.012)	0.034*** (0.011)	0.031*** (0.007)	0.029*** (0.006)
Postal Voting $t + 3$	0.047*** (0.014)	0.045*** (0.013)	0.033*** (0.005)	0.030*** (0.005)
Postal Voting $t + 4$	0.041** (0.016)	0.036** (0.016)	0.029*** (0.006)	0.023*** (0.005)
Postal Voting $t + 5$	0.054*** (0.014)	0.048*** (0.014)	0.025*** (0.004)	0.017*** (0.005)
Observations	2,225	2,225	2,225	2,225
R-squared	0.026	0.272	0.563	0.811
Canton FE		✓		✓
Year FE			✓	✓

Note: The table shows placebo OLS regression estimates. The dependent variable is canton-level turnout in referendums. Standard errors are clustered by referendum day.

Table A.3: Postal Voting and Turnout in Referendums, 1981-2009 (Cantonal-level Referendum Data)

	(1)	(2)	(3)
Postal Voting	0.04 (0.01)	0.05 (0.01)	0.04 (0.01)
Observations	2,314	2,314	2,314
R-squared	0.03	0.81	0.82
Controls			✓
Year FE		✓	✓
Canton FE	✓	✓	✓

Note: The table reports OLS regression coefficients using canton-level referendum data. The dependent variable is turnout in referendums. The control variables (controls) are: Share of individuals 60 years or older, share of individuals holding a university degree, share of Catholics in the canton. The appendix provides a detailed description of all variables. Standard errors are clustered by referendum day. The results remain unchanged when estimated using individual-level data, see Appendix Table A.4.

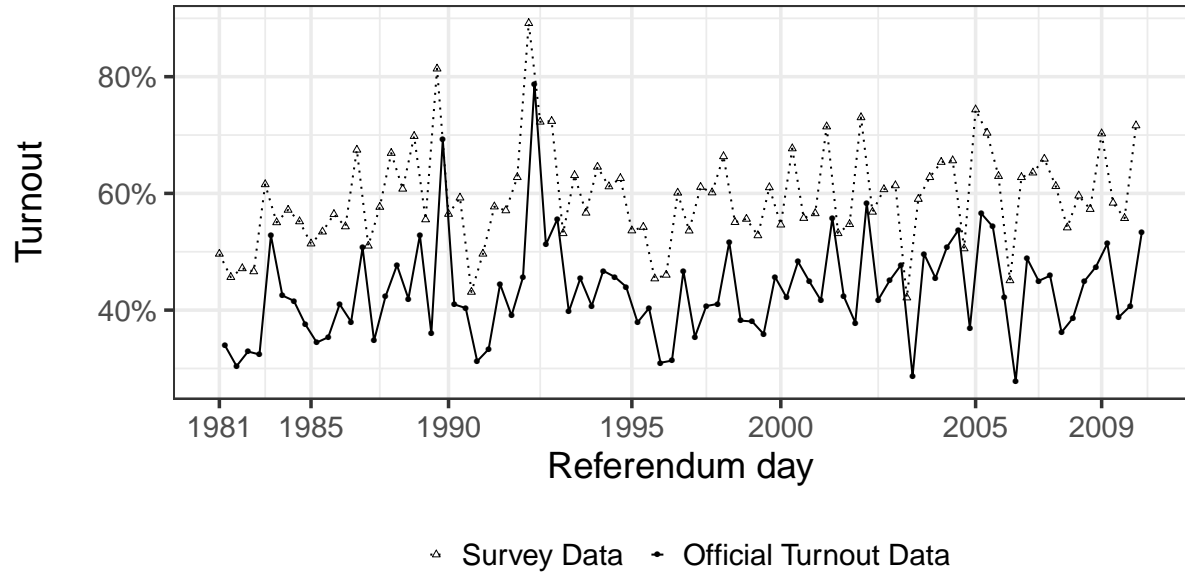
Table A.4: The Effects of Postal Voting on Turnout in Referendums, 1981-2009 (Probit Models, Individual-level Data)

	(1)	(2)	(3)
Postal Voting	0.026 (0.019) [0.019]	0.046 (0.011) [0.011]	0.046 (0.011) [0.011]
Observations	69,116	69,116	69,116
R-squared	0.01	0.04	0.09
Controls			✓
Year FE		✓	✓
Canton FE	✓	✓	✓

Note: The table shows the marginal effects of postal voting based on three separate probit regressions using post-referendum (individual-level) survey data. Control variables (controls) are chosen in accordance with the estimations using aggregate data in Table A.3 and include age categories, education categories, and religious categories. The appendix provides a detailed description of all variables. Standard errors in parenthesis are clustered by referendum day, standard errors in square brackets are clustered by canton.

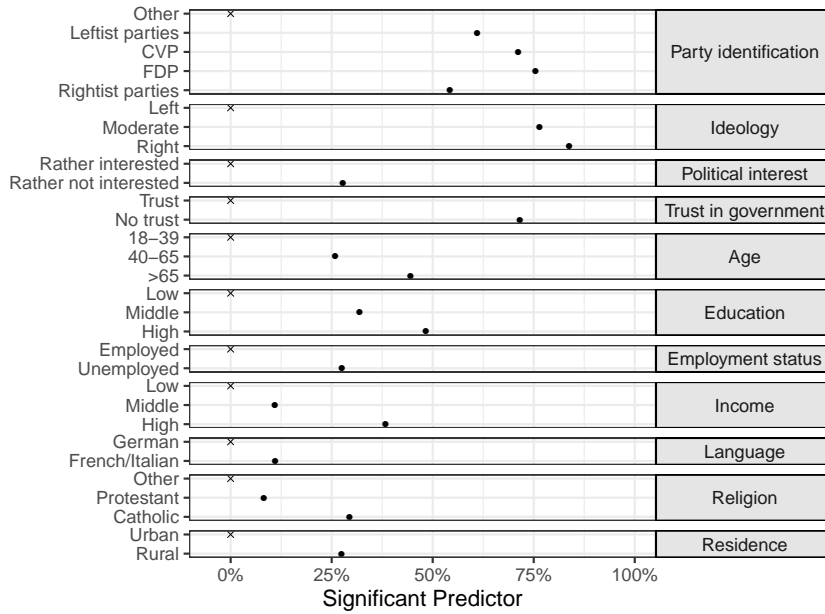
Appendix Figures

Figure A.1: Reported and Observed Turnout in Referendums, 1981-2009



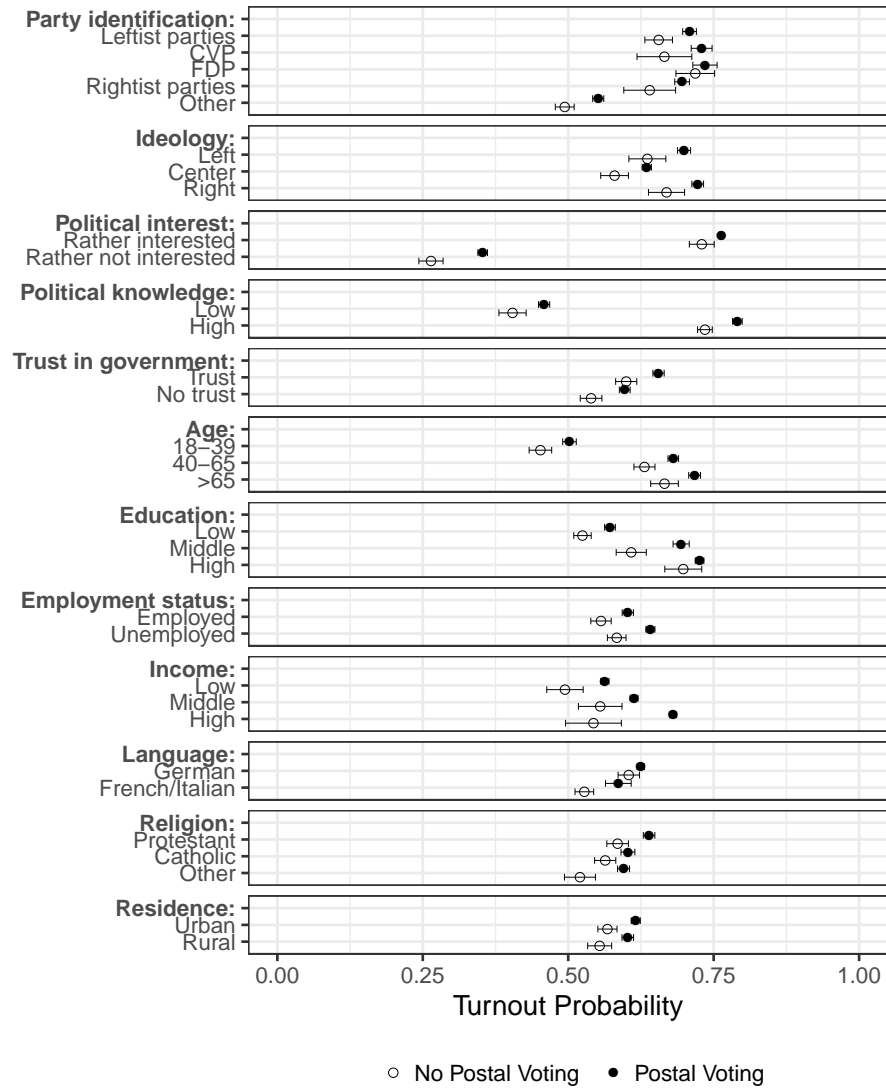
Note: This figure shows reported and observed turnout in referendums over time. The dashed line indicates reported turnout based on VOX survey data (FORS 2012), N=79,041. Sample sizes vary between 670 and 6,042 respondents per referendum day. The solid line indicates turnout based on official referendum data provide by the Swiss Federal Statistical Office.

Figure A.2: Relative Frequency of Significant Predictors of Individual-level Vote Choice in Referendums, 1981-2009 (Individual-level Data)



Note: This figure shows the relative frequency of a given covariate being a significant predictor of vote choice in referendum-specific probit regressions. Each dot indicates the share of regressions in which an individual-level characteristic was significant at the 10% significance level. Crosses indicate reference categories. All probit regressions model vote choice as a function of the same set of socio-demographic and political predictors for each ballot proposition with standard errors clustered by referendum day. Total N=79,041 respondents. The sample sizes vary between 670 and 6,042 respondents per referendum day.

Figure A.3: Predicted Turnout Probabilities in Referendums with and without Postal Voting, 1981-2009 (Individual-level Data)



Note: This figure shows the predicted turnout probabilities with (black dots) and without postal voting (white circles). Horizontal lines indicate 95%-confidence intervals. All estimates are based on group-specific regressions that include canton and referendum-day fixed effects. Total N=79,041 respondents from representative samples. The sample sizes vary between 670 and 6,042 respondents per referendum day. Standard errors are clustered by referendum day.