

Concurrent Elections, the Calculus of Voting, and Political Decisions

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Abstract

This paper explores the consequences of concurrent elections on turnout, information acquisition, and individual voting decisions. I exploit a natural experiment in which all voters decide on the exact same federal direct-democratic propositions. A fraction of voters, however, also votes in high-salience subnational elections that change the calculus of voting for federal propositions. The analysis of survey and administrative voting data for Switzerland between 1981 and 2010 reveals that concurrent elections increase voter turnout for federal propositions, make vote decisions more difficult, decrease proposition knowledge, and increase the share of individuals who cast a blank ballot.

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1 Introduction

Political participation rates in most Western democracies have fallen dramatically since the 1950s. This has provoked widespread concerns about the legitimacy of democratic institutions and unequal representation against disadvantaged citizens. To counteract the trend of falling turnout, scholars and politicians have proposed several means to lower the costs of voting including the abolition of literacy tests, the registration via driver license, and the introduction of postal voting.¹ Others have argued to increase the costs of non-voting, most prominently by making voting compulsory (Lijphart, 1997), although many have remained skeptical towards compulsory voting because it may increase the share of poorly informed citizens (Börger, 2004; Krishna and Morgan, 2011).

A much simpler and cost-effective approach to increase voter turnout is holding concurrent elections and referendums in which the physical costs of casting only one vote are basically equal to the costs of casting multiple votes. Thus, if individuals act according to the calculus of voting, they vote in all elections and propositions after having paid the costs of voting. The evolution of turnout over time, depicted in Figure 1 for referendums in Switzerland, is consistent with this conjecture. The figure documents that aggregate turnout rates are heavily clustered at the referendum day which are graphically separated by the vertical white and gray-shaded areas. But how do citizens behave in concurrent referendums when voting on some propositions comes at zero costs?

[Figure 1 about here]

To explore the effect of concurrent elections on voting behavior, I use a natural experiment in Switzerland in which all individuals vote on the exact same federal propositions but only a fraction of voters also votes in the election to the cantonal (state-level) parliament. Swiss cantons have their own legislative and executive branches with considerable policymaking powers and thus cantonal parliamentary elections are highly salient and provide exogenous variation in the salience of concurrent elections. I examine the consequences of concurrent elections on turnout, information acquisition, political knowledge, and individual voting decisions by studying survey data on more than 72,000 eligible voters in 244 popular votes from 1981 to 2010 as well as administrative voting records for

¹Husted and Kenny (1997) explore of the consequences of abolishing literacy tests, Knack (1995) studies the effects of the driving license program, and Hodler, Luechinger and Stutzer (2015) examine the consequences of postal voting.

the same period. Direct democracy in Switzerland provides a unique opportunity to study the consequences of concurrent propositions in a real-world context because the country's major decisions are taken in popular votes.²

The results suggests that concurrent cantonal elections increases turnout in federal referendums by 8.4 percentage points (13.4%) among eligible voters in the post-referendum survey (“VoxIt”) and by 8.6 percentage points in the administrative record data. The findings show that actual voters in cantons with concurrent elections assess the voting decision to be more difficult, the relevant measure increases by 20.6% compared to a voter who has no concurrent cantonal election. This increases voters’ information search behavior, measured by the total of information sources used, by 3.0% and decreases proposition knowledge by 4.6%. These effects are most pronounced for relatively young male voters in the center of the political spectrum who do not regularly participate. I also explore the effect of concurrent elections on the voting decision and find that about 5% of voters who are mobilized by concurrent elections delegate their vote by casting a blank ballot. In addition, I provide some evidence that concurrent elections increase support for the alternative put forward by the government in close and important referendums. Finally, I show that the main results extend beyond the natural experiment of concurrent cantonal elections to a setting in which salient concurrent propositions change the calculus of voting.

I perform five robustness tests to explore concerns that the findings may be driven by factors other than concurrent elections. First, I explore whether the results of the post-referendum survey can be replicated using administrative voting data. Second, I compare the balance of treatment group, those individuals who face a concurrent election, and control group in the survey data. Third, I explore the possibility that cantonal and federal authorities use strategic scheduling to maximize their vote share. Fourth, I discuss the impact of ballot position on the results. Finally, I examine the study’s external validity, namely whether the main findings generalize to a time span longer than the post-referendum survey. The main results are not sensitive to these robustness tests.

This paper contributes to two strands of the literature. First, the political economy literature has documented that concurrent elections matter because they may change the electoral influence of special-interest groups (Anzia, 2011), the incentives for strategic scheduling (Meredith, 2009), and split-ticket voting (Degan and Merlo, 2011). Furthermore, several scholars have provided evidence that the ordering of propositions affects electoral outcomes of multiple elections (Arrow, 1950; Hum-

²Important popular votes during the study period include a proposition to join the European Economic Area (1992), three referendums on the sectoral agreements with the European Union (2000, 2006, 2009), a proposition on the membership to the United Nations (2002), as well as important changes to the federal tax code (1986, 1993, 2001, 2004, 2009, 2010, among others). See Table C.3 in the Appendix for a complete list of all propositions.

mel, 2012; Augenblick and Nicholson, 2015). However, there is little real-world empirical evidence on the effects of holding high-salience concurrent referendums and elections that change the calculus of voting.

Second, the findings add to the literature on the aggregation of dispersed information that is a key feature of elections. Since Condorcet's (1785) famous Jury Theorem, a large body of literature has pointed out the positive welfare properties of large elections and voluntary voting when it comes to aggregating dispersed information (Feddersen and Pesendorfer, 1997; Krishna and Morgan, 2011). Furthermore, a growing body of literature has emphasized that voter information increases the quality of political decisions (Besley and Prat, 2006). However, despite its importance in modern democracies, the effects of multiple concurrent elections on aggregate information has not been examined empirically, mostly because there is little exogenous variation in bundling propositions with different salience levels.

From a policy perspective, the results from this study have important implications for many countries that hold concurrent elections and referendums. A large number of presidential democracies, such as the United States, elect executive and legislative bodies on the same day, while other countries, most notably France, Germany, and the United Kingdom, hold concurrent elections for different levels of government.³ In addition to concurrent elections, there are important examples of countries and subnational units holding direct-democratic votes in concurrent referendums.⁴ Previous literature has shown that elections for the higher administrative level change the calculus of voting (Anzia, 2011).

The rest of the paper is organized as follows. Section 2 describes the institutional background and the data. Section 3 outlines the estimation strategy. Section 4 presents the empirical results. Section 5 concludes.

2 Institutional Background and Data

2.1 Direct Democracy in Switzerland

Switzerland is a federal republic with a two-chamber-parliament. Besides the parliament's full legislation competences at the level of federal acts, four different institutions of direct democracy evolved during the 19th and 20th century. The mandatory referendum requires every amendment to the con-

³Voters in the United States elect a subset of seats in the Congress (33%) and the House of Representatives (50%) concurrent with the presidential election.

⁴California, for example, held 115 propositions and elections on 14 referendum days in the period of 2000–2009.

stitution to be approved by the majority of the votes cast (*Volksmehr*) as well as by the majority of the federal units (*Staendemehr*).⁵ In addition, citizens can oppose bills approved in parliament by launching an optional referendum that takes place if 50,000 signed petitions are submitted within 100 days.⁶ The third direct-democratic institution is the popular initiative that gives voters the right to vote on partial amendments to the constitution. This direct-democratic form has been mainly used by the opposition parties from the left and right and requires the submission of 100,000 signed petitions within a time window of 18 months.⁷ The counter proposition is the fourth direct-democratic institution and allows both government and parliament to launch an alternative, more moderate proposition to an initiative and is held concurrent with the initiative. In this case, citizens cast three votes, one vote for both initiative and counter proposition, and one vote on their preference between the two, in case both will be approved.

2.2 Popular Votes in the Period of 1981–2010

Overall, Swiss voters decided on 254 federal popular votes in the period between 05. April 1981 and 28. November 2010. Most of the propositions were held concurrent with other propositions, while only 13 days were voting days with a single referendum, corresponding to a fraction of 15.7% of all voting days. The average number of propositions for voting days with multiple referendums was 2.9 propositions per referendum day with a maximum of nine popular votes on 18. May 2003. Average turnout was 43.3% in the study period.

The sample of single referendum days includes important foreign policy decisions, such as the proposed membership to the United Nations (1986), membership to the European Economic Area (1992), the sectoral agreements with the European Union (2000), as well as the extension of the sectoral agreements to the new member states (2005). Yet arguably less important propositions, such as the complete abolishment of animal testing (1985) and subsidies for small farmers (1989), were also decided as single referendums. Thus, the descriptive evidence suggests that many single referendums are mainly if not exclusively high stake decisions. The referendum on the membership to the European Economic Area had the highest turnout in the sample. A fraction of 78.7% of eligible voters turned out to reject the membership proposition by a narrow margin of 50.3%. In contrast, the

⁵Every canton has one federal unit vote (*Staendestimme*), except for Basel-County, Basel-City, Nidwalden, Obwalden, Appenzell Outer Rhodes, and Appenzell Inner Rhodes. Due to their small population size, these cantons have only half a vote.

⁶An *optional referendum* can also be called by eight cantons. This option, however, has been chosen only once.

⁷The requirements were 30,000 signed petitions for the optional referendum and 50,000 for the popular initiative before 1979. I will account for this change in the empirical analysis below.

referendum day with the lowest turnout was on 21 March 2006 when only 27.9% of voters decided on reforms of the Swiss education system.

The set of concurrent propositions includes 225 propositions on a variety of topics, namely the future of the Swiss pension system, asylum regulations, introduction of a debt brake, and changes to the criminal code. The initiative that proposed to abolish the Swiss Army (1988) marked the highest turnout of 69.2% in the sample of multiple concurrent referendums and was rejected by 74.4% of voters. Concurrent with the vote on the future of the Swiss Army, an initiative that intended to increase speed limits on highways and main roads was rejected by 72% of voters. Some propositions were put to a popular vote several times during the period of study. There were, for instance, three failed attempts to shut down nuclear power plants (1984, 1990, and 2000) and three unsuccessful attempts to introduce a compulsory maternity insurance (1984, 1987, 1999) until the proposition was eventually approved in 2004. Table C.3 in the Appendix provides a complete list of all popular votes included in the analysis.

2.3 Individual and Administrative Voting Data

To explore the effects of concurrent referendums on voting outcomes, I use individual voting data from the post-vote survey “VoxIt” covering 72,658 eligible voters in 244 popular votes on 83 voting days (FORS 2014).⁸ The average total number of observations per proposition is 895. The data includes information on individual turnout, proposition knowledge, the voting decision as well as detailed personal characteristics, such as age, gender, party identification, and whether individuals classify as regular voters. All major federal parties issue a voting recommendation in advance to a popular vote. This data comes from the “Swissvotes” database that was collected in a joint project by the Swiss Federal Office for Statistics, the Swiss Federal Chancellery, and the Institute of Political Science at the University of Bern (Swissvotes 2012).⁹ Appendix B provides a detailed list of all variables used in the analysis.

The VoxIt data on concurrent referendums allows me to explore the impact of concurrent referendums on individual decision-making, proposition knowledge and the voting decision. The variable *Difficult Decision* captures whether voters assess the voting decision to be difficult, measured on a four-point scale from 0 to 1. To measure the extent individuals invest in information search, I con-

⁸Note that there was no post-referendum survey for 12 votes between 1981 and 1993. Moreover, the original VoxIt data includes 4,636 individuals more with no information on their residence canton. Since the canton is essential to determine whether a voters faces a concurrent election, I exclude these individuals from the analysis.

⁹The data may be downloaded from the website www.swissvotes.ch.

struct the variable *Information Search* that combines four dummies whether voters made use of media outlets (TV, radio, newspaper, and official information) for political information. I rescale this measure to a range from 0 to 1. To measure proposition knowledge, I use a binary measure that captures if the respondents could answer the two questions on the proposition title and content. I use five variables to examine the effects of concurrent referendums on the voting decision. The first variable, *Blank Ballot*, is a dummy that measures whether a voter cast a blank ballot. The variable *Government Support* is a dummy that captures whether a voter voted for the alternative endorsed by the federal government. In a similar vein, the variable *Support Left (Support Right)* is a binary indicator that is 1 if the respondent supported the position recommended by the Social-Democratic Party (Swiss People's Party). The fourth variable of interest, *Ideological Voting*, is defined only for partisan voters and captures whether a voter followed the voting recommendation of her most preferred party.

In addition to the post-referendum survey data I use administrative information on aggregate voting outcomes at the cantonal level. This dataset is based on the official voting record of the Swiss Federal Statistical Office (SFS 2014) and includes turnout, the total number of yes and no votes, the number of empty ballots, and the number of invalid ballots.

2.4 Descriptive Statistics

Table 1 summarizes the individual characteristics of respondents in the VoxIt sample split into all respondents (Panel A), actual voters (Panel B), and partisan voters (Panel C). The average respondent is 47.4 years old and most likely to be married. The group of respondents is balanced in its gender composition. Average sample turnout is 63.0% compared to the observed average turnout which was 43.2%. This pattern has two explanations. First, the higher share of voters in the survey sample reflects the fact that individuals who went to the polls are more likely to participate in the survey. Second, there might be reporting bias. I investigated whether this difference between observed and survey turnout varies over time. This would be a major concern for the interpretation of the results, mainly if there are systematic reporting differences across referendums with and without concurrent elections. However, the turnout difference remains fairly constant over time (see Figure A.1 in the Appendix).

Among actual voters, about 30% assess the voting decision to be difficult. The average voter invests about 0.72 in information search on a scale from zero to one and 67% of voters know both the title and details of the proposition. At the same time, about 4% cast a blank ballot, while 62% vote for the alternative endorsed by the government, 54% vote according to the voting recommendation

issued by the left party, and 58% support the right-wing party.¹⁰ Among voters who identify with a particular party, about 72% vote according to the voting recommendation of their party.

[Table 1 about here]

Previous research has provided evidence that the salience of a proposition as well as political knowledge are important determinants of the individual turnout decision (Feddersen and Pesendorfer, 1996; Coate and Conlin, 2004; Coate, Conlin and Moro, 2008). To get a sense of whether voters and non-voters differ along these dimensions, I compare salience and information for the two groups. Panel (A) in Figure 2 depicts a histogram of individually assessed proposition salience on an eleven-point scale, with 0 indicating “very unimportant” and 10 indicating “very important”.¹¹ The solid (dashed) line depicts a non-parametric estimation of the salience density for voters (non-voters). Average salience is 5.7 for voters and 4.0 for nonvoters. Panel (B) in Figure 2 shows the distribution of proposition knowledge on a two-point scale. A score of 1 indicates knowledge of the proposition title and details, a score of 0 indicates no knowledge of either proposition title or details. While 67.6% of voters possess high proposition knowledge, only 42.0% of nonvoters attain this score. These figures suggest that both dimensions, salience and proposition knowledge, differ significantly between voters and nonvoters.

[Figure 2 about here]

To what extent do these differences help us understand aggregate turnout in direct-democratic votes? Figure 3 shows average salience of the proposition with the highest average salience per referendum day on the x-axis and referendum day turnout on the y-axis. The black line is a least-square fit with a 95% confidence interval indicating a clear positive relationship between the two variables, the correlation coefficient is $r = 0.53$. Three propositions clearly do not fit the pattern. While the least-square fit underpredicts observed turnout in the referendum on the EEA membership in 1992 and in the referendum on the abolition of the Swiss army in 1987, it overpredicts turnout in the referendum on education reform held in 2006. If I exclude these outlier observations, the correlation between the average salience and turnout increases to $r = 0.64$.

[Figure 3 about here]

¹⁰Note that these numbers do not add up to 100% because the three parties issued the same voting recommendation in 25.6% of all propositions.

¹¹The exact wording of the question is: “Speaking about the vote in general, what is the impact of a yes or a no outcome on your person? Please indicate your choice using an eleven-point scale, with 0 indicating “very unimportant” and 10 indicating “very important”.”

3 Empirical Strategy

The aim of this paper is to study the effects of concurrent referendums that change the trade-off between the gains and costs of voting. Of particular interest is the question how individuals vote in propositions for which they cast a ballot if they are mobilized by a salient or close concurrent proposition. But disentangling the effects of different concurrent propositions is difficult because it is hard to measure which proposition on a specific referendum day actually drives turnout, information acquisition, and the vote decision.¹² In Section 4.5 I will examine how concurrent propositions with different salience levels affect political choices as an extension.

To identify the causal effects of concurrent elections, I focus on a natural experiment in which citizens vote on the exact same propositions but only a fraction of voters elects the cantonal executive and legislative branch on the same day. Concurrent cantonal elections generate plausibly exogenous variation in the salience of concurrent elections. The reason is the strongly decentralized structure of Switzerland that grants cantons a high degree of political self-determination.¹³ All cantons have their own legislative and executive branches with considerable policymaking powers. As a consequence, cantonal elections are important for voters and can significantly alter the calculus of voting for federal referendums if these take place on the same day.

Figure 4 depicts all federal referendum days and all cantonal election days for each canton (y-axis). The white triangles show cantonal elections days with no concurrent federal referendum, the white dots depict federal referendum days with no concurrent cantonal election. The black squares indicate days for which a federal referendum was concurrent with a cantonal election. The figure reveals that it is common practice for cantons to hold cantonal elections concurrent with cantonal elections. Fifteen of the twenty-six cantons held at least one election concurrent with federal referendums. Importantly, the graph shows no clear timing pattern in the sense that all cantons would hold concurrent elections on a particular referendum day. This allows me to separate the concurrent election effect from the proposition fixed effects. I will address potential strategic scheduling as a threat to internal validity in Section 4.4.

[Figure 4 about here]

¹²The identification problem is particularly apparent when exploring the effect of concurrent proposition salience on information acquisition using individual voting data. It is very likely that voters with low information on a proposition will also consider it to be less salient. Thus, a regression of information knowledge on the salience of concurrent referendums will likely yield negative coefficients but the resulting estimates cannot be interpreted as causal effects.

¹³Most notably the policy domains of education, police, taxes, and part of the health care system are in the responsibility of the cantons.

In the first step of the analysis, I explore how concurrent cantonal elections affect turnout in federal referendums. I estimate the following fixed effect model:

$$Y_{ijp} = \text{Concurrent Election}_{ijp}\beta_1 + \mu_j + \delta_p + \varepsilon_{ijp} \quad (1)$$

where i indexes voters, j indexes cantons, p indexes propositions; Y_{ijp} is turnout, $\text{Concurrent Election}_{ijp}$ is a dummy that is 1 if voter i in canton j has a concurrent cantonal elections on the voting day of the federal proposition p , β_1 is a coefficient, μ_j is a cantonal fixed effect, δ_p is a proposition fixed effect, and ε_{ijp} is a random error that I will cluster at the voter level. In the second step of the analysis, I estimate equation (1) for proposition knowledge, decision difficulty, information search, and the voting decision described in the data section.

4 Results

4.1 Main Results

I begin the empirical investigation by examining how concurrent cantonal elections affect turnout and the decision-making process of voters using the post-referendum survey data. Table 2 reports the results of estimating equation (1) for four different outcome variables. All specifications include cantonal and proposition specific fixed effects. Column (1) shows that concurrent cantonal elections increase voter turnout in federal referendums by 8.4 percentage points, which is equivalent to a 13.4% increase compared to the baseline turnout for propositions with no concurrent cantonal election. This result establishes that concurrent elections significantly alter the basic trade-off between the gains and costs of voting. Columns (2) to (4) report the effects of concurrent elections on information acquisition and proposition knowledge for all voters who cast a ballot. Column (2) documents that concurrent elections increase the likelihood that actual voters consider the voting decision to be difficult by 6.1 percentage points (+20.6%). Column (3) presents the results of estimating the effect of concurrent elections on information search on a scale from 0 to 1. The result indicates that voters who have a concurrent election increase their information efforts by 2.2 percentage points (+3.0%). This suggests that voters who are mobilized by a concurrent election may want to compensate a lack of general political knowledge by reading newspapers and the official voting brochure, watching TV, and listening to the radio. I further examine how concurrent elections affect political knowledge, a dummy that takes the value one if individuals recall title and content of the proposition and zero otherwise. The entries in column (4) indicate that concurrent elections decrease proposition knowledge

by 3.1 percentage points (-4.6%). This result suggests that voters who vote on federal referendums joint with cantonal elections are less informed about the propositions at stake, even though they invest more in information search.

[Table 2 about here]

These results provide evidence that concurrent elections significantly affect the calculus of voting, thereby increasing turnout among eligible voters and decreasing proposition knowledge among individuals who go to the polls. However, it remains unclear whether concurrent affect political choices. To assess the effect of concurrent referendums on the individual voting decision, I estimate equation (1) for five different outcome variables. The results are reported in Table 3. Column (1) shows that concurrent elections do not raise the likelihood to cast a blank ballot when using data from the post-referendum survey. Columns (2)–(4) report the results of estimating the effect of concurrent referendums on support for the government’s position, support for the Social-Democratic Party, and support for the Swiss People’s Party, respectively. The results suggest that concurrent referendums do not alter voting decisions in the full sample of referendums. Finally, column (5) reports the results from a regression of ideological voting on concurrent elections. I define ideological voting as casting a ballot according to the recommendation of the party that is ideologically closest to the voter.¹⁴ The entries show that the point estimate on the concurrent elections is essentially zero and not significant. This result implies concurrent referendums have no effect on ideological voting.

[Table 3 about here]

All in all, the evidence of this section has established a clear and important relationship between concurrent referendums, turnout and individual decision-making but has provided no evidence that concurrent elections affect the voting decision. I now turn to the question of whether the effects of concurrent referendums differ across proposition types and different types of voters.

4.2 Effects of Concurrent Referendums in High-Salience and Close Propositions

The main analysis has estimated the effect of concurrent elections using the full set of propositions. Yet direct-democratic votes in Switzerland are heterogeneous in several dimensions. The following analysis tries to shed light on the question whether voters react differently to concurrent elections depending on proposition salience and the expected closeness of the vote. A large body of literature

¹⁴This definition obviously excludes non-partisan voters from the estimation.

has provided evidence that salience is a major determinant of the individual turnout decision (Downs, 1957; ?; Coate and Conlin, 2004). The strong positive relationship between salience and turnout is also a notable feature of referendums in Switzerland as Figure 3 illustrates. A more recent strand of literature has emphasized that the expected closeness is positively related to individual turnout because close elections increase political leaders' mobilization effort (Shachar and Nalebuff, 1999). In general, close and important propositions are likely to have a high mobilization potential but, since those referendums tend to be crucial for the future of the country, may also affect the decision-making process and the vote decision. As a consequence, it is likely that voters more often use recommendations issued by political actors, such as the federal government or their ideologically closest party.

Table 4 reports the results from an estimation of the effect of concurrent elections on nine variables of interest. I split the sample by salience and closeness. The high salience propositions are those with the highest salience measure for a particular citizen on a referendum day. To split the sample into close and non-close propositions, I calculate the winning margin in parliament and split the propositions at the median.¹⁵ Proposition over which the main parties disagree tend to have higher turnout.¹⁶

[Table 4 about here]

The results in the top panel of Table 4 suggest that concurrent elections do increase turnout for every category of propositions, somewhat more for those with high salience compared to those with low salience. Moreover, the figures indicate that the effect of concurrent elections lead to a higher perceived difficulty of the voting decision for propositions with high salience and for the sample of close propositions. This result is not surprising given the fact that salient and close referendums are mostly critical junctures for the country, thereby making the individual voting decision more difficult, particularly for voters who vote primarily because of a concurrent cantonal election. In terms of information search, the results indicate that voters increase their information effort particularly for highly salient and not close propositions. Turning to proposition knowledge, the entries in Table 4 suggest that concurrent elections decrease proposition knowledge mainly for proposition with low salience and for propositions that are not close. This finding is consistent with the view that concurrent elections do not reduce the information aggregation mechanism of democracy for important and

¹⁵The two chambers of parliament issue a vote recommendation for every proposition that is put to a popular vote.

¹⁶A linear regression of official turnout on proposition closeness in the final vote in parliament and a constant yields a negative coefficient of -8.07 (t-value: 3.38). Based on this calculation, a one standard deviation increase in the winning margin in parliament decreases overall turnout by 2.12 percentage points.

close propositions (Feddersen and Pesendorfer, 1997; Krishna and Morgan, 2011).

The bottom panel of Table 4 presents evidence for the question of whether the effect of concurrent elections on the voting decision differs as a function of the proposition type. The probability to cast a blank ballot increases with a concurrent election for the sample of less salient and close proposition. This result is in line with the previous finding that proposition knowledge decreases primarily for low-salience propositions, which makes voters more likely to delegate their vote to their more informed fellow voters. An interesting pattern emerges when we analyze the effect of concurrent elections on government support. It turns out that concurrent elections increase government support but only for highly salient and close propositions. This finding suggests that exogenously mobilized voters tend to vote according to the generally moderate recommendation issued by the government. Finally, I find that in propositions that are not close, concurrent elections increase support for the left, which is in line with previous evidence suggesting that higher turnout benefits left-wing parties (Fowler, 2013; Bechtel, Hangartner and Schmid, 2015).

4.3 Heterogeneous Effects of Concurrent Referendums

A number of scholars have found that the determinants of turnout, such as civic duty (Enos, Fowler and Vavreck, 2013), postal voting (Hodler, Luechinger and Stutzer, 2015), the elimination of obstacles to voting, such as poll taxes and literacy tests (Husted and Kenny, 1997), have an unequal impact across the population of voters. The question of whether concurrent proposition affect citizens differently is particularly important because a non-constant treatment effect leads to changes in the constituency that may affect political outcomes. To explore this, I estimate equation (1) for different subgroups. I split the sample by age, gender, party identification, and political interest. Figure A.2 in the Appendix depicts the results. Panel (A) indicates that concurrent elections increase turnout mostly for young (+12.4 percentage points) and male voters (+11.2 percentage points) compared to the baseline estimate of 8.5 percentage points. Yet turnout probabilities increase equally across the whole political spectrum. This results suggests that concurrent elections does not lead to unequal mobilization of different political groups. The turnout effect is highest for voters who do not regularly participate because they have a low a priori turnout propensity, while regular voters would also have voted with no concurrent election. Panel (B) presents the results for the difficulty of the voting decision. While there is no significant difference between age groups, individuals with different political identification, and regular and irregular voters, it seems that men (+10.0 percentage points) assess the voting decision in concurrent elections to be significantly more difficult than women. A similar

pattern with regard to gender emerges when considering the effects on information search reported in Panel (C). Men increase their information search effort more than women. Notably, the effect of concurrent elections on search effort is highest among centrist and irregular voters. Finally, Panel (D) depicts the effects of concurrent elections on proposition knowledge that is largest among young (-5.4 percentage points) and irregular (-5.1 percentage points) voters who hold centrist political views (-3.9 percentage points).

4.4 Robustness Checks and External Validity

In this section, I examine the sensitivity of the main results with regard to five major concerns. First, I check whether the results of the post-referendum survey can be replicated using administrative voting data. Second, I compare the balance of the group of voters who have a concurrent election and the group of voters who have not. Third, I explore strategic scheduling. Fourth, I discuss whether the results can be explained by the position of a proposition on the ballot and choice fatigue, the empirical regularity that voters are more likely to abstain and use heuristics for propositions at the bottom of the ballot. Finally, I examine the external validity, namely whether the findings generalize to a broader time span.

Validity check using administrative data — The analysis of the post-referendum survey data has provided important insights how concurrent elections affect political decisions. Yet it remains unclear whether these results can be generalized to the full population of voters. This concern is particularly relevant because respondents of the post-referendum survey tend to be more politically interested than the average voter in the population. As a consequence, aggregate turnout in the post-referendum data is higher than in the official results in the administrative data (see Figure A.1 in the Appendix).

[Table 5 about here]

To probe the generalizability of the findings, I reestimate equation (1) using turnout and the five vote decision variables as outcomes. Column (1) in Table 5 reports the effect for each dependent variable using the full sample, columns (2)–(5) report the results for four subsamples split by salience and closeness. The overall effect of concurrent elections on turnout is 8.4 percentage points and thus very similar to the results obtained using the post-referendum survey data. The turnout effect is larger for low-salience propositions than it is for high-salience propositions. Furthermore, concurrent elections increase the share of blank ballots by 0.4 percentage points that corresponds to a 5% increase

for voters who turned out because of the concurrent election. This result suggests that concurrent elections increase the probability to abstain in certain propositions, a phenomenon known as “roll-off”. Note that we found no effect of concurrent elections on roll-off behavior in the post-referendum survey, which is most likely a consequence of the fact that the survey oversamples individuals with high political interest who do not delegate their vote by abstaining. In contrast, the results indicate that there is no relationship between concurrent elections and the probability to cast an invalid ballot. Consistent with the empirical results from the post-referendum survey, I find that concurrent elections increase the support for propositions endorsed by the government for the set of close referendums, namely those propositions with a narrow final vote in parliament. In contrast, there is a small increase for the propositions endorsed by the Social-Democratic Party for a priori not close referendums. This finding is also consistent with the individual-level results.

Balance of treatment and control group — A second concern is that voters in the treatment group, those individuals who had the opportunity to vote not only in a federal referendum but also in a concurrent cantonal election, are systematically different from voters in the control group. This might occur, for instance, if actual turnout increases the likelihood to be a respondent in the post-referendum survey. If voters who are mobilized by concurrent elections are systematically different to voters who vote in federal referendums anyway and if turnout increases survey response rates, individuals in the treatment group are likely to be different to individuals in the control group. As a consequence, it would not be possible to interpret the concurrent election estimate as a causal effect because the differences obtained might be due to differences in the sample composition.

[Figure 5 about here]

To check the balance of treatment and control group, I regress ten pre-determined covariates on the treatment indicator, time and cantonal fixed effects as specified in equation (1). The dots in Figure 5 depict the p-values of the coefficient on *Concurrent Election_{ijp}* for all estimations, the vertical line indicates the 5% significance level. The results suggest that nine out of ten coefficients are not significant. There is, however, a significant difference for age, indicating that individuals in the treatment group are on average about one year older than individuals in the control group.

What are the implications of this imbalance for the interpretation of the main results? With regard to turnout, the imbalance in age is a potential problem because older individuals have a higher propensity to vote. Using a simple linear model for the relationship between turnout and age (including time and cantonal fixed effects) indicates that one additional year of age increases turnout by

0.5 percentage points. Thus, this imbalance may account for about 5.8% of the concurrent election treatment effect of 8.5 percentage points. Similarly, old voters invest more in acquiring information which might explain why we find a substantial difference in information search effort. Performing the same calculation as for turnout reveals that the effect of one year of age on information search is 0.28 percentage points and may thus explain about 12.8% of the treatment effect found in column (3) of Table 2. On the other hand, old people find it easier to form an opinion, score higher on proposition knowledge and are less likely to cast a blank ballot. Because age has an effect that works in the opposite direction to the treatment effect for these variables, the estimates in Tables 2, 3 and 4 provide a lower bound for the true effect of concurrent elections.

Strategic scheduling — The third robustness tests explores the potential impact of strategic scheduling. Basically, there are two different ways how strategic scheduling can occur. First, cantons potentially chose their election days based on expected turnout in federal referendums. For example, if high turnout favors left-wing parties, a left-wing cantonal government would schedule cantonal elections to a referendum day with high expected turnout. This is very unlikely to happen because most cantons schedule their election dates at least one year in advance when the bundle of federal proposition is still unknown. The second strategic scheduling concern is more relevant and requires careful examination. It may be that members of the Swiss government strategically bundle propositions. Based on the estimates from the post-referendum survey reported in Table 4, a rational federal government would assign favorable salient and close propositions to high turnout referendum days to maximize the number of government support votes. If voter preferences are correlated with government preferences, the relationship between the salience of the concurrent proposition and voting outcomes may simply be driven by strategic scheduling. To address this concern, I discuss strategic scheduling in Switzerland and then run a robustness test to probe the sensitivity of the results.

Officially, it is the federal government that allocates the propositions to the four yearly referendum days that are pre-determined many years in advance. According to article 10/1bis of the Federal Act on Political Rights, the government has to communicate the set of propositions for the next referendum day at least four months in advance. To gain insights into the scheduling procedure, I conducted a semi-structured interview with the person at the Federal Chancellery who is in charge of the proposition bundling. The three central messages from this interview are the following. First, the government has no long-term plan for direct-democratic votes and decides separately for each referendum day which propositions to put on the ballot. Basically, all propositions that are up for a vote

are scheduled for the next referendum day.¹⁷ Second, there are no official dates until a proposition has to be put to a vote except for initiatives, which require the parliament to decide within 30 months after the official submission about the recommendation to voters.¹⁸ Third, the responsible person acknowledges that propositions of utmost importance, such as the membership to the European Economic Area or the sectoral agreements with the European Union, should be scheduled to referendum days with only one proposition. The main concern of the Federal Chancellery is that political actors primarily focus their campaign efforts on highly salient propositions, thereby crowding out political information for other propositions. This argument is consistent with the empirical result of this study that highly salient concurrent elections decrease proposition knowledge.

Overall, the semi-structured interview has provided evidence that the Federal Assembly is well aware that some particularly salient propositions may affect the campaign of other propositions. Yet only 6% of all propositions in the sample period are scheduled to referendum days with only one proposition. To probe the robustness of the results with regard to strategic scheduling, I reestimate the main model using propositions for which the difference between the expected yes and no votes is particularly high. The expected yes votes (no votes) are calculated as the sum of vote share of all parties who endorse a Yes (No) vote.¹⁹ For the set of propositions with a high score of this measure, it is very unlikely that the government uses strategic scheduling because the likelihood that the actual vote outcome is different to the predicted outcome is very low.²⁰

[Figure 6 about here]

Figure 6 reports the coefficients of the main specification in Table 2 (white dots) together with the coefficients from a regression that uses only the set of propositions that score higher than the median on the measure described above (black dots). The results suggest that restricting the sample to propositions with low incentives for strategic scheduling does not significantly alter the coefficients of interest for turnout, information search, and proposition knowledge. It seems, though, that there is no relationship between concurrent elections and decision difficulty for the set propositions that are not close. I conclude that the result on decision difficulty is sensitive to potential strategic scheduling,

¹⁷A proposition is up for a vote if both chambers of parliament and the government have issued an endorsement and, in the case of popular initiatives, have decided either not to launch a counterproposition or on the details of the counterproposition.

¹⁸See also, Federal Act on the Federal Assembly article 100.

¹⁹The respective measure is given as $(\sum_{i=1}^{N_{yes}} Vote_Share_i - \sum_{j=1}^{N_{no}} Vote_Share_j) / (\sum_{i=1}^{N_{yes}} Vote_Share_i + \sum_{j=1}^{N_{no}} Vote_Share_j)$ where $Vote_Share_i$ ($Vote_Share_j$) is the vote share of party i (j) who endorses a yes vote (no vote) and N_{yes} (N_{no}) is the number of parties who recommend a yes vote (no vote).

²⁰The measure correctly predicts the voting outcome in 82% of all propositions in the study period.

while all other main results are not. A different interpretation of the zero effect on decision difficulty is that voters tend to find it easier to take a decision on broadly supported propositions. This conjecture is supported by the analysis of the relationship between expected closeness and decision difficulty revealing that voters find it more difficult to decide on close propositions. The difference of 2.8 percentage points is statistically significant at the 1% level.

Ballot order and choice fatigue — Previous literature has documented that the ordering of proposition on a voting ballot can affect voters' decision. In particular, Augenblick and Nicholson (2015) show that voters are more likely to abstain and to rely on heuristics in propositions that appear lower on the ballot because of the high cognitive effort exerted for previous propositions, a phenomenon that is known as “choice fatigue”. Figure A.3 in the Appendix documents that the total number of propositions increases the number of blank ballots, particularly for votes further down the ballot. Yet neither the total number of ballots nor the ballot position seem to affect turnout in the sample of Swiss referendums.

Because the ballot position is the same across cantons, the inclusion of proposition fixed effect captures all heterogeneity among ballot positions. Thus, the main effects of concurrent referendums are not affected by differences in ballot position. It is, however, possible that the effect of concurrent propositions varies depending on the ballot position. To explore the impact of ballot position, I split the sample at the median position, which is equal to two, and reestimate the main regression for turnout and the share of blank ballots using the administrative data. The entries in Table A.2 in the Appendix reveal that the effect on turnout is constant across ballot positions, while the share of blank ballots increases only significantly for propositions at the bottom of the ballot. This result is consistent with the notion that concurrent referendums exacerbate the impact of choice fatigue.

External validity — So far, I have analyzed the effect of concurrent referendums for the sample period 1981 to 2010 due to the availability of the survey data. However, it remains unclear whether the results for this particular period extend to a larger time span. To explore the generalizability of the main results, I reestimate the main specification using voting record data for the period of 1945–2010. Table A.1 in the Appendix reports the results. The point estimate of the overall turnout effect is slightly higher, possibly a consequence of the fact that cantonal elections had higher turnout rates in the period previous to 1981.²¹ Consistent with the main findings, the effect of concurrent elections is higher in salient and relatively less close referendums. About 5% of the actual voters who turn

²¹Average turnout in cantonal elections was 67.1% in the period of 1945–1980 and 46.3% in the period of 1981–2010.

out because of concurrent elections delegate their voting decision to their fellow citizens by casting a blank ballot. I find no evidence that concurrent elections would increase the share of invalid ballots, the aggregate votes cast in favor of the position endorsed by the government, and total votes for the position endorsed by the left-wing or right-party.

4.5 Extension to Salient Concurrent Propositions

The analysis thus far has identified the effect of concurrent elections by focusing on the impact of concurrent cantonal elections. This is a credible source of exogenous variation in the salience of concurrent elections because cantons do not know the federal propositions that voters will vote for when they schedule their elections. Furthermore, the proposition scheduling of the federal government scheduling is motivated by considerations other than whether cantonal elections take place. Yet the exclusive focus on concurrent elections neglects that there are multiple concurrent referendums with different salience levels. It is thus likely that highly salient propositions have similar effects as concurrent cantonal elections because they mobilize voters who would otherwise not vote.

To explore the effects of concurrent referendums, I focus on propositions with low salience and examine the question of whether the salience of concurrent proposition matters for political decisions. The key mechanism is similar to the analysis of referendums that are concurrent with cantonal elections: A concurrent proposition with high salience decreases the opportunity costs of casting a ballot for the proposition with lower salience. Thus, as the salience of the concurrent proposition increases, the opportunity costs of voting decrease and therefore I expect that turnout is a positive function of the concurrent proposition's salience.²² To simplify the analysis, I focus on the value of the proposition with the highest individual salience level on a given referendum day as the key independent variable. The estimation specification is the following fixed effect model:

$$Y_{ijp} = \text{Max_Salience}_{ijp}\beta_1 + \text{Salience}_{ijp}\beta_2 + \mu_j + \delta_p + \varepsilon_{ijp} \quad (2)$$

where i indexes voters, j indexes cantons, p indexes propositions; Y_{ijp} is the dependent variable, $\text{Max_Salience}_{ijp}$ is the maximal individual salience level per referendum day, Salience_{ijp} is the individual salience level for proposition p , β_1 and β_2 are coefficients, μ_j is a cantonal fixed effect, δ_p is a

²²Note that recent models of group voting model the variation in turnout using exactly this heterogeneity in voting costs (see, for instance, Coate and Conlin (2004)).

proposition fixed effect, and ε_{ijp} is a random error.

[Figure 7 about here]

Figure 7 reports the results of the regression as described in equation (2) using the sample of concurrent propositions. The white dot represents the baseline predicted probability for a proposition with a concurrent proposition of average salience, the black dot represents the same probability but computed for a concurrent proposition of average salience plus one standard deviation. The results indicate that a one standard deviation increase in the salience of the concurrent proposition increases turnout from 66% to 76%. This effect is very similar in magnitude when compared to the effect of concurrent cantonal elections. In contrast to the main results using concurrent cantonal elections I find no effect of salience on the individually assessed voting difficulty and the information search efforts of voters. Yet proposition proposition decreases by 2 percentage points which is equivalent to a 2.7% decrease. This effect is slightly smaller than the findings obtained for cantonal elections (-4.6%). Overall, it appears that the within-referendum-day heterogeneity of salience has similar effects on turnout and proposition knowledge as concurrent cantonal elections but do not affect voting difficulty and information search.

5 Conclusion

This paper isolates the effect of concurrent elections using a natural experiment in which all voters vote on the same propositions but some have a concurrent high-salience cantonal election. I find that concurrent cantonal elections affect the calculus of voting, thereby substantially increasing turnout in federal referendums. The findings suggest that voters in cantons with concurrent elections assess the voting decision to be more difficult, increase their information search efforts and possess lower levels of proposition knowledge. These effects are most pronounced for relatively young male voters with centrist views who do not turn out regularly. I also find that concurrent elections increase the share of blank ballots casts but only in propositions with a relatively low salience. In addition, the findings indicate that voters who are exogenously mobilized by concurrent elections tend to follow the recommendation of the government in close and important propositions.

Understanding the consequences of concurrent political decisions is important because most countries hold concurrent elections and referendums. Taken together, the findings of this study have important implications for the literature on voting behavior. For single elections, a large literature has established that majority voting efficiently aggregates dispersed information in large elections. If

voters are free to decide about turnout or abstention, majority voting will result in socially optimal decisions. It is, however, not surprising that the endogenous information aggregation mechanism can fail in multiple concurrent elections and reduces aggregate information in the electorate, thereby increasing the share of voters who cast a blank ballot in less salient and not close propositions. The findings of this study suggest that this reduction in proposition knowledge has only minor effects on individual voting decisions.

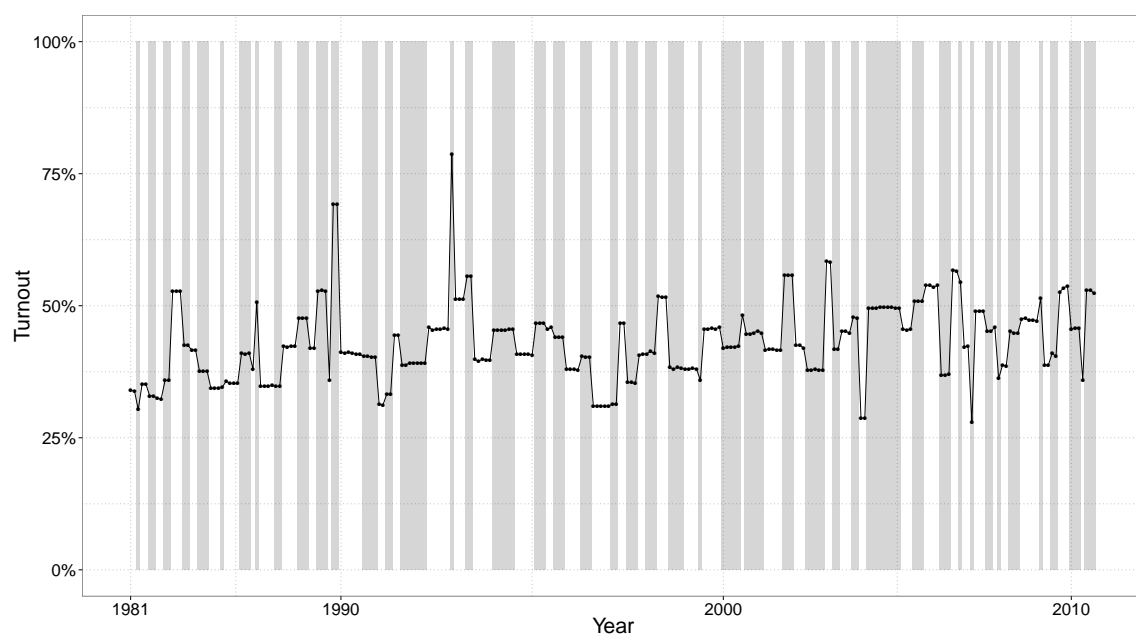
References

- Anzia, Sarah F.** 2011. "Election Timing and the Electoral Influence of Interest Groups." *Journal of Politics*, 73(02): 412–427.
- Arrow, Kenneth J.** 1950. "A Difficulty in the Concept of Social Welfare." *Journal of Political Economy*, 58(4): 328–346.
- Augenblick, Ned, and Scott Nicholson.** 2015. "Ballot Position, Choice Fatigue, and Voter Behavior." *Review of Economic Studies*, forthcoming.
- Bechtel, Michael M., Dominik Hangartner, and Lukas Schmid.** 2015. "Does Compulsory Voting Increase Support for Left Policy?" *American Journal of Political Science*, forthcoming.
- Besley, Timothy, and Andrea Prat.** 2006. "Handcuffs for the Grabbing Hand? Media Capture and Government Accountability." *American Economic Review*, 96(3): 720–736.
- Börgers, Tilman.** 2004. "Costly Voting." *American Economic Review*, 94(1): 57–66.
- Coate, Stephen, and Michael Conlin.** 2004. "A Group Rule? Utilitarian Approach to Voter Turnout: Theory and Evidence." *American Economic Review*, 94(5): 1476–1504.
- Coate, Stephen, Michael Conlin, and Andrea Moro.** 2008. "The Performance of Pivotal-Voter Models in Small-Scale Elections: Evidence from Texas Liquor Referenda." *Journal of Public Economics*, 92(3-4): 582–596.
- Condorcet, Marquis.** 1785. "Essai sur l'application de l'analyse a la probabilité des decisions rendues a la pluralité des voix." In *Foundations of Social and Political Theory*, translated and edited by Iain McLean and Fiona. . 1996 ed., , ed. Marquis de Condorcet. Elgar:Elgar.
- Degan, Arianna, and Antonio Merlo.** 2011. "A Structural Model of Turnout and Voting in Multiple Elections." *Journal of the European Economic Association*, 9(2): 209–245.
- Downs, Anthony.** 1957. *An Economic Theory of Democracy*. New York:Harper and Row.
- Enos, Ryan D., Anthony Fowler, and Lynn Vavreck.** 2013. "Increasing Inequality: The Effect of GOTV Mobilization on the Composition of the Electorate." *Journal of Politics*, 76(01): 273–288.
- Feddersen, Timothy J., and Wolfgang Pesendorfer.** 1996. "The Swing Voter's Curse." *American Economic Review*, 86(3): 408–424.
- Feddersen, Timothy J., and Wolfgang Pesendorfer.** 1997. "Voting Behavior and Information Aggregation in Elections With Private Information." *Econometrica*, 65(5): 1029–1058.

- FORS - Swiss Foundation for Research in Social Sciences.** 2014. "Vox Data: Standardized Post-Referendum Surveys." *University of Lausanne*.
- Fowler, Anthony.** 2013. "Turnout Matters: Evidence from Compulsory Voting in Australia." *Quarterly Journal of Political Science*, 8(2): 159–182.
- Hodler, Roland, Simon Luechinger, and Alois Stutzer.** 2015. "The Effects of Voting Costs on the Democratic Process and Public Finances." *American Economic Journal: Economic Policy*, 7(1): 141–171.
- Hummel, Patrick.** 2012. "Sequential Voting in Large Elections with Multiple Candidates." *Journal of Public Economics*, 96(3): 341–348.
- Husted, Thomas A., and Lawrence W. Kenny.** 1997. "The Effect of the Expansion of the Voting Franchise on the Size of Government." *Journal of Political Economy*, 105(1): 54.
- Knack, Steve.** 1995. "Does" motor voter" work? Evidence from state-level data." *The Journal of Politics*, 57(3): 796–811.
- Krishna, Vijay, and John Morgan.** 2011. "Overcoming Ideological Bias in Elections." *Journal of Political Economy*, 119(2): 183–211.
- Lijphart, Arend.** 1997. "Unequal Participation: Democracy's Unresolved Dilemma." *American Political Science Review*, 91(1): 1–14.
- Meredith, Marc.** 2009. "The Strategic Timing of Direct Democracy." *Economics & Politics*, 21(1): 159–177.
- SFS - Swiss Federal Statistical Office.** 2014. *Official voting records 1866-2014*. Neuchâtel.
- Shachar, R., and B. Nalebuff.** 1999. "Follow the leader: Theory and evidence on political participation." *American Economic Review*, 89(3): 525–547.
- Swissvotes - Database of Swiss Federal Referendums.** 2012. *Integraler Datensatz*. Bern:Institute of Political Science and Annee Politique.

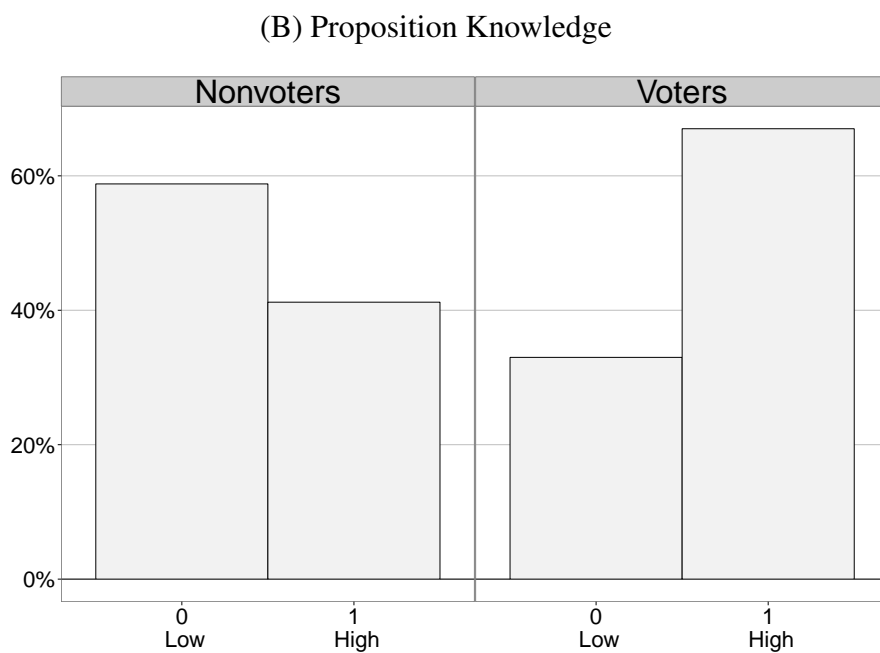
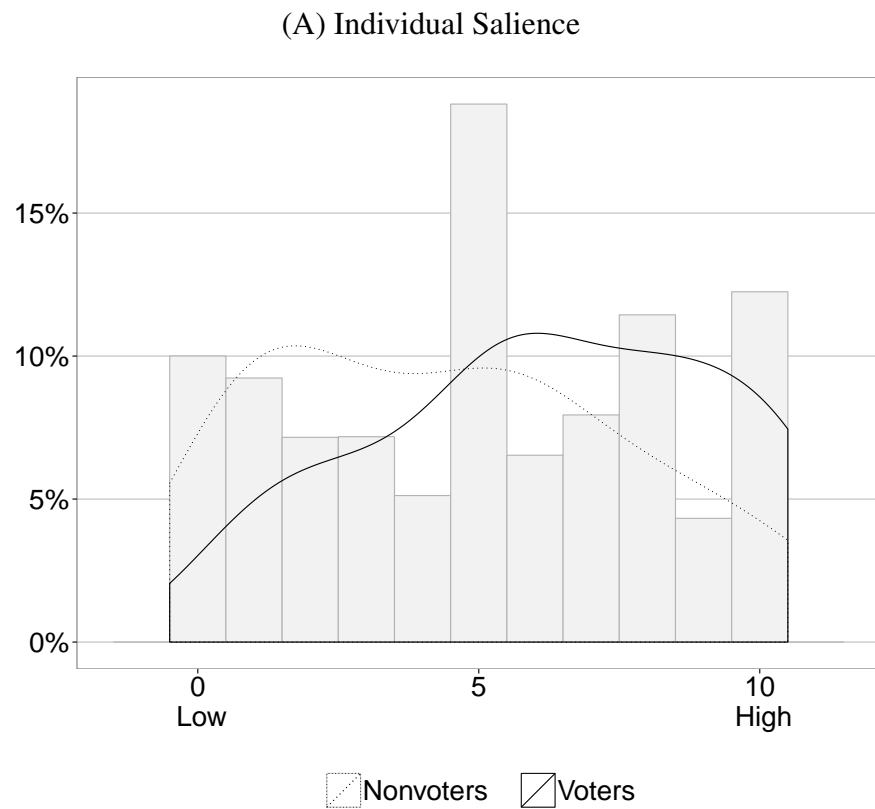
Figures and Tables

Figure 1: Turnout in Federal Referendums in Switzerland



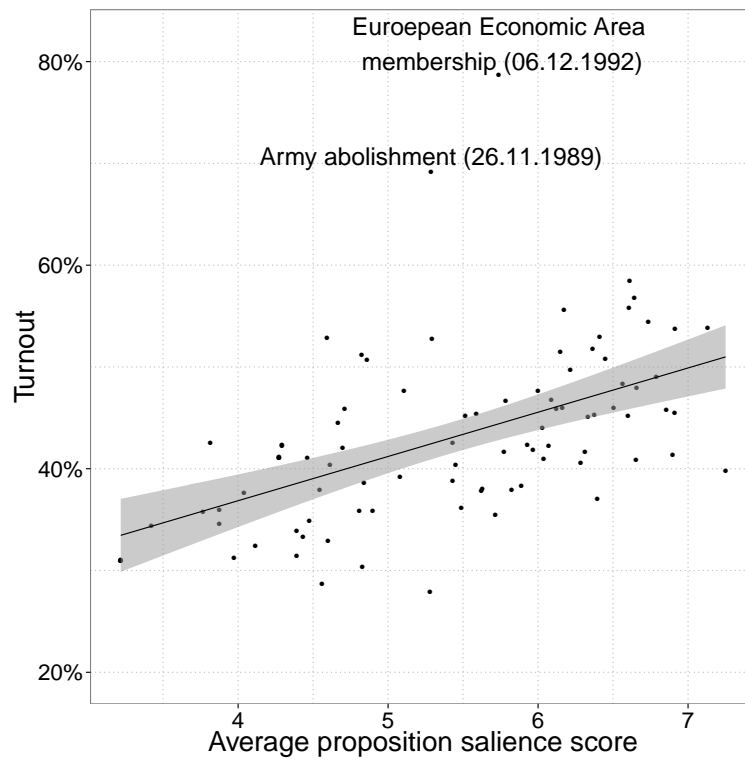
Note: The figure depicts turnout in federal referendums in Switzerland from 1981 to 2010. Each dot represents turnout, e.g. the number of valid votes cast as a fraction of the eligible population, for a particular proposition. The vertical white- and gray-shaded regions span a referendum day.

Figure 2: Histogram of Salience Measure and Proposition Knowledge for Nonvoters and Voters



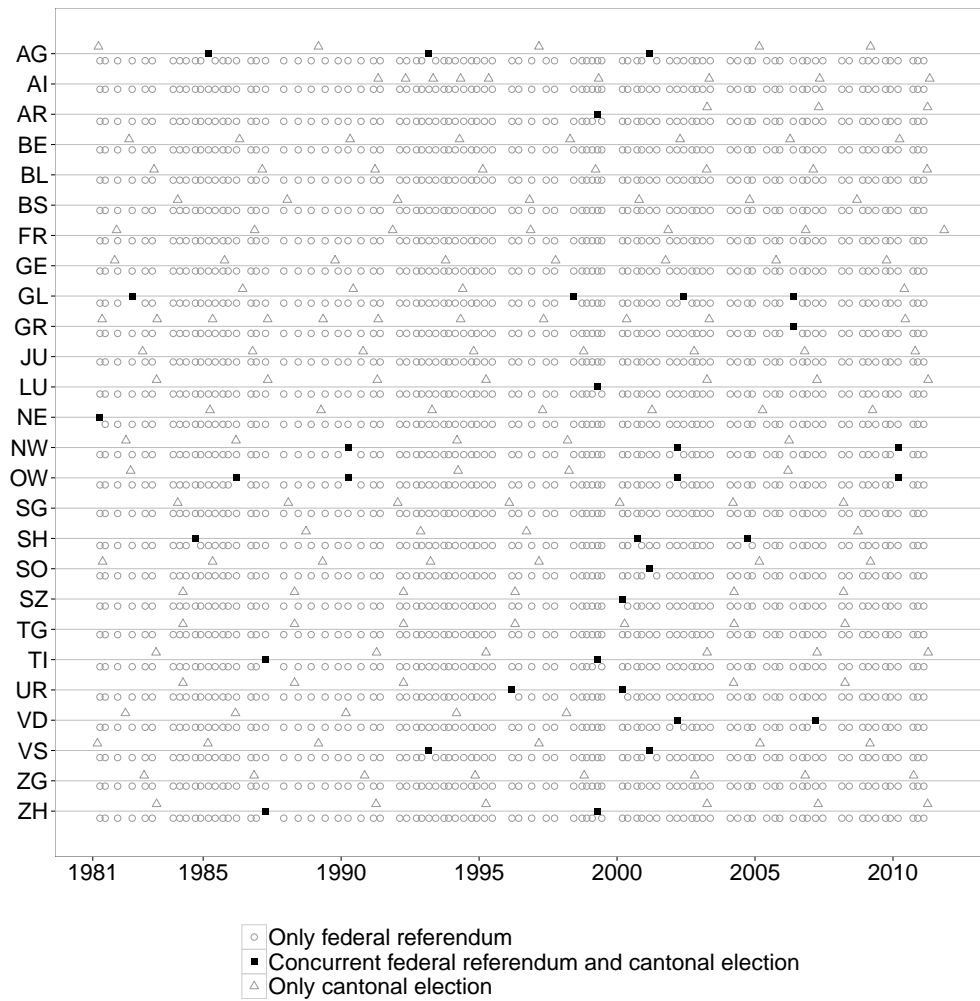
Note: Panel (A) of this figure depicts the histogram of the individually attributed salience of a proposition on a 0-10 scale for all voters as well as an estimate of the salience density for voters (solid line) and non-voters (dashed line). Panel (B) depicts a histogram of proposition knowledge on a 0-1 scale for voters and nonvoters. The sample includes all federal propositions in Switzerland from 1981 to 2010. Source: VoxIt (FORS 2014).

Figure 3: Descriptive Relationship between Average Salience and Turnout



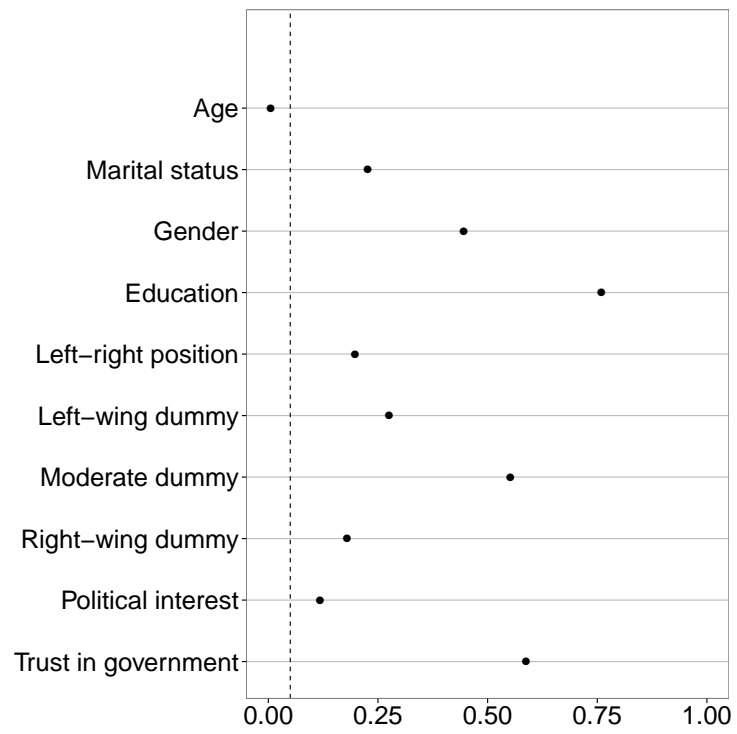
Note: The figure shows a scatter plot of average proposition salience and turnout, the latter is based on administrative voting records. Average proposition salience is shown for the proposition with the highest salience value on a particular referendum day. The black line depicts a least-square fit with a 95% confidence interval. The correlation coefficient is $r = 0.53$ overall and $r = 0.64$ when excluding the three outliers shown in the figure. The sample includes all referendum days in Switzerland from 1981 to 2010.

Figure 4: Dates of Federal Referendums and Cantonal Elections



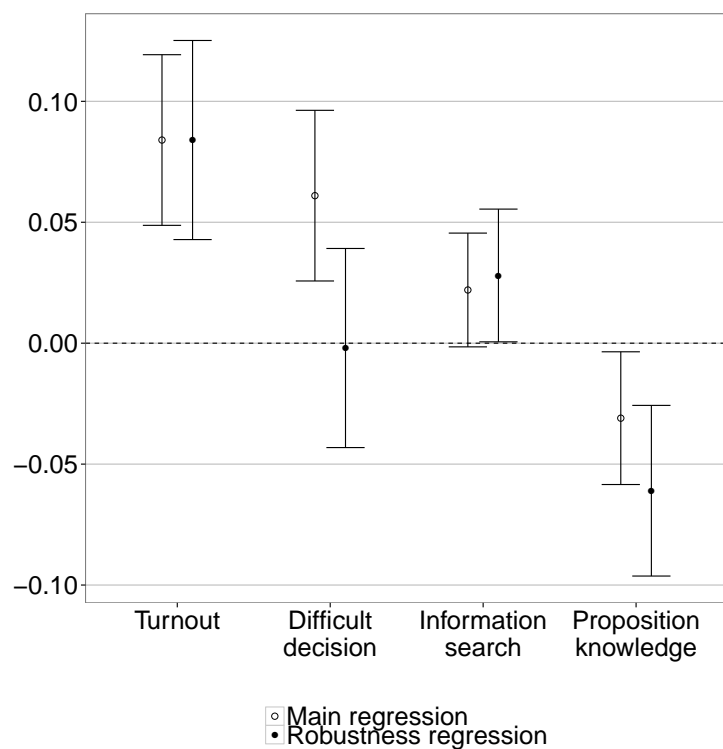
Note: The figure depicts the dates of all federal referendums and cantonal elections between 1981 and 2010 for each canton. The white triangles show cantonal elections dates with no concurrent federal referendum. The white dots depict federal referendum dates with no concurrent cantonal election. The black squares indicate dates for which a federal referendum was concurrent with a cantonal election. Note that there is missing information on the election days for Appenzell Inner Rhodes (before 2000) and Appenzell Outer Rhodes (before 1990). All these observations are excluded from the estimation. The set of cantons includes Aargau (AG), Appenzell Inner Rhodes (AI), Appenzell Outer Rhodes (AR), Basel-Landschaft (BL), Basel-Stadt (BS), Bern (BE), Fribourg (FR), Geneva (GE), Glarus (GL), Graubünden (GR), Lucerne (LU), Neuchâtel (NE), Nidwalden (NW), Obwalden (OW), Schaffhausen (SH), Schwyz (SZ), Solothurn (SO), St Gallen (SG), Thurgau (TG), Ticino (TI), Uri (UR), Valais (VS), Vaud (VD), Zug (ZG), and Zurich (ZH).

Figure 5: Balance of Covariates



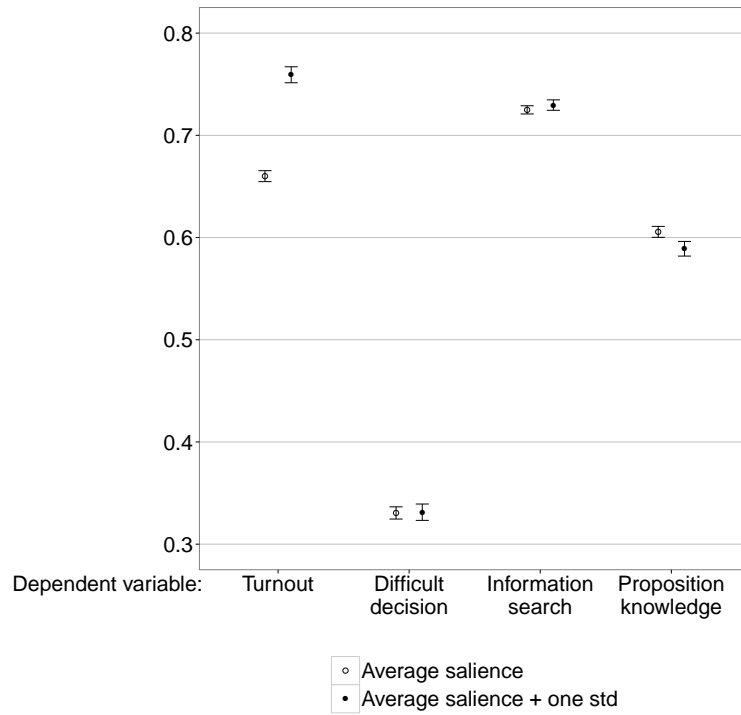
Note: The figure shows the results of 10 different regressions using pre-determined covariates as dependent variable in equation (1). The dots depict the p-value of the coefficient on *ConcurrentElection*. The dashed vertical line indicates the 5% significance level.

Figure 6: Robustness to Strategic Scheduling



Note: The figure shows the results of eight different regressions using four different dependent variables in equation (1), namely turnout, the difficulty to take a voting decision, information search, and proposition knowledge. The white dots represent estimated coefficients on *Concurrent Election* with a 95% confidence interval using the baseline regression, the black depict the coefficients on *Concurrent Election* using a sample propositions with low incentives for strategic scheduling.

Figure 7: The Effects of Multiple Propositions



Note: The figure shows predicted values based on the results of four different regressions using turnout, the difficulty to take a voting decision, information search, and proposition knowledge as dependent variable in equation (2). The dots depict the predicted level of the dependent variable for concurrent propositions with an average salience level (white dot) and for propositions with an average salience level plus one standard deviation (black dot). The vertical line indicates the 95% confidence interval.

Table 1: Sample Descriptive Statistics

	Mean	Std. Dev.	Min.	Max.	No. Observations	No. Individuals	Available Years
<i>Panel A: All Respondents</i>							
Age	47.40	17.33	13	97	205,519	72,667	1981–2010
Married	0.60	0.49	0	1	205,519	72,667	1981–2010
Men	0.50	0.50	0	1	205,519	72,667	1981–2010
Turnout	0.63	0.48	0	1	205,519	72,667	1981–2010
<i>Panel B: Actual Voters</i>							
Difficult decision	0.30	0.46	0	1	124,019	44,481	1981–2010
Information search	0.72	0.25	0	1	108,242	38,062	1990–2010
Proposition knowledge	0.67	0.47	0	1	128,995	45,384	1981–2010
Blank ballot	0.04	0.20	0	1	121,314	43,756	1981–2010
Support government	0.62	0.48	0	1	115,974	43,477	1981–2010
Support left	0.54	0.50	0	1	109,897	43,271	1981–2010
Support right	0.58	0.49	0	1	115,991	43,505	1981–2010
<i>Panel C: Partisan Voters</i>							
Ideological voting	0.72	0.45	0	1	61,549	23,238	1981–2010

Note: This table reports individual descriptive statistics for all respondents (Panel A), for actual voters (Panel B), and for partisan voters (Panel C) from the post-referendum survey VoxIt (FORS 2014). Columns 2 to 5 report mean, standard deviation, minimum and maximum value. Column 6 reports the total number of observations, column 7 reports the total number of individuals, and column 8 reports the data availability period for the respective variable. The variable “Difficult decision” captures whether people find it difficult to decide on a proposition, “Information search” denotes the extent to which people search information about the proposition (on a 0-1 scale), and “Proposition knowledge” is a dummy whether individuals know the proposition name and content. “Blank ballot” is the probability of casting an blank ballot. “Support government” is a dummy that is 1 if the respondent voted for the proposition that was endorsed by the government. “Support left” is a dummy that equals 1 if the respondent voted according to the recommendation of the left-wing Social-Democratic Party. “Support right” is a dummy that equals 1 if the respondent voted according to the recommendation of the right-wing Swiss People’s Party. “Ideological Voting” is dummy defined for partisan voters only and takes the value 1 if a partisan voters votes according to his/her preferred party’s endorsement.

Table 2: The Effect of Concurrent Elections on Turnout, Information, and Proposition Knowledge

	Turnout	Difficult decision	Information search	Proposition knowledge
Sample	All eligible voters	All actual voters		
	(1)	(2)	(3)	(4)
Concurrent elections	0.084*** (0.018)	0.061*** (0.018)	0.022* (0.012)	-0.031** (0.014)
Effect size (% change)	13.4%	20.6%	3.0%	-4.6%
Observations	207,347	124,961	109,083	130,051
R-squared	0.030	0.063	0.016	0.179
Project FE	✓	✓	✓	✓
Cantonal FE	✓	✓	✓	✓

Note: This table reports the estimates of a linear probability model of equation (1) using four different dependent variables: turnout, a variable that captures whether people find it difficult to decide on a proposition, the extent to which people search information about the proposition (on a 0-1 scale), and a dummy whether individuals know the proposition name and content. The sample in the first column includes all eligible voters, the sample in columns (2) to (4) include all actual voters. The differences in the number of observations are due to the fact that the post-referendum survey covers the variables “Difficult decision” and “Proposition knowledge” for 241 propositions, while “Information search” is available for only 189 propositions. All specifications include cantonal and proposition fixed effects. Significance at the 10% level is indicated by *, at the 5% level by **, and at the 1% level by ***.

Table 3: The Effect of Concurrent Elections on the Vote Decision

	Blank ballot	Support government	Support left	Support right	Ideological vote
	(1)	(2)	(3)	(4)	(5)
Concurrent elections	0.006 (0.007)	0.013 (0.015)	0.026 (0.016)	-0.009 (0.015)	0.005 (0.019)
Observations	122,173	116,792	110,691	116,806	61,980
R-squared	0.036	0.113	0.161	0.148	0.050
Project FE	✓	✓	✓	✓	✓
Cantonal FE	✓	✓	✓	✓	✓

Note: This table reports the estimates of a linear probability model of equation (1) using five different dependent variables: blank ballot, voting for the alternative supported by the government, voting for the alternative supported by the left-wing Social-Democratic Party, voting for the alternative supported by the right-wing Swiss People’s Party, and ideological vote. The sample in columns (1) to (4) includes all actual voters, column (5) includes only partisan voters. All specifications include cantonal and proposition fixed effects. Significance at the 10% level is indicated by *, at the 5% level by **, and at the 1% level by ***.

Table 4: The Effect of Multiple Concurrent Referendums for Different Propositions

Dependent variable	Salience		Closeness	
	Low	High	Close	Not close
	(1)	(2)	(3)	(4)
<i>Panel A: Turnout, Information, and Proposition Knowledge</i>				
Turnout	0.052*** (0.020)	0.096*** (0.014)	0.074*** (0.016)	0.082*** (0.017)
Difficult decision	0.041* (0.022)	0.068*** (0.015)	0.090*** (0.018)	0.032* (0.018)
Information search	0.019 (0.013)	0.050*** (0.013)	0.013 (0.014)	0.047*** (0.012)
Proposition knowledge	-0.056*** (0.021)	-0.019 (0.015)	-0.012 (0.017)	-0.053*** (0.017)
<i>Panel B: Vote decision</i>				
Blank ballot	0.021* (0.012)	0.002 (0.005)	0.014* (0.008)	0.002 (0.008)
Support government	-0.006 (0.023)	0.048*** (0.017)	0.036* (0.019)	0.026 (0.019)
Support left	0.044 (0.030)	-0.014 (0.020)	-0.017 (0.019)	0.061* (0.033)
Support right	-0.025 (0.023)	0.020 (0.017)	0.025 (0.019)	-0.012 (0.019)
Ideological vote	0.057* (0.031)	-0.005 (0.022)	0.024 (0.026)	0.009 (0.025)
Project FE	✓	✓	✓	✓
Cantonal FE	✓	✓	✓	✓

Note: This table reports the results of a linear regression of equation (1) using nine dependent variables, namely turnout, difficult decision, information search, and proposition knowledge (panel A) as well as blank ballot, voting for the alternative supported by the government, voting for the alternative supported by the left-wing Social-Democratic Party, voting for the alternative supported by the right-wing Swiss People's Party, and ideological voting (panel B) as dependent variables. Sample is split by salience (columns (1) and (2)) and by closeness (columns (3) and (4)). High salience referendums include all referendums for which a voter assigns the highest salience measure per referendum date, low salience referendums all others. Closeness is determined in terms of the winning margin of the final vote in the Swiss National Council (split at the median). Significance at the 10% level is indicated by *, at the 5% level by **, and at the 1% level by ***.

Table 5: The Effect of Concurrent Elections using Administrative Data

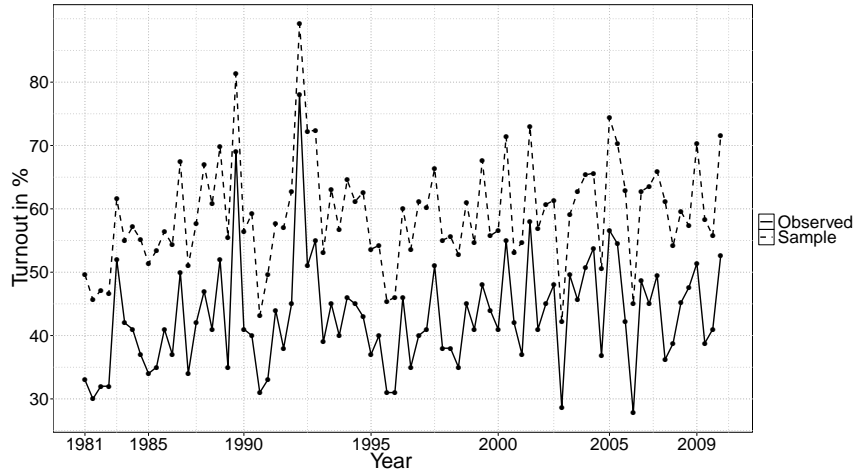
Dependent variable	Main Effect	Salience		Closeness	
		Low	High	Close	Not close
	(1)	(2)	(3)	(4)	(5)
Turnout	0.086*** (0.024)	0.116*** (0.029)	0.052** (0.022)	0.085*** (0.026)	0.085*** (0.024)
Blank ballot	0.004* (0.002)	0.006*** (0.002)	0.002 (0.003)	0.004 (0.003)	0.004* (0.002)
Invalid ballot	-0.000 (0.000)	0.001 (0.001)	-0.000 (0.001)	-0.001* (0.000)	0.000 (0.001)
Support government	0.006 (0.009)	0.009 (0.011)	0.000 (0.010)	0.010 (0.008)	-0.006 (0.016)
Support left	0.001 (0.009)	-0.014 (0.011)	0.013 (0.012)	0.010 (0.010)	0.012 (0.007)
Support right	-0.008 (0.012)	0.005 (0.007)	-0.012 (0.013)	-0.011 (0.010)	-0.006 (0.020)
Project FE	✓	✓	✓	✓	✓
Cantonal FE	✓	✓	✓	✓	✓

Note: This table reports the estimates of a linear model using six different dependent variables: turnout, the share of blank ballots, the share of invalid ballots, the share of voters who vote for the alternative supported by the government, the alternative supported by the Social-Democratic Party, and the alternative supported by the Swiss People's Party, respectively. The sample is split by salience and closeness. High salience referendums include all referendums for which a voter assigns the highest salience measure per referendum date, low salience referendums all others. Closeness is determined in terms of the winning margin of the final vote in the Swiss National Council (split at the median). All variables are measured at the cantonal level, all shares except turnout are calculated in terms of total votes cast. All specifications include cantonal and proposition fixed effects. Standard errors are clustered at the canton level. Significance at the 10% level is indicated by *, at the 5% level by **, and at the 1% level by ***.

Appendix (For Online Publication)

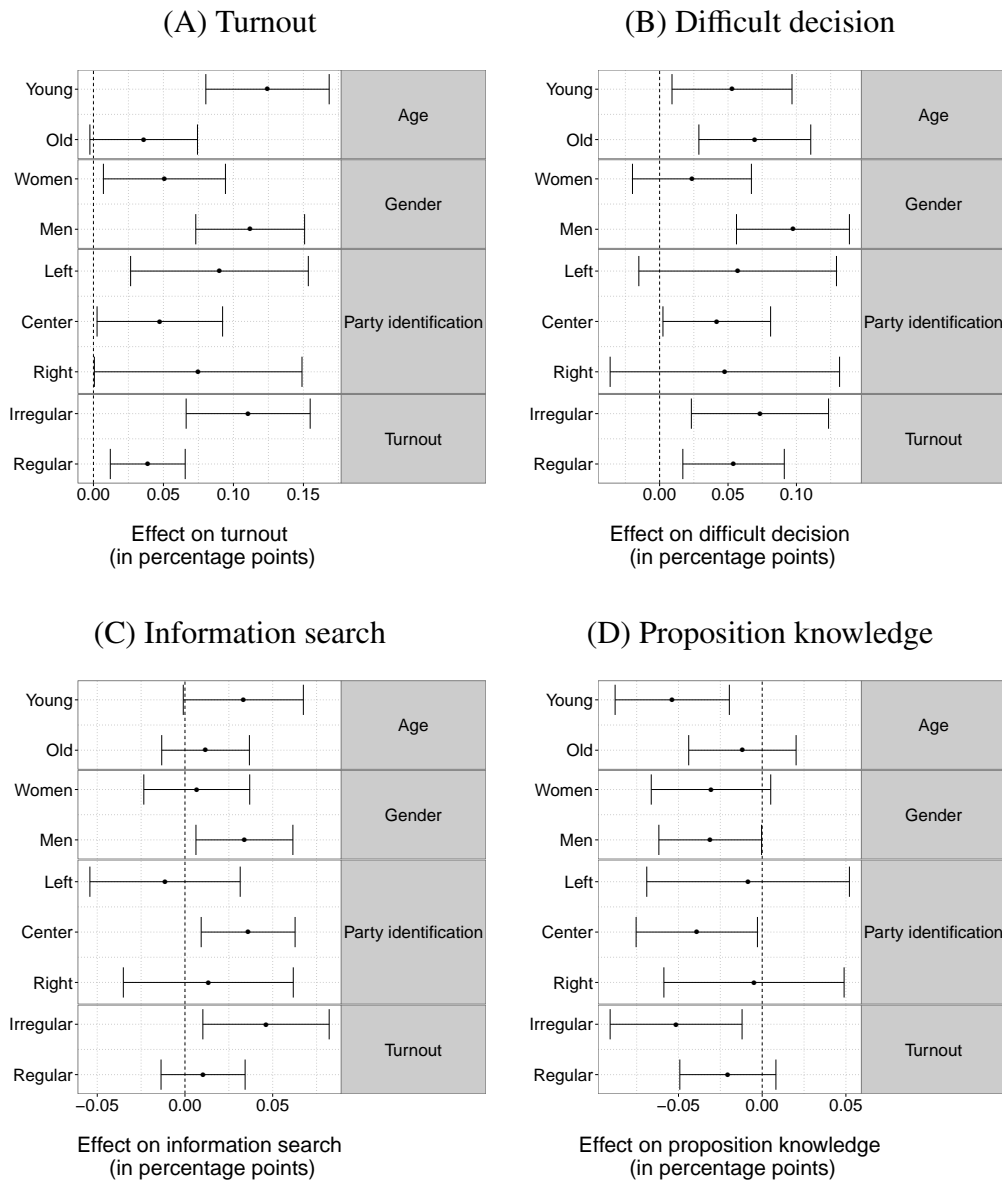
Appendix A: Additional Figures and Tables

Figure A.1: Sample and Record Data on Turnout (1981-2010)



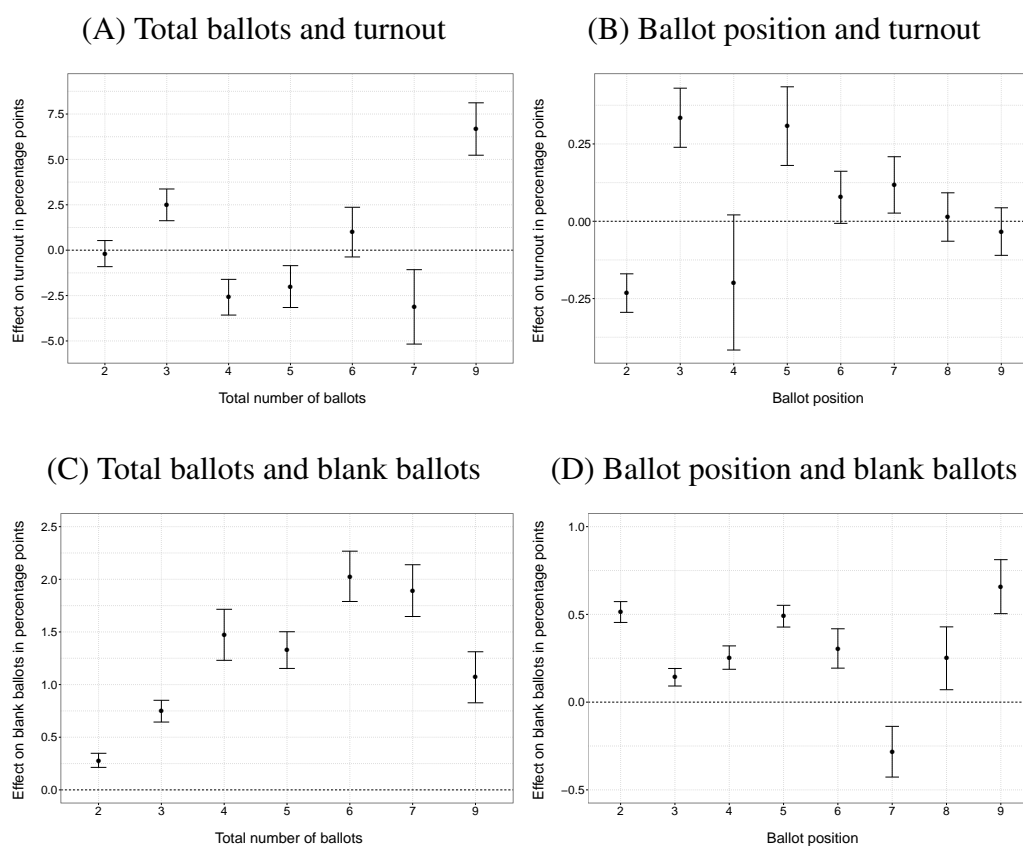
Note: The graph depicts turnout per referendum day in the sample period of 1981–2010. The black line is observed turnout while the dashed line marks average turnout in the sample. The mean of the difference is 16.2 percentage points.

Figure A.2: The Effects of Multiple Referendums for Different Voters



Note: Figure shows the results of 36 different regressions on four dependent variables, namely turnout (Panel (A)), the difficulty to take a voting decision (Panel (B)), information search (Panel (C)), and proposition knowledge (Panel (D)) as specified in equation (1). The sample is split into young (age ≤ 45 = median of age) and old voters, men and women, voters with left (Left-right measure ≤ 3 on a 11-point left-right scale), center ($4 \leq$ Left-right measure ≤ 6) and right political identification (Left-right measure ≥ 8), and regular (average turnout in 10 propositions ≥ 8 = median) and irregular voters (average turnout in 10 propositions < 8). The dots depict the effect of multiple elections on the outcome variable with a 90% confidence interval. The dashed vertical line indicates the zero line. All regressions include cantonal and proposition fixed effects.

Figure A.3: The Effects of Total Ballots and Ballot Position on Turnout and Blank Ballots



Note: Figure shows the results of four different regressions using administrative data on cantonal outcomes for the period 1981–2010. The two dependent variables are turnout (Panels A and B) and the share of blank ballots (Panels C and D). Panel (A) reports the results of regressing turnout on dummies for each realization of “total number of ballots”, a variable that captures how many propositions were on the voting ballot, with the corresponding 95% confidence interval. Panel (B) reports the results from the same turnout regression for “ballot position”, a variable that captures a proposition’s position on the voting ballot. Panel (C) is the same as Panel (A) but uses blank votes as dependent variable, Panel (D) is equivalent to Panel (B) using blank votes as dependent variable. All regressions include cantonal fixed effects.

Table A.1: External Validity

Dependent variable	Main Effect	Salience		Closeness	
		Low	High	Close	Not close
	(1)	(2)	(3)	(4)	(5)
Turnout	0.099*** (0.026)	0.116*** (0.029)	0.093*** (0.029)	0.084*** (0.026)	0.115*** (0.033)
Blank ballot	0.005* (0.003)	0.006*** (0.002)	0.005 (0.004)	0.004 (0.003)	0.006 (0.003)
Invalid ballot	-0.000 (0.000)	0.001 (0.001)	-0.000 (0.001)	-0.000 (0.000)	0.001 (0.001)
Support government	-0.003 (0.008)	0.009 (0.011)	-0.012 (0.009)	0.007 (0.007)	-0.022 (0.016)
Support left	0.001 (0.007)	-0.014 (0.011)	0.017 (0.016)	0.012 (0.011)	0.017 (0.013)
Support right	-0.007 (0.010)	0.005 (0.007)	-0.014 (0.014)	-0.010 (0.010)	-0.017 (0.019)
Project FE	✓	✓	✓	✓	✓
Cantonal FE	✓	✓	✓	✓	✓

Note: This table reports the estimates of a linear model using six different dependent variables: turnout, the share of blank ballots, the share of invalid ballots, the share of voters who vote for the alternative supported by the government, the alternative supported by the Social-Democratic Party, and the alternative supported by the Swiss People's Party, respectively. The sample spans the period from 1945 to 2010. All variables are measured at the cantonal level, all shares except turnout are calculated in terms of total votes cast. All specifications include cantonal and proposition fixed effects. Standard errors are clustered at the canton level. Significance at the 10% level is indicated by *, at the 5% level by **, and at the 1% level by ***.

Table A.2: The Effect of Concurrent Elections by Ballot Position

Ballot position	Turnout		Blank ballot	
	Top	Bottom	Top	Bottom
	(1)	(2)	(3)	(4)
Concurrent elections	0.085*** (0.021)	0.086*** (0.031)	0.003 (0.003)	0.006** (0.003)
Observations	4,171	2,317	4,171	2,317
R-squared	0.716	0.585	0.770	0.769
Project FE	✓	✓	✓	✓
Cantonal FE	✓	✓	✓	✓

Note: This table reports the estimates of a linear regression of equation (1) using two different dependent variables: turnout and the share of blank ballots. All variables are measured at the cantonal and based on administrative information for the period of 1981–2010. All specifications include cantonal and proposition fixed effects. Significance at the 10% level is indicated by *, at the 5% level by **, and at the 1% level by ***.

Appendix B: Data Sources

1. Individual voting data:

- *Turnout*: Individual turnout. Source. Post-electoral survey data VoxIt: FORS (2014).
- *Difficult decision*: Individually stated difficulty of voting decision (dummy). Source. Post-electoral survey data VoxIt: FORS (2014).
- *Information search*: Individually stated information search effort (rescaled from a 0-4 scale to a 0-1 scale). Source. Post-electoral survey data VoxIt: FORS (2014).
- *Proposition knowledge*: Individual political knowledge about the proposition. Source. Post-electoral survey data VoxIt: FORS (2014).
- *Blank ballot*: Dummy for casting a blank ballot. Source. Post-electoral survey data VoxIt: FORS (2014).
- *Support government*: Individual support of government endorsement. Source. Post-electoral survey data VoxIt: FORS (2014) and Swissvotes (2012).
- *Support left*: Individual support of endorsement of Social Democratic Party (SPS). Source. Post-electoral survey data VoxIt: FORS (2014) and Swissvotes (2012).
- *Support right*: Individual support of endorsement of Swiss People's Party (SVP). Source. Post-electoral survey data VoxIt: FORS (2014) and Swissvotes (2012).
- *Ideological vote*: Binary variable that equals one if the voting decision is the same as the party endorsement. Sources. Post-electoral survey data VoxIt: FORS (2014) and Swissvotes (2012).
- *Saliency*: Individually stated saliency of a proposition. Source. Post-electoral survey data VoxIt: FORS (2014).
- *Turnout probability*: Individual turnout probability measured by the following question: "If there are ten referendums in a year, in how many of them do you turn out?". Source. Post-electoral survey data VoxIt: FORS (2014).

2. Aggregate voting data:

- *Turnout*: Turnout. Source: Administrative voting records: SFS (2014) and Swissvotes (2012).
- *Blank ballot*: Share of blank ballots in terms of total votes cast. Source: Administrative voting records: SFS (2014) and Swissvotes (2012).
- *Invalid ballot*: Share of invalid ballots in terms of total votes cast. Source: Administrative voting records: SFS (2014) and Swissvotes (2012).
- *Support government*: Share of support of government recommendation in terms of total votes cast. Source: Administrative voting records: SFS (2014) and Swissvotes (2012).
- *Support left*: Share of support of recommendation by the Social Democratic Party (SPS) in terms of total votes cast. Source. Administrative voting records: SFS (2014) and Swissvotes (2012).
- *Support right*: Share of support of recommendation by the Swiss People's Party (SVP) in terms of total votes cast. Source. Administrative voting records: SFS (2014) and Swissvotes (2012).

Appendix C: List of Propositions Included in the Estimation

Table C.3: Overview of Federal Referendums Included in the Analysis

Date	Proposition	Form	Average Saliency	Turnout	Yes Share	Ctl Votes
14.06.1981	Federal decree “Equal Rights for Men and Women”	C	4.3	33.9%	60.3%	15.5
14.06.1981	Federal decree on the “Protection of Consumer Rights”	C	4.4	33.9%	65.5%	20
29.11.1981	Federal decree on the continuation and improvement of federal finances	M	4.8	30.4%	69.0%	23
28.11.1982	Initiative on the “Prevention of Excessive Prices”	I	4.6	32.9%	56.1%	18
28.11.1982	Counterproposition to the initiative on the “Prevention of Excessive Prices”	C	3.9	32.9%	21.6%	0
27.02.1983	Federal decree on a new system of fuel taxes	M	4.1	32.4%	52.7%	15.5
27.02.1983	Federal decree on a new energy article in the federal constitution	M	3.9	32.4%	50.9%	11
26.02.1984	Federal decree to levy a tax on heavy vehicles	M	4.9	52.8%	58.7%	15.5
26.02.1984	Federal decree on a federal road tax	M	5.3	52.8%	53.0%	16
26.02.1984	Initiative to introduce a civilian service as an alternative to military service	I	3.6	52.8%	36.2%	1.5
20.05.1984	Initiative against “Abuse of the Banking Secrecy and the Power of Banks”	I	3.8	42.5%	27.0%	0
20.05.1984	Initiative against “Selling off the homeland”	I	3.7	42.5%	48.9%	8.5
23.09.1984	Initiative for a “Future without new Nuclear Power Plants”	I	5.8	41.6%	45.0%	6
23.09.1984	Initiative for a “Secure, Efficient, and Environmentally Friendly Energy Supply”	I	5.7	41.6%	45.8%	6
02.12.1984	Initiative for an “Effective Protection of Motherhood”	I	3.4	37.6%	15.8%	0
02.12.1984	Federal decree on a constitutional article on radio and television operators	M	3.2	37.5%	68.7%	23

... table C.3 continued

Date	Proposition	Form	Average Salience	Turnout	Yes Share	Ctl Votes
02.12.1984	Federal decree on the initiative on the “Compensation Payments for Victims of Violent Crime”	C	4.0	37.6%	82.1%	23
10.03.1985	Federal decree on the abolition of a federal contribution for primary education	M	3.1	34.4%	58.5%	18
10.03.1985	Federal decree on the abolition of a federal contribution in the health sector	M	3.4	34.4%	53.0%	13
10.03.1985	Federal decree on the financial contributions for education	M	3.3	34.4%	47.6%	8.5
10.05.1985	Initiative for paid vacations	I	3.9	34.6%	34.8%	2
09.06.1985	Initiative “Right to Live”	I	3.8	35.7%	31.0%	5.5
09.06.1985	Federal decree on the abolition of the cantonal share of the revenues from the federal stamp duty	M	2.8	35.2%	66.5%	22
09.06.1985	Federal decree on the allocation of revenues from liquids	M	2.9	35.2%	72.3%	22
09.06.1985	Federal decree on the abolition of supporting an self-sufficient corn supply	M	3.0	35.3%	57.0%	18.5
22.09.1985	Federal decree on the initiative “For a Federal Coordination of School Calenders”	C	3.9	41.0%	58.8%	16
22.09.1985	Federal decree on the innovation risk guarantee for small and medium-sized companies	O	2.8	40.9%	43.1%	5.5
22.09.1985	Swiss Civil Code (Effects of Marriage in General, Marital Property, Bequest Act”)	O	4.5	41.1%	54.7%	12
01.12.1985	Initiative on the “Abolition of Vivisection”	I	4.5	38.0%	29.5%	0
16.03.1986	Federal decree on the membership to the United Nations	M	4.9	50.7%	24.3%	0
28.09.1986	Initiative “Federal Cultural Initiative”	I	3.9	34.7%	16.7%	0
28.09.1986	Counterproposition to the “Federal Cultural Initiative”	C	3.5	34.7%	39.3%	7.5

... table C.3 continued

Date	Proposition	Form	Average Saliency	Turnout	Yes Share	Ctl Votes
28.09.1986	Initiative for a "Secure Vocational Education and Professional Retraining"	I	4.0	34.8%	18.4%	0
28.09.1986	Federal decree on the national sugar industry	O	4.5	34.9%	38.2%	5
05.04.1987	Asylum Act	O	4.3	42.4%	67.3%	23
05.04.1987	Federal Act on the residence and settlement of foreigners	O	4.3	42.2%	65.7%	23
05.04.1987	Initiative for a "Popular Vote about Military Expenditures"	I	4.2	42.4%	40.6%	2.5
05.04.1987	Federal decree on the procedure for initiatives with counterpropositions	M	4.0	42.3%	63.3%	21
06.12.1987	Federal decree for a new railroad concept (BAHN 2000)	O	5.1	47.7%	57.0%	18.5
06.12.1987	Federal Act on public health care	O	4.5	47.7%	28.7%	1
06.12.1987	Popular initiative for the "Protection of the Rothen-turm Moor"	I	5.0	47.7%	57.8%	20
12.06.1988	Federal decree for a "Coordinated Transportation Service"	M	4.6	41.9%	45.5%	4
12.06.1988	Initiative to reduce the retirement age	I	4.7	42.0%	35.1%	2
04.12.1988	Initiative "City-Countryside Initiative against Property Speculation"	I	4.6	52.8%	30.8%	0
04.12.1988	Initiative on the "Reduction of Working Hours"	I	4.4	52.9%	34.3%	2
04.12.1988	Initiative to "Curb Immigration"	I	4.6	52.8%	32.7%	0
04.06.1989	Initiative against factory farming	I	3.9	36.0%	48.9%	8
26.11.1989	Initiative "For a Switzerland without an Army and an Overall Peaceful Political Stance"	I	5.3	69.2%	35.6%	2
26.11.1989	Initiative to increase tempo limits on Swiss main roads and highways	I	4.8	69.2%	38.0%	6
01.04.1990	Initiative "Stop Concrete - for a Limitation of Road Construction"	I	4.1	41.1%	28.5%	0

... table C.3 continued

Date	Proposition	Form	Average Salience	Turnout	Yes Share	Ctl Votes
01.04.1990	Initiative to prohibit the highway construction between Murten and Yverdon	I	4.3	41.1%	32.7%	0
01.04.1990	Initiative to prohibit the highway construction in the district of Knonau	I	4.3	41.1%	31.4%	0
01.04.1990	Initiative to prohibit the highway construction between Biel and Solothurn/Zuchwil	I	4.3	41.1%	34.0%	0
01.04.1990	Federal decree on viticulture	O	3.3	40.8%	46.7%	11
01.04.1990	Federal Supreme Court Act	O	3.5	40.7%	47.4%	7
23.09.1990	Initiative to shut down nuclear plants	I	4.6	40.4%	47.1%	7
23.09.1990	Initiative to stop the construction of nuclear plants	I	4.6	40.4%	54.5%	19.5
23.09.1990	Federal decree on the energy article	M	4.4	40.3%	71.1%	23
23.09.1990	Federal Road Traffic Act	O	4.3	40.3%	52.8%	15
03.03.1991	Federal decree to decrease the legal voting age from 20 to 18 years	M	3.7	31.3%	72.7%	23
03.03.1991	Initiative on the "Public Support for Public Transport"	I	4.0	31.2%	37.1%	1.5
02.06.1991	Federal decree on the reorganization of federal finances	M	4.4	33.3%	45.6%	2.5
02.06.1991	Military Justice Act	O	3.7	33.3%	55.7%	19
16.02.1992	Initiative for a "Financially Affordable Health Care System"	I	4.5	44.4%	39.3%	1
16.02.1992	Initiative on to limit vivisection	I	4.7	44.5%	43.6%	3.5
17.05.1992	Federal decree on the membership to the Bretton Woods institutions	O	4.1	38.8%	55.8%	18.5
17.05.1992	Federal decree on the protection of waters	O	5.1	39.2%	66.1%	18.5
17.05.1992	Initiative to "Save our Waters"	I	4.9	39.2%	37.1%	0
17.05.1992	Food from Agriculture Free from Genetic Engineering	C	4.7	39.2%	73.8%	22
17.05.1992	Federal decree to introduce a civilian service as an alternative to military service	C	4.7	39.2%	82.5%	23

... table C.3 continued

Date	Proposition	Form	Average Saliency	Turnout	Yes Share	Ctl Votes
17.05.1992	Criminal Code (violent acts against the sexual integrity)	O	4.6	39.1%	73.1%	22
27.09.1992	Federal decree on the construction of a new railway through the Alps (AlpTransit NEAT)	O	4.7	45.9%	63.6%	21
27.09.1992	Federal act on the organization of the federal parliament	O	3.6	45.4%	58.0%	17
27.09.1992	Federal Act on the compensation of federal members of parliament and factions	O	3.6	45.6%	27.6%	0
27.09.1992	Federal Act on the financial contributions for infrastructure of factions and members of the federal parliament	O	3.6	45.5%	30.6%	1
27.09.1992	Federal Stamp Duty Act	O	3.9	45.7%	61.5%	23
27.09.1992	Federal Act on the property rights of farmers	O	3.8	45.7%	53.6%	15
06.12.1992	Federal decree on the membership to the European Economic Area	M	5.7	78.7%	49.7%	7
07.03.1993	Federal decree to increase fuel taxes	O	4.8	51.3%	54.5%	15
07.03.1993	Federal decree on the abolition of the ban to operate a casino	M	3.3	51.2%	72.5%	23
07.03.1993	Initiative on the "Abolition of Vivisection"	I	4.8	51.2%	27.8%	0
06.06.1993	Initiative to ban the construction of military camps	I	5.8	55.6%	44.7%	7
06.06.1993	Initiative against the purchase of new military aircraft	I	6.2	55.6%	42.8%	4
26.09.1993	Federal decree against the abuse of weapons	M	5.3	39.8%	86.3%	23
26.09.1993	Federal decree on the accession of the Bernese district of Laufen to the canton of Basel-Land	M	2.5	39.5%	75.2%	23
26.09.1993	Initiative to establish the Swiss National Day (August 1st) as a national holiday	I	5.3	39.9%	83.8%	23
26.09.1993	Federal decree on measures to limit cost increases in the health care system	O	7.3	39.8%	80.5%	23

... table C.3 continued

Date	Proposition	Form	Average Saliency	Turnout	Yes Share	Ctl Votes
26.09.1993	Federal decree on financial measure in the unemployment insurance	O	6.6	39.7%	70.4%	23
28.11.1993	Federal Finance Act	M	5.6	45.4%	66.7%	22
28.11.1993	Federal decree on a contribution to improve federal finances	M	5.5	45.4%	57.7%	18
28.11.1993	Initiative to "Limit Alcohol Problems"	I	4.2	45.5%	25.3%	0
28.11.1993	Initiative to "Limit Tobacco Problems"	I	4.2	45.5%	25.5%	0
20.02.1994	Federal decree on the continuation of the federal national road tax	M	4.4	40.8%	68.5%	21
20.02.1994	Federal decree on the continuation of the federal tax on heavy vehicles	M	4.0	40.8%	72.2%	23
20.02.1994	Federal decree to introduce a Distance-Related Heavy Vehicle Fee	M	4.2	40.7%	67.1%	21
20.02.1994	Initiative for "The Protection of the Alps against Transit Traffic"	I	6.7	40.8%	51.9%	16
20.02.1994	Federal Air Traffic Act	O	4.5	40.6%	61.1%	23
12.06.1994	Federal decree on a constitutional article on culture promotion	M	5.1	46.6%	51.0%	11
12.06.1994	Federal decree on the revision of the Naturalization Act (simplified naturalization for 2nd generation immigrants)	M	6.1	46.8%	52.8%	10
12.06.1994	Federal decree on sending Swiss troops to international peace-keeping operations	O	5.5	46.8%	42.8%	4
25.09.1994	Federal decree on the abolition of price support for domestic corn financed by tariff revenues	M	3.5	45.5%	64.6%	23
25.09.1994	Swiss Military Justice Act	O	6.1	45.9%	54.6%	11.5
04.12.1994	Federal Health Insurance Act (KVG)	O	5.4	44.0%	51.8%	12
04.12.1994	Initiative for a sane health care system	I	4.0	44.0%	23.4%	0

... table C.3 continued

Date	Proposition	Form	Average Salience	Turnout	Yes Share	Ctl Votes
04.12.1994	Federal Act on coercive measures in the federal law on aliens	O	6.0	44.0%	72.9%	23
12.03.1995	Counterproposition to the initiative “For an environmentally-friendly and efficient agricultural sector”	C	4.3	37.9%	49.1%	9 N
12.03.1995	Federal decree on milk production	O	4.2	37.9%	36.5%	4
12.03.1995	Agricultural Act	O	4.1	37.9%	33.6%	3
12.03.1995	Federal decree on a federal debt brake	M	5.6	37.9%	83.4%	23
25.06.1995	Federal Pension System Act	O	5.5	40.4%	60.7%	18
25.06.1995	Initiative to increase the pension and disability insurance	I	3.9	40.3%	27.6%	0
25.06.1995	Federal Act on the purchase of property by foreigners	O	4.9	40.3%	46.4%	7
10.03.1996	Federal decree about the revision of the language article in the federal constitution (article 116)	M	3.1	31.0%	76.2%	23
10.03.1996	Federal decree on the accession of the Bernese municipality of Vellerat to the canton of Jura	M	2.5	31.0%	91.6%	23
10.03.1996	Federal decree on the abolition of the cantonal responsibility to equip members of the armed forces	M	3.2	31.0%	43.7%	3
10.03.1996	Federal decree on the abolition of the duty to buy liquor and liquor machines	M	3.2	30.9%	80.8%	23
10.03.1996	Federal decree to abolish federal contributions for railway station parking	M	3.2	31.0%	53.9%	14
09.06.1996	Counterproposition to the initiative “Farmers and Consumers — For an Environmentally-Friendly Agriculture”	C	4.4	31.4%	77.6%	23 N
09.06.1996	Federal Council and Administration Organization Act	O	3.7	31.3%	39.4%	3
01.12.1996	Initiative “Against Illegal Immigration”	I	5.2	46.7%	46.3%	11
01.12.1996	Federal decree on the working conditions in industry, trade, and services	O	5.8	46.7%	33.0%	0

... table C.3 continued

Date	Proposition	Form	Average Salience	Turnout	Yes Share	Ctl Votes
08.06.1997	Initiative for a “Popular Decision on the EU membership talks”	I	5.4	35.4%	25.9%	0
08.06.1997	Initiative to ban the export of war materiel	I	5.7	35.5%	22.5%	0
08.06.1997	Federal decree to abolish the federal ammunition depot	M	2.7	35.3%	82.2%	23
28.09.1997	Federal decree on financing the unemployment insurance	O	6.3	40.6%	49.2%	14
28.09.1997	Initiative “Youth without Drugs”	I	6.2	40.8%	29.3%	0
07.06.1998	Federal decree on the measures to balance the federal financial household	M	6.1	40.9%	70.7%	23
07.06.1998	Initiative to “Protect Human Lives and the Environment from Genetic Engineering”	I	6.9	41.3%	33.3%	0
07.06.1998	Initiative on the abolition of the domestic intelligence service	I	4.9	41.0%	24.6%	0
27.09.1998	Federal Act on the Distance-Related Heavy Vehicle Fee	O	6.4	51.8%	57.2%	16
27.09.1998	Initiative “for affordable food and organic farming”	I	4.8	51.6%	23.0%	0 N
27.09.1998	Initiative to reform the pension system and increase retirement age	I	6.2	51.6%	41.5%	5
29.11.1998	Federal decree on the construction and financing public transport	M	5.9	38.3%	63.5%	20.5
29.11.1998	Federal decree for a temporal new corn article	M	3.2	38.0%	79.4%	23 N
29.11.1998	Initiative “For a Sensible Drug Policy”	I	5.9	38.4%	26.0%	0
29.11.1998	Federal Act on working in industry and trade	O	5.1	38.1%	63.4%	20
07.02.1999	Federal decree on the amendment of the eligibility requirements for becoming member of the Federal Council	M	4.5	38.0%	74.7%	21
07.02.1999	Federal decree concerning the constitutional restrictions on transplantation medicine	M	5.6	38.0%	87.8%	23

... table C.3 continued

Date	Proposition	Form	Average Salience	Turnout	Yes Share	Ctl Votes
07.02.1999	Initiative "Housing for Everyone"	I	5.6	38.2%	41.3%	3
07.02.1999	Land Use Planning Act	O	5.0	38.0%	55.9%	19.5
18.04.1999	Federal decree on the new Federal Constitution	M	4.8	35.9%	59.2%	13
13.06.1999	Asylum Act	O	5.8	45.6%	70.6%	23
13.06.1999	Federal decree on urgent measures in the area of alien law	O	5.9	45.6%	70.8%	23
13.06.1999	Federal decree on the prescription of heroin	O	5.4	45.7%	54.4%	14
13.06.1999	Federal Disability Insurance Act	O	6.1	45.6%	30.3%	0
13.06.1999	Federal Maternity Leave Act	O	6.5	45.9%	39.0%	6
12.03.2000	Federal decree on judicial reforms	M	3.9	41.9%	86.4%	23
12.03.2000	Initiative for faster direct-democratic decision-making	I	4.5	42.1%	30.0%	0
12.03.2000	Initiative for "An Equal Representation of Women in the Federal Administration"	I	4.6	42.2%	18.0%	0
12.03.2000	Initiative "To Protect Humans from Manipulation in Reproduction Technology"	I	5.1	42.2%	28.2%	0
12.03.2000	Initiative to "Cut Motor Vehicle Traffic by Half to Maintain and Improve the Environment"	I	5.9	42.4%	21.3%	0
21.05.2000	Federal decree on the sectoral agreements between Switzerland and the European Union	O	6.6	48.3%	67.2%	21
24.09.2000	Initiative for "A Solar Cent"	I	5.0	44.7%	31.3%	0
24.09.2000	Constitutional article on renewable energy subsidies	C	4.8	44.7%	45.3%	4.5
24.09.2000	Constitutional article on the energy tax	C	4.7	44.9%	44.5%	2.5
24.09.2000	Initiative to "Steer Immigration"	I	6.4	45.3%	36.2%	0
24.09.2000	Initiative "More Rights to the People by Establishing a Referendum with Counterproposition"	I	3.5	44.8%	34.1%	0
26.11.2000	Initiative for "A Flexible Retirement and Disability Insurance System - Against the Increase of the Retirement Age for Women"	I	5.5	41.7%	39.5%	6

... table C.3 continued

Date	Proposition	Form	Average Salience	Turnout	Yes Share	Ctl Votes
26.11.2000	Initiative for “A Flexible Retirement Age for Men and Women (Starting at 62 Years)”	I	5.6	41.7%	46.0%	7
26.11.2000	Initiative to “Reduce Military Spending - for more Peace and Jobs with a Future”	I	5.4	41.7%	37.6%	4
26.11.2000	Initiative for “Lower Hospital Costs”	I	6.3	41.7%	17.9%	0
26.11.2000	Federal Personnel Act	O	4.6	41.5%	66.8%	21
04.03.2001	Initiative “Yes to Europe”	I	6.6	55.8%	23.2%	0
04.03.2001	Initiative for “Lower Drug Prices”	I	5.8	55.7%	30.9%	0
04.03.2001	Initiative for “More Traffic Security by Establishing a Speed Limit of 30 kmh in municipalities”	I	5.5	55.8%	20.3%	0
10.06.2001	Federal Army and Military Administration Act II (Armament)	O	5.4	42.5%	51.0%	10
10.06.2001	Federal Army and Military Administration Act I (Training Cooperation)	O	5.2	42.5%	51.1%	10
10.06.2001	Federal decree to abolish the approval requirement to establish new dioceses	M	2.9	42.0%	64.2%	23
02.12.2001	Federal decree on the debt brake	M	5.3	37.8%	84.7%	23
02.12.2001	Initiative for a “Secure Pension System - Tax Energy instead of Work”	I	4.8	37.8%	22.9%	0
02.12.2001	Initiative for a “Credible Security Policy and a Switzerland without an Army”	I	5.8	37.9%	21.9%	0
02.12.2001	Initiative “Solidarity Creates Security: For a Voluntary Civilian Peace Service”	I	4.9	37.9%	23.2%	0
02.12.2001	Initiative for a “Capital Gains Tax”	I	5.0	37.8%	34.1%	0
03.03.2002	Initiative for “Switzerland’s Membership to the United Nations”	I	6.6	58.4%	54.6%	12
03.03.2002	Initiative for “Shorter Working Hours”	I	5.3	58.3%	25.4%	0
02.06.2002	Criminal Code (abortion)	O	6.0	41.8%	72.2%	21.5

... table C.3 continued

Date	Proposition	Form	Average Salience	Turnout	Yes Share	Ctl Votes
02.06.2002	Initiative "For Mothers and Children - for the Protection of the Unborn Child and for Help to his or her Mother in Need"	I	5.2	41.7%	18.2%	0
22.09.2002	Initiative "Gold Reserves for the Pension System"	I	5.5	45.2%	46.4%	6
22.09.2002	Initiative "Gold for the Pension System, Cantons and Foundations"	C	5.1	45.2%	46.4%	6.5
22.09.2002	Electricity Market Act	O	5.1	44.8%	47.4%	9
24.11.2002	Initiative "Against the Abuse of the Asylum System"	I	6.7	47.9%	49.9%	12.5
24.11.2002	Federal Act on the mandatory unemployment insurance and insolvency payments	O	5.7	47.6%	56.1%	19
09.02.2003	Federal decree on changing voting rights	M	3.8	28.7%	70.4%	23
09.02.2003	Federal Hospital Contribution Act	O	4.6	28.7%	77.4%	23
18.05.2003	Federal Army Act (Army XXI)	O	4.9	49.6%	76.0%	23
18.05.2003	Federal Civil Protection Act	O	4.9	49.5%	80.6%	23
18.05.2003	Initiative "Yes to Fair Rents"	I	4.4	49.6%	32.7%	1
18.05.2003	Initiative for "A Car-Free Sunday per Season During a Trial Period of Four Years"	I	4.6	49.8%	37.6%	0
18.05.2003	Initiative "Health Has to Remain Affordable"	I	6.2	49.7%	27.1%	0
18.05.2003	Initiative "Equal Rights for Disabled Persons"	I	6.0	49.7%	37.7%	3
18.05.2003	Initiative "Electricity without Nuclear Power - For an Energy Change and Phasing Out the Use of Nuclear Power Plants"	I	6.2	49.7%	33.7%	0.5
18.05.2003	Initiative "MoratoriumPlus - For a Continuation of the Moratorium to Construct New Nuclear Plants and for Limiting the Risk of Nuclear Power Supply"	I	6.0	49.6%	41.6%	1
18.05.2003	Initiative for "A Sufficient Supply of Professional Education"	I	5.3	49.6%	31.6%	0
08.02.2004	Counterproposition to the initiative "Avanti - For Secure and High-Performance Highways"	C	6.2	45.6%	37.2%	0

... table C.3 continued

Date	Proposition	Form	Average Salience	Turnout	Yes Share	Ctl Votes
08.02.2004	Federal Act on the Amendment of the Swiss Civil Code (Rent)	O	5.4	45.4%	35.9%	0
08.02.2004	Initiative for “Life Imprisonment for Extremely Dangerous Sex and Violent Offenders”	I	6.9	45.5%	56.2%	21.5
16.05.2004	Federal Act on the Amendment of the Pension and Disability Insurance	O	6.1	50.8%	32.1%	0
16.05.2004	Federal decree on financing the pension and disability insurance by increasing the VAT	M	6.0	50.8%	31.4%	0
16.05.2004	Federal Act on the Amendment of Family Bequest, Housing Property, and Stamp Duty	O	6.4	50.8%	34.1%	0
26.09.2004	Federal decree on the naturalization of second-generation immigrants	M	6.6	53.8%	43.2%	5.5
26.09.2004	Federal decree on the naturalization of third-generation immigrants	M	6.7	53.8%	48.4%	6.5
26.09.2004	Initiative “Postal Service for Everyone”	I	5.6	53.5%	49.8%	9.5
26.09.2004	Federal decree on the compensation scheme for service in the army, civilian servic, and civil protection	O	7.1	53.8%	55.5%	9.5
28.11.2004	Federal decree on the new national fiscal equalization	M	5.0	36.9%	64.4%	20.5
28.11.2004	Federal decree on the new financial regulations	M	4.7	36.8%	73.8%	22
28.11.2004	Federal Act on Research on Embryonic Stem Cells	O	6.4	37.0%	66.4%	23
05.06.2005	Federal decree on the sectoral agreement with the European Union and the association of Schengen/Dublin	O	6.6	56.8%	54.6%	11
05.06.2005	Federal decree on registering a civil partnership for homosexual couples	O	5.1	56.6%	58.0%	16.5
25.09.2005	Federal decree on the extension of the sectoral agreements with the European Union to include the new EU member states	O	6.7	54.4%	56.0%	17.5
27.11.2005	Initiative for “Food from Agriculture without Genetic Manipulation”	I	6.1	42.2%	55.7%	23

... table C.3 continued

Date	Proposition	Form	Average Salience	Turnout	Yes Share	Ctl Votes
27.11.2005	Federal Act on Shop Opening Hours	O	6.0	42.4%	50.6%	6
21.05.2006	Federal decree on the new constitutional article on education	M	5.3	27.9%	85.6%	23
24.09.2006	Initiative "Gains of the Swiss National Bank Shall for the Pension Fund"	I	5.8	48.9%	41.7%	2.5
24.09.2006	Federal Alien Act	O	6.5	49.0%	68.0%	23
24.09.2006	Asylum Act Amendment	O	6.8	49.1%	67.8%	23
26.11.2006	Federal Act on the Cooperation with the Countries in Eastern-European	O	5.5	45.1%	53.4%	14
26.11.2006	Federal Act on Child Allowance	O	6.3	45.1%	68.0%	22.5
11.03.2007	Initiative for a "Social Single-Payer Health Care System"	I	6.2	45.9%	28.8%	2
17.06.2007	Federal decree on the revision of the disability insurance	O	5.5	36.2%	59.1%	19
24.02.2008	Initiative to "Counter Fighter Jet Noise in Tourism Regions"	I	4.2	38.7%	31.9%	0
24.02.2008	Federal Act on the Improvement of the Federal Tax Scheme for Entrepreneurs	O	4.8	38.6%	50.5%	16
01.06.2008	Initiative for "Democratic Naturalization"	I	6.6	45.2%	36.2%	1
01.06.2008	Initiative "People Sovereignty instead of Institutional Propaganda"	I	5.7	44.9%	24.8%	0
01.06.2008	Constitutional article for "Quality and Efficiency in the Health Care System"	C	6.6	44.8%	30.5%	0
30.11.2008	Initiative on the "Non-Applicability of Statutory Limitations for Sexual Offences Against Children"	I	5.0	47.5%	51.9%	18
30.11.2008	Initiative for "A Flexible Retirement Age"	I	6.0	47.6%	41.4%	4
30.11.2008	Initiative "An Organization's Right to Appeal: For an End to the Obstructionist Policy - More Growth for Switzerland"	I	4.5	47.2%	34.0%	0

... table C.3 continued

Date	Proposition	Form	Average Salience	Turnout	Yes Share	Ctl Votes
30.11.2008	Initiative for “A Sensible Marijuana Policy including Effective Protection of the Youth”	I	4.6	47.3%	36.7%	0
30.11.2008	Federal Act on Narcotic Substances and Psychotropic Substances	O	4.5	47.1%	68.1%	23
08.02.2009	Federal decree on the continuation of the sectoral agreements with the European Union and extending it to Romania and Bulgaria	O	6.1	51.4%	59.6%	19.5
17.05.2009	Constitutional article on “The Future with Complementary Medicine”	C	5.4	38.8%	67.0%	23
17.05.2009	Biometric passports	O	4.6	38.8%	50.1%	9
27.09.2009	Federal decree for a temporal financing of the disability insurance by increasing the value added tax	M	6.0	41.0%	54.6%	12
27.09.2009	Federal decree not to introduce the general popular initiative	M	3.1	40.4%	67.9%	23
29.11.2009	Federal decree on special financing for air traffic projects	M	3.8	52.6%	65.0%	23
29.11.2009	Initiative for “A Prohibition of War Materiel Exports”	I	6.3	53.4%	31.8%	0
29.11.2009	Initiative “Against the Construction of Minarets”	I	6.9	53.8%	57.5%	19.5
07.03.2010	Constitutional article on human subject research	M	4.9	45.5%	77.2%	23
07.03.2010	Initiative “Against Animal Abuse and for a Better Legal Protection of Animals”	I	3.7	45.8%	29.5%	0
07.03.2010	Federal Pension Act (minimal conversion rate)	O	6.9	45.8%	27.3%	0
26.09.2010	Federal Unemployment and Insolvency Act	O	4.9	35.8%	53.4%	15.5
28.11.2010	Initiative “Expulsion of Criminal Foreigners”	I	6.4	52.9%	52.9%	17.5
28.11.2010	Counterproposition to the initiative “Expulsion of Criminal Foreigners”	C	5.3	52.9%	45.8%	0
28.11.2010	Initiative for “Fair Taxes. For an End of the Abuse of Tax Competition”	I	5.8	52.4%	41.5%	3.5

Note: This table provides a list of all ballot propositions during the period of study from 1981–2010. The column “Form” includes a abbreviation for the legal form of the proposition, namely popular initiatives (I), mandatory referendums (M), optional referendums (O), and counterpropositions to popular initiatives (C). The column “Average Salience” reports the average salience measure among voters using the post-referendum survey, “Turnout” and “Yes-Share” is obtained from the official records. The column “Ctl votes” lists the total of cantons that approved the proposition. Note that all changes to the federal constitution, i.e. mandatory referendums, initiatives and counterpropositions, require both a majority of voters and a majority of cantonal votes which equals 12.