

The Effects of a Seat in Parliament on Individual Preferences

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Abstract

The paper explores if and why MPs change their political attitudes as a consequence of a first-time seat in parliament. We use a regression discontinuity design that compares candidates' preference changes in close elections to the Swiss National Council between 2003 and 2011. Three competing hypotheses that might predict the effects of parliamentary membership on preferences are examined: party convergence, parliament convergence, and general attitude change. While we find considerable within-party variation regarding the degree of preference changes on a left-right scale, all three hypotheses fail to explain these changes. However, the current paper is in a very preliminary state and still suffers from a number of technical and conceptual shortcomings we intend to address in the near future.

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1 Introduction

Do politicians change their political attitudes as a consequence of a seat in parliament? If yes, how can we explain these changes? This paper examines three competing views that predict the effects of a seat in parliament using detailed data on candidates to the Swiss National Council in the period of 2003–2011.

Under the premises of ‘new institutionalism’, it is commonplace that ‘institutions matter’ by shaping preferences and behavior of political actors (March and Olsen, 1984; March and Olson, 1989). Entering parliament means getting exposed to a bundle of institutional incentives and arrangements which do affect the political preferences of new MPs. Legislative institutions — most notably parliamentary party groups, legislative offices, parliamentary rules and procedures — play an important role in the literature on legislative behavior (e.g. Cox and McCubbins, 1993, 2004; Cox, 2000). Bowler, Farrell, and Katz (1999) suggest that MPs face a different set of incentives guiding their legislative behavior than during the election campaign when the main focus is on intra-party nomination and the voting system hurdle (Bowler, Farrell, and Katz, 1999).

While previous parliamentary research has primarily focused on the behavior of politicians *within* parliament, there is little evidence on the effect of the parliamentary seat itself on political attitudes.³ The lack of credible evidence has several reasons. On the one hand, there are few panel data sets on political attitudes. Most existing studies examine data on behavior and attitudes of elected candidates. On the other hand, previous contributions using regression discontinuity designs in two-party systems still suffer from selection bias (see Caughey and Sekhon, 2011 for a recent discussion).

In this paper, we attempt to fill this gap by using the system of proportional representation (PR) in Switzerland. We examine three different views on why politicians are expected to change their attitudes as a consequence of a seat in parliament. First, the *party convergence hypothesis* claims that office-seeking MPs are likely to move their positions to the center of their group, and party leaders will try to bring outliers in line, at least when the issue is important for the party’s reputation (Cox and McCubbins, 1993). These predictions are in line with the pledge fulfillment literature (see Pétry and Collette, 2009 for an overview).

³A notable exception is the work by Bowler, Donovan, and Karp (2006) who examine the difference in attitudes toward electoral institutions between elected and non-elected politicians. However, the established differences comprise both selection effect, politicians who are in favor of stable institutions might have an electoral advantage, and the causal effect of the seat.

Specifically, Schwarz, Schädel, and Ladner (2010) show that adapting to the party line is the main reason why MPs change their attitude in parliamentary votes when compared to the positions presented in pre-election surveys. Second, the *parliament convergence hypothesis*, i.e. the conjecture that politicians converge to the median voter’s preference, is one of the central predictions of the political economy model of Downs (1957). It stems from the analysis of a classical two-party system where politicians maximize their (re-) election chances. The question remains whether politicians have the same incentives to convergence in a PR system. The models of Austen-Smith and Banks (1988) and Baron and Diermeier (2001) show that in an unidimensional choice space politicians are likely to move towards the median voter. Previous studies have revealed that Switzerland’s legislative politics is an example of a predominantly unidimensional case (Benoit and Laver, 2006; Hug and Schulz, 2007). Third, the *general attitude change hypothesis* claims that politicians with a parliamentary seat change their behavior in general. For instance, a long strand of literature has suggested that a political mandate leads to a higher public spending for special interest groups (Barro, 1973) and for general purposes (Persson and Svensson, 1989).

The paper examines the hypotheses above using data on 6,992 candidates in the election to the Swiss National Council in the years 2003, 2007, and 2011. We solve the potential endogeneity problem, namely that elected candidates are a priori different to non-elected candidates in the probability to change their political attitudes, by estimating our equations using a regression discontinuity framework. Our preliminary findings suggest no systematic difference in both main variables, left-right orientation and preferences for an increase of public spending.

The remainder of the paper is organized as follows. Section 2 presents the institutional background. Section 3 describes our data and estimation strategy. Section 4 presents descriptive statistics, and section 5 presents our preliminary results. Section 6 concludes.

2 Institutional background

In this chapter, we will briefly outline the institutional context. Switzerland has a fixed election timetable with general elections to the two legislative chambers (National Council and Council of States) taking place every four years. There is no option for the government or parliament to shorten this period by a no-confidence vote or a dissolution of parliament.

Nor has parliament any option to withdraw the mandate of government members (Federal Councilors), who are elected by parliament in the first session after the general election on the same four-year term basis. The consequences for executive-legislative relations are quite far-reaching (see e.g. Schwarz, Bächtiger, and Lutz, 2011; Linder, 2010): Governing parties are discharged from constant support for their own government. In fact, there are neither ‘parties in power’ or ‘ruling parties’, nor is there an official (permanent) opposition, as there is no stable majority coalition but rather case-by-case support and opposition. Like the parties, also individual MPs enjoy considerable leeway when it comes to voting decisions as they do not have to carry the burden of possibly being the one pivotal legislator that could bring down the own government. Consequently, party disciplinary measures are weaker and less often threatened than in genuine parliamentary systems.

Voting in general elections takes place in 26 electoral districts (cantons). In the National Council (200 MPs), the number of seats per district is allocated according to population figures (for a general overview see e.g. Lutz and Strohmman, 1998; OSCE, 2012).⁴ Since 2003, there are 6 single-member districts (which apply a first-past-the-post system) and 20 districts with 2 to 34 seats.⁵ The latter use an open party list PR system which provides the voters with a range of means to express their preferences: you can delete candidates from party lists, duplicate candidates, and you can do a cross-vote and create a personalized list with candidates from different parties on it. This at the same time creates a competitive intra-list environment for the candidates. Candidates find themselves in a collective action problem: All members on the same list share the common goal to maximize the number of votes for their list since the count of these ‘list votes’ determines how many parliamentary seats are allocated to a party list in the first place. But party fellows turn to rivals when it comes to determine who exactly gets the allocated seats. In this round the number of personal votes is crucial, and assuming that everyone wants to get elected then everyone wants to get more votes than the first non-elected candidate on the list.

Despite the fact that there is no need for government parties to constantly back their government and that the voting system promotes intra-list competition between candidates belonging to the same party, party unity in Swiss parliament is still considerably high (see Sciarini, 2007 as well as the up-to-date data under <http://www.smartmonitor.ch>), mainly

⁴ Voting system for the second chamber (Council of States) is different and not further explained here since we only use data from National Council elections.

⁵ In the following we solely focus on districts with more than one seat.

due to two reasons: First, Switzerland’s party systems is highly differentiated (12 parties currently serve in parliament), narrowing down the room for the kind of heterogeneous umbrella parties. Second, while government pressure on parties is low, there is still the pressure from party leaders on individual MPs to stick to the party line in order to maximize policy influence or maintain the party label.

3 Data and estimation

3.1 Data

Our data come from the smartvote project, a Swiss voting advice application (Thurman and Gasser, 2009; Ladner and Fivaz, 2012).⁶ The project is based on the idea of preference matching; i.e., any smartvote user (voter) answers the same set of questions as the candidates and then gets a list of candidates that indicates the political distance between the user and the candidates. The survey has been designed in order to provide an adequate overview of relevant political issues within Swiss politics and to elicit the candidates political positions on these issues. As a part of the project, all political candidates in the run-up to the Swiss general elections in 2003, 2007, and 2011 were invited to take part in a survey of 70-75 questions.⁷ The smartvote survey does not follow a strict panel design, i.e. there is significant variation of the questions’ content and wording over time.

Although not particularly designed for direct comparability between elections, the three questionnaires include a number of (nearly) identical items. For the two pairs of consequent elections (2003/07 and 2007/11) the total number of identical questions is 57: 25 from the smartvote 2003 and 2007 surveys and 24 (plus 8 questions related to the national budget) from the 2007 and 2011 surveys. The individual questions are listed in Table 5.

⁶ Smartvote (<http://www.smartvote.ch>) is a widely used web-based voting advice application in Switzerland. The system was developed and is operated by the non-profit association Politools in Bern, Switzerland. From the beginning in 2003, smartvote has received high media attention affecting candidate behavior in several respects: 1. It boosts participation rates. 2. Candidates take the tool (and consequently their own answers) serious. 3. Strategic considerations come into play, i.e. how to maximize the personal vote while still remaining credible? (see also Ladner and Fivaz, 2012; Ladner, Fivaz, and Pianzola, 2012). Some parties provided their candidates with an instructive ‘sample questionnaire’, although it remains unclear if uniform answer patterns indeed have a positive effect on the total number of votes. Yet in the analysis at hand strategic issues do not play a big role as long as we can assume that any such considerations have the same effects on all candidates running on the same party list.

⁷The survey comprised 70, 73 and 75 questions in 2003, 2007 and 2011, respectively. In 2003, the smartvote questionnaire was only available in German and French. It was extended to the Italian-speaking part of the country in 2007.

Moreover, we selected 11 questions from the 2003/07 pool and 11 questions (plus 6 concerning the national budget) from the 2007/11 pool in order to construct a rough left-right scale on which the respondents are positioned (see Table 5). These items include a selection of issues related to economic and welfare policy, taxes and public spending, migration, and law and order. However, at the current state of the paper the selection process must be described as rather tentative since it is not based on statistical grounds but on (our own) judgment on the topics which define the left-right dimension in Switzerland. Nevertheless, as we will later see in Section 4, party locations on our hand-knitted scale are very similar to those e.g. by Hug and Schulz (2007) or Leimgruber, Hangartner, and Leemann (2010).

Beside the left-right scale we also define a public spending dimension out of 8 questions on the national budget from the 2007/11 surveys (see Table 5). Respondents could indicate if they wanted to spend more, the same, or less on a specific policy area which forms the basis for our public spending scale.

3.2 Basic model

Our main focus is the question whether preferences of politicians depend on a parliamentary seat. In very general form and assuming a linear relationship, we can formulate this in the following model

$$Y_{ij,t} = \mu_i + \gamma_j + \delta_t + S_{ij,t-1}\beta_1 + \mathbf{X}_{ij,t}\beta_2 + \varepsilon_{ij,t} \quad (1)$$

where $Y_{ij,t}$ is our dependent variable, i indexes the politicians, j indexes the parties, and t indexes election years; μ_i , γ_j , δ_t are individual, party, and time fixed effects, respectively; $S_{i,t-1}$ is an indicator function which is 1 if a politician has a seat in parliament and 0 otherwise, $\mathbf{X}_{ij,t}$ are individual covariates, β_1 and β_2 are parameters, and $\varepsilon_{ij,t}$ is a residual term. For the *party convergence hypothesis* our variable of interest is the deviation to the party mean, i.e. $Y_{i,t} = |Z_{ij,t} - \text{med}(Z_{\bullet,j,t})|$ where $Z_{ij,t}$ is the individual preference of candidate i in party j and $\text{med}(Z_{\bullet,j,t})$ is the median preference of the *elected* party members. For the *parliament convergence hypothesis* our variable of interest is the deviation to the party mean, i.e. $Y_{i,t} = |Z_{ij,t} - \text{med}(Z_{\bullet\bullet,t})|$ where $Z_{ij,t}$ is the individual preference of candidate i in party j and $\text{med}(Z_{\bullet\bullet,t})$ is the median preference of all members of parliament. For the *general*

attitude change hypothesis we use simply $Y_{i,t} = Z_{ij,t}$.

However, it is likely that individual unobserved factors $\varepsilon_{i,t}$ are correlated with a seat in parliament $S_{i,t-1}$. In this case, a simple OLS estimation would yield biased estimates for β_1 . Imagine, for instance, that some candidates are both clever and charismatic and therefore always win the election (i.e., $S_{i,t-1} = 1$). While their strategic cleverness helps them to take a median position within their party, their charisma gives them a safe seat in parliament. In this case, some unobservable characteristics drive both the seat in parliament and the positioning of the politician. Yet, the focus on barely elected candidates provides a natural experiment in which a relatively small margin decides about being elected or not. In this spirit, the regression discontinuity design (RDD) helps us correcting for the above mentioned selection effects. The literature in political science and political economy has made use of RDD, mostly to estimate the incumbency advantage (Lee, Moretti, and Butler, 2004; Lee, 2008), but also to estimate the returns to office (Eggers and Hainmueller, 2009), the effect of gender composition in government (Gagliarducci and Paserman, 2012) or the effect of a mayor's partisanship on policy outcomes (Gerber and Hopkins, 2011).⁸

3.3 Focusing on close election

The literature on RDD in political elections has primarily focused on countries with a plurality voting system. In the context of plurality voting, measuring the assignment to treatment is relatively clear. Most studies use the distance to the required number of votes (50% in case of majority voting) as assignment variable. Yet, things are a bit more complicated in a proportional system. Basically, there are two sources of random variation in the distribution of parliamentary seats. The first one concerns between-party variation in the allocation of seats. In every electoral district, total list votes are counted and seats are allocated to lists according to a voting rule that is Hagenbach-Bischoff, a special variant of the d'Hondt method, in the case of Switzerland. The second source of variation is within-list variation. After seats are allocated to electoral lists, the ranking of personal votes determines which candidates actually get a seat (see also Section 2). This paper will focus on the second source of variation. First, it is more reasonable to imagine a marginally non-elected candidate from the same list as a counterfactual to a closely elected candidate because they share

⁸See Caughey and Sekhon (2011) for a recent critical praise on the literature of estimating the incumbency advantage.

the same political context. If we use between-party variation we cannot rule out having an extreme-right candidate as a counterfactual for an extreme-left candidate. Second, the relative distances between candidates are more comparable across different electoral districts when focusing on the list. This is mainly because margins of victory between parties tend to be relatively big in small districts compared to large districts. In contrast, the allocation mechanism of list PR allows for close within-party races even in small cantons. We define the relative vote share of individual i as follows

$$\text{vote_share}_{ijt} = \frac{\#\text{votes}_{ijt}}{\sum_{i=1}^{N_{jt}} \#\text{votes}_{ijt}} \times 100 \quad (2)$$

where $\#\text{votes}_{ijt}$ is the total number of votes of candidate i and $\sum_{i=1}^{N_{jt}} \#\text{votes}_{ijt}$ is the sum of total votes of list j in election year t . Now we order the relative vote shares within the list and define the marginal candidate as the candidate with the smallest relative vote share among all elected candidates in list j . The difference of a candidate i 's vote share and the marginal guy's vote share gives us an indicator how closely a candidate was elected. It can be written as

$$\text{dist_marginal}_{ijt} = \text{vote_share}_{ijt} - \text{vote_share}_{\text{marginal},jt} \quad (3)$$

where $\text{vote_share}_{\text{marginal},jt}$ is the vote share of the marginal guy on list j . Figure 1 shows a histogram of our running variable $\text{dist_marginal}_{ijt}$. Not surprisingly, there are far more non-elected candidates when compared to elected candidates. Also, the distribution seems not to be smooth at the threshold. If candidates were able to manipulate their realization of the assignment variable, an important assumption of our RDD design would be violated. There are three reasons why this is very unlikely to happen. First, seats per canton are fixed and therefore a certain amount of additional votes is not sufficient to guarantee a seat in parliament. Second, under the assumption of office-motivated candidates we would expect the discontinuity to be of other form. In particular, there should be a bunch of candidates just selected for treatment and not, as observed in the data, many candidates in the control group. Third, there is hardly any recount of votes in the elections under consideration.

4 Descriptive statistics

Table 1 shows the observable characteristics of the full set of candidates and of our sample of candidates. The full set of candidates to the National Council in Switzerland comprises 9,450 individuals in the years 2003, 2007, and 2011. 74.1% of them, 6,992 candidates, completed the smartvote questionnaire about their political preferences. The Social Democratic Party (SPS) has the highest response rate (85.2%), followed by the Liberal Free Democratic Party (FDP, 85.2%). The Christian Democratic People’s Party (CVP) and the Green Party (GPS) have response rates of 80.6% and 80.2%, respectively. The response rate is lowest for the Swiss People’s Party (SVP), a fraction of 68.1% of the party’s candidates answered the survey.⁹ The fraction of men is almost equal in the survey as in the full set of candidates (65.8% vs. 65.9%). The average survey respondent is 39.8 years of age, about 1.5 years younger than the average candidate.

Figure 4 shows individual levels on the left-right scale for the two time periods $t - 1$ and t and divided into elected and non-elected candidates (in time $t - 1$).¹⁰ The scale ranges from 0 (left) to 100 (right). The colors indicate party affiliation, the size of the points is proportional to the distance to the marginal guy as defined in equation (3). While the average candidate for the SVP scores 73.6, the average SP candidates has a value of 10.1. Candidates of the two parties in the political center also differ. The average CVP candidate shows a left-right score of 45.7, the one of the FDP has a score of 62.3. The GPS is located very close to the SPS with an average score of 11.8, while the average candidate of all other parties has a score of 35.1.¹¹ Overall, the party averages and the histograms in figure 4 show that our left-right measure, though somewhat rough and discretionary, produces a distribution of party positions in Swiss politics that is close to previous studies using other scaling methods (see e.g. Benoit and Laver, 2006; Hug and Schulz, 2007; Leimgruber, Hangartner, and Leemann, 2010). Moreover, the figure shows that there is variation in preferences over time which seems – at least within the elected candidates – larger among center-right parties than among the

⁹An important explanation of SVP’s lower response rate is the fact that the party’s age average is around 3.4 years higher than the average of the other major parties. Furthermore, the conservative mindset and more rural anchorage of the SVP candidates most likely lower the personal affinity to web-based tools like smartvote.

¹⁰For the construction of the left-right dimension see section 3.1.

¹¹While the interpretation of the average score of the “other parties” is substantively meaningless due to their political heterogeneity, it makes perfect sense in statistical terms since we use them as reference category in our estimations. About half of this category is represented by EVP, EDU and GLP candidates, the rest by even smaller parties.

left.

Figure 5 depicts a histogram of the change in the individual left-right positions for the four largest parties in Switzerland.¹² Overall, the average preferences of all survey candidates have remained fairly constant with a mean of 0.4. However, there are differences when considering the parties separately. The distribution of changes of the SPS has more mass around zero than the distribution of the other three major parties with an average change of 0.9. The SVP shows the highest average shift to the right (4.0), while the average GPS candidate moved to the left (-3.0). The center parties, FDP (1.2) and CVP (0.3), moved only slightly to the right. Also the average candidate in the category “other parties” is located slightly to the right (0.2). Notably, as before in figure 4, figure 5 reveals considerable variation in the degree of preference shifts measured by our lift-right scale.

5 Preliminary results¹³

5.1 OLS results

In table 2, we present the results of our basic OLS estimation of equation (1). The entries in Columns (1) and (4) are coefficients of the estimation examining the *party convergence hypothesis*, i.e. using the individual absolute deviation to the party median as dependent variable. Columns (2) and (5) present the results of the *parliament convergence hypothesis* model where the dependent variable is individual’s deviation to the parliament median. Columns (3) and (6) show the estimation results of the *general attitude change hypothesis* using the basic left-right score and the support for an increase in total public spending as dependent variable, respectively. All regressions include a time fixed effect and the covariates age (both linear and squared term), gender, and a party dummy for the five largest parties (reference category is “other parties”).¹⁴

¹²A note of caution: The comparison is based on our selection of left-right items which contains the same set of questions for each individual but not so for the comparison across the two pairs of elections considered in our study (2003/07 vs. 2007/11). See Section 3.1.

¹³The results are based on the 2007/11 comparison only because we have not yet merged the 1999 election results (personal votes) to the dataset which is a prerequisite for the definition of the lag variable for 2003.

¹⁴Party affiliations are defined according to party membership in the election year 2003 (for 2003/07 comparison) and 2007 (for 2007/11 comparison). At the current stage of our research we have not yet eliminated party switchers from our sample (like those from SVP to BDP after the 2007 general elections). This probably would be a good idea for future versions of the paper since the literature provides evidence that parties constrain preferences and that party switchers not only change labels but also some political

Our sample consists of 1,008 and 1,006 candidates for the left-right and increase of public spending equation, respectively. In all OLS baseline specifications, the estimated parameter on a parliamentary seat is insignificant at any conventional significance level. This indicates that there is no systematic difference between elected and non-elected candidates. Yet we still might suffer a potential selection problem if there are unobserved differences between elected and non-elected candidates. In order to correct for this, we focus on barely elected candidates and apply a regression discontinuity design.

5.2 RDD results

5.2.1 First stage

We have outlined that the relative distance to the marginally elected candidate on the election ballot is our measure of closeness to get a parliamentary seat. Consequently, we use $\text{dist_marginal}_{ijt}$ in equation (3) as our running variable that determines assignment to treatment. For the following analysis we exclude individuals on lists with no elected candidate. In this case, no marginal guy exists and it is difficult to determine how “close” to a seat these candidates were.¹⁵ These are 4,069 of our total of 6,992 candidates. The same reasoning applies to the six single-member districts for which the proportional system is de facto a plurality voting system. Consequently, we exclude the group of cantons with only one seat in the National Council.¹⁶ Table 3 shows the first stage. Our regression discontinuity design is sharp, i.e. our assignment variable perfectly predicts whether a candidate gets a seat or not. 512 candidates from a total of 2,923 are elected.

5.2.2 Second stage

Table 4 shows our second stage with the same functional form as in the baseline OLS estimation but including a linear term of the assignment variable and an interaction of assignment variable and treatment. We focus only on barely elected candidates in the predefined range of $\text{dist_marginal}_{ijt} \in [-5, 5]$. In future work we will use the optimal bandwidth estimator

positions (Nokken, 2000).

¹⁵One could instead use the first-stage assignment of seats to parties as an indicator of closeness. However, there exists no intra-party counterfactual and things would become even more complicated if connected sub- and sub-sub-lists had to be taken into account. Our focus on within-list competition masks this problem.

¹⁶The group of cantons with only one seat in the National Council comprises Appenzell Inner Rhodes, Appenzell Outer Rhodes, Glarus, Obwalden, Nidwalden, and Uri.

developed by Imbens and Kalyanaraman (2012). Furthermore, we include all candidates who had become member of parliament as a replacement candidate.¹⁷ Our sample consists of 357 and 355 observations for the left-right and public spending equation, respectively. Consistent with the OLS results, we find no significant effect of a seat in parliament on our two main measures of individual preferences.

¹⁷Casual vacancies arise if a MP resigns or dies, or if s/he gets elected as a member of the Council of States or as Federal Councilor. In this case, the normal procedure is that the first non-elected candidate from the same party list inherits the seat. The reason behind the inclusion of succeeding MPs is that they receive some treatment, even if their term in office is shortened compared with conventionally elected MPs. There is, however, large variation in the period succeeding MPs spend in parliament: some serve almost the whole four years, some only two or three parliamentary sessions before election day arrives. Thus we plan to use an additional time variable or dummy for these MPs in future work.

6 Discussion and outlook

The preliminary results of our paper lead to two main provisional conclusions. First, from a descriptive point of view, we see considerable shifts in MP left-right preferences within a 4-year period and also a large within-party variance of these changes. The question remains what is driving these changes. We examine three hypotheses from the literature using a sample of candidates to the Swiss National Council in the years 2003, 2007, and 2011. In particular, we test the *party convergence hypothesis*, the *parliament convergence hypothesis*, and the *general attitude change hypothesis*. Our second result relies on OLS and RDD estimations and suggests that none of these hypotheses can explain changes in attitudes.

In the near future, we will address the shortcomings of the present paper and advance it in several dimensions. From a conceptual point of view, we will test further explanations for a change in political attitudes. There is evidence that politicians in parliament might have incentives to chose positions closer to their constituency, yet putting forward a completely different agenda while in parliament. In particular, some elected MPs might try to present consistent attitudes to the voters when interviewed for the election survey, while in parliament they adjust to whatever is necessary to advance their career. We will investigate on this by using detailed roll call data. From a statistical point of view, we will use of alternative definitions of the left-right dimension as validity tests for our main dependent variable, the left-right score. Although the results with our self-defined left-right score fall into place with the expected positions of Swiss parties, alternative and less discretionary methods to define the sample of left-right items would divert criticism. Also, as mentioned above, we will complete and adjust our dataset by using the 1999 election results and excluding party switchers, use more flexible estimation models and implement the optimal bandwidth estimator developed by Imbens and Kalyanaraman (2012). Furthermore, we intend to dig deeper to get a bit closer to the original questions of the surveys by first constructing and then testing single issue dimensions similar to the public spending score we already used. In doing so we could follow the example of the eight ‘smartspider’ dimensions (as far as our limited selection of smartvote questions permits).

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Tables and figures

Figure 1: Distribution of running variable

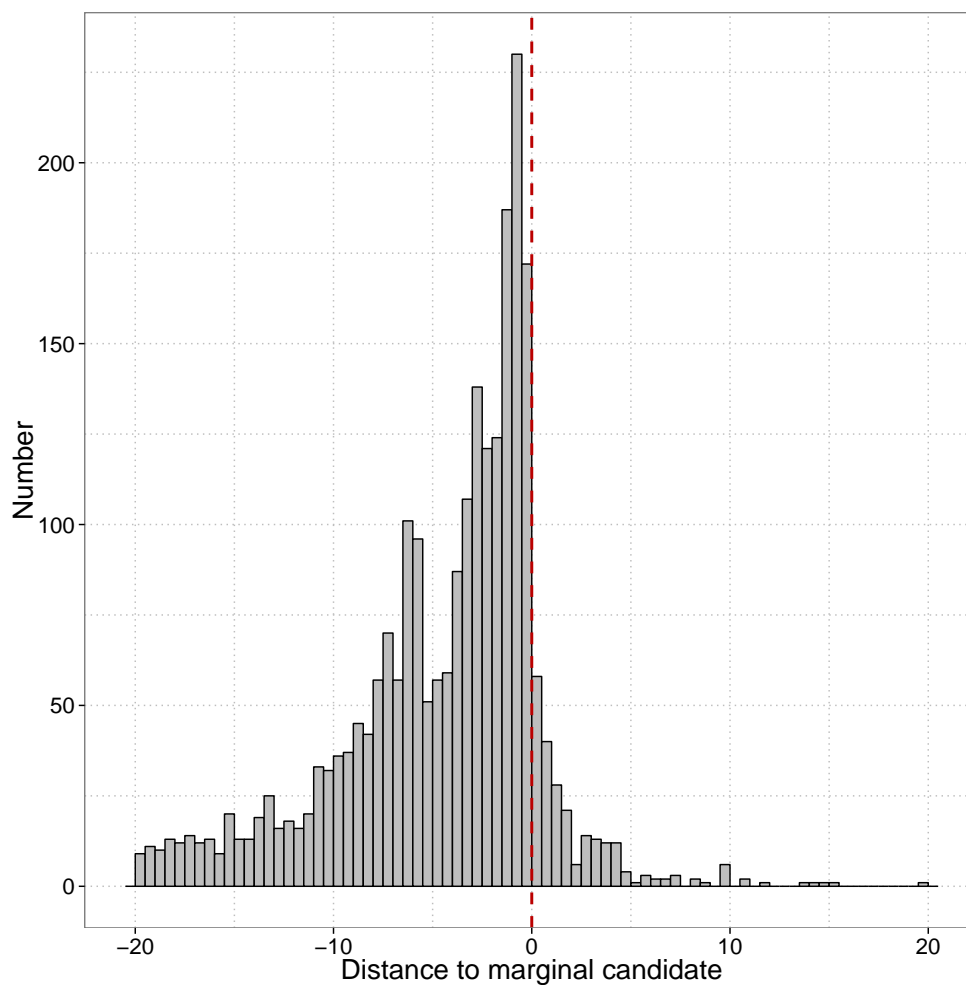


Table 1: Comparison sample and full set of candidates

	smartvote	Not smartvote	All candidates
Characteristics			
Proportion of male (n=9,450)	65.8	66.1	65.9
Age (n=9,450)	39.8	45.3	41.3
By party affiliation			
FDP (n=1,278)	85.2	14.8	100.0
CVP (n=1,076)	80.6	19.4	100.0
SPS (n=1,192)	90.5	9.5	100.0
SVP (n=1,184)	68.1	31.9	100.0
GPS (n=1,098)	80.2	19.8	100.0
Others (n=3,612)	62.8	37.2	100.0
Total (n=9,440)	74.1	25.9	100.0

Figure 2: Left-right positions by party and year

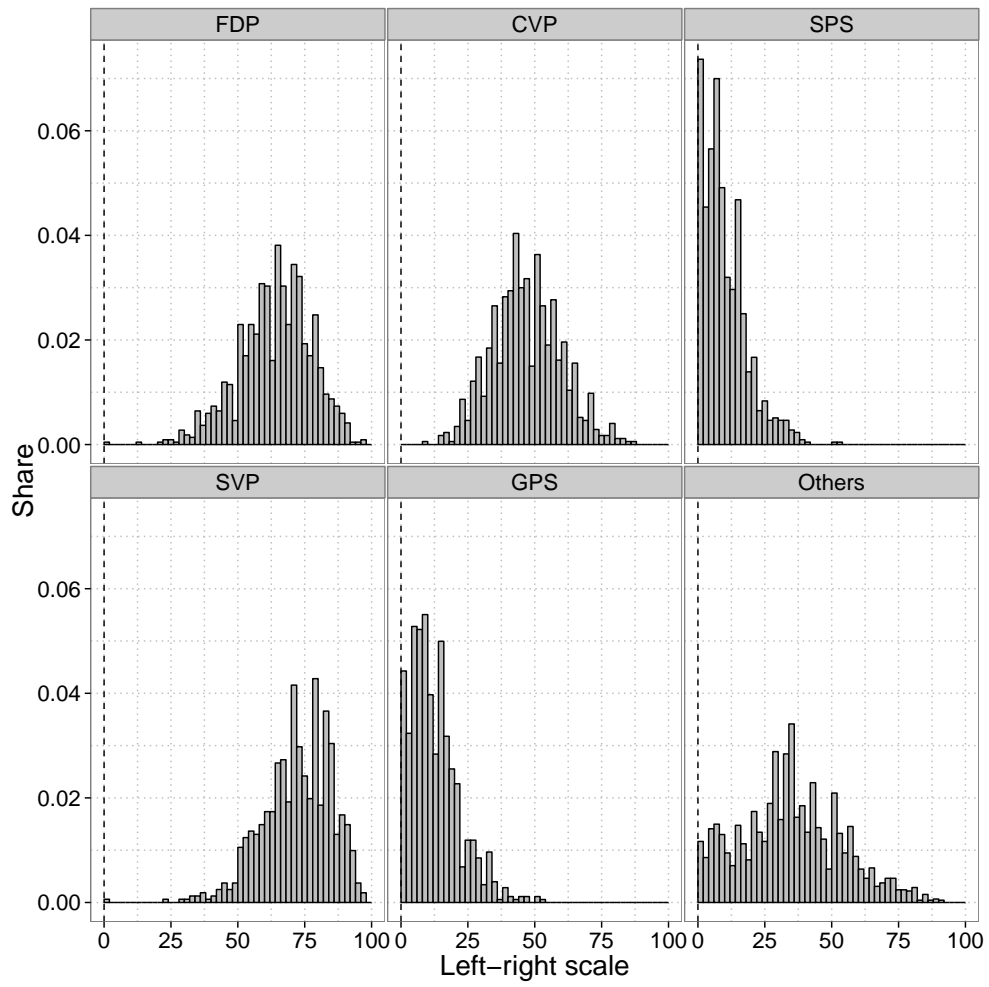


Figure 3: Left-right positions by elected status

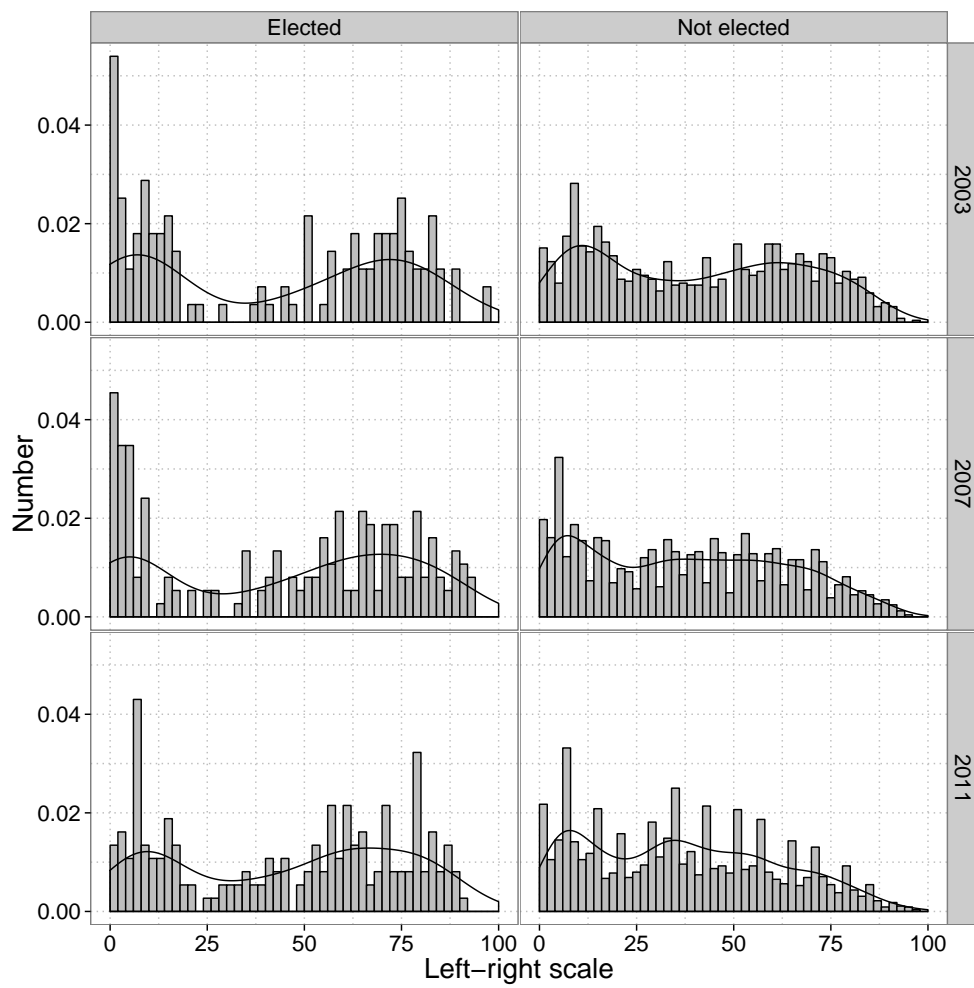


Figure 4: Left-right positions over time

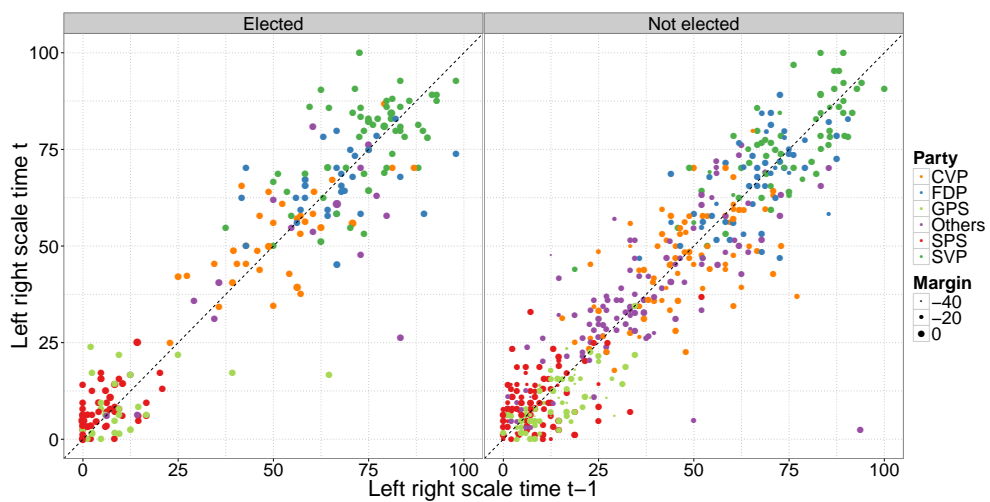


Figure 5: Changes in the left-right position

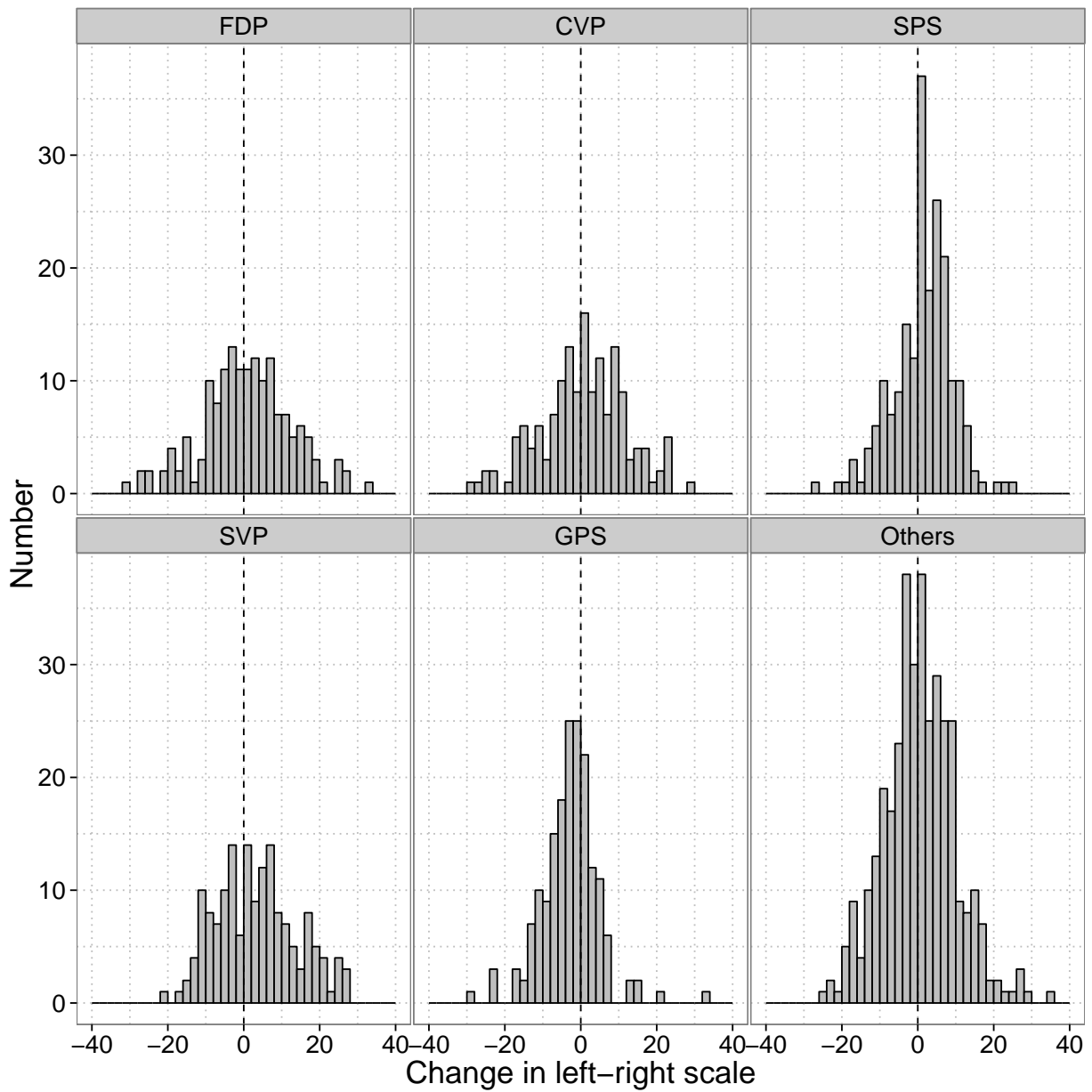


Table 2: OLS results

	Leftright			Increase of public spending		
	General (1)	Party (2)	Parliament (3)	General (4)	Party (5)	Parliament (6)
Seat	1.30 (1.47)	-0.72 (1.49)	-0.95 (2.41)	-0.30 (1.40)	-0.83 (1.63)	-0.30 (1.40)
Observations	1,108	1,108	1,108	1,106	1,106	1,106
R-squared	0.13	0.19	0.02	0.10	0.08	0.10

Note: Table shows results of the regression of leftright and public spending measure on holding a parliamentary seat. “General” denotes respective variable, “party” is the absolute deviation to the party median position, and “parliament” is the absolute deviation to the parliament’s median position. All regressions include a gender dummy, age, squared age, a time dummy, and party dummies. Clustered standard errors in parenthesis (by candidate). Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table 3: First stage

Assignment	Elected		Total
	0	1	
0	2,411	0	2,411
1	0	547	512
Total	2,411	512	2,923

Note: Table depicts first stage. Assignment is 1 if variable $\text{dist_marginal}_{ijt} \geq 0$, and 0 otherwise. The variable elected is taken from the official records.

Table 4: Second stage: RDD

	Leftright			Increase of public spending		
	General (1)	Party (2)	Parliament (3)	General (4)	Party (5)	Parliament (6)
Seat	0.51 (2.30)	-0.90 (2.01)	0.50 (3.70)	0.30 (2.14)	1.19 (2.31)	0.30 (2.14)
Running variable (RV)	-1.18 (0.95)	-0.48 (0.89)	3.17* (1.66)	-1.34 (0.90)	-1.85* (0.98)	-1.34 (0.90)
Seat \times RV	-1.03 (2.23)	-1.29 (2.10)	-4.10* (2.21)	2.31 (1.49)	3.48* (2.00)	2.31 (1.49)
Observations	355	355	355	353	353	353
R-squared	0.28	0.39	0.18	0.23	0.23	0.23

Note: Table shows results of the regression of leftright and public spending measure on holding a parliamentary seat. “General” denotes respective variable, “party” is the absolute deviation to the party median position, and “parliament” is the absolute deviation to the parliament’s median position. All regressions include a gender dummy, age, squared age, a time dummy, and party dummies. Clustered standard errors in parenthesis (by candidate). Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table 5: Selected smartvote questions

	smartvote 2003	smartvote 2007	smartvote 2011	left-right
1	Sollen die Krankenkassenprämien in Zukunft nach dem Einkommen berechnet werden?	Sollen die Krankenkassenprämien für die Grundversicherung nach der wirtschaftlichen Leistungsfähigkeit (Einkommen und Vermögen) berechnet werden?		x
2	Befürworten Sie eine Erhöhung des Rententalters für Frauen und Männer auf 67 Jahre?	Befürworten Sie eine Erhöhung des Rententalters für Frauen und Männer auf 67 Jahre?	Befürworten Sie eine Erhöhung des Rententalters für Frauen und Männer (z.B. auf 67 Jahre)?	x
3		Halten Sie eine Verschärfung des Jugendstrafrechts für eine geeignete Massnahme zur Eindämmung der Jugendkriminalität?	Soll das Jugendstrafrecht in Zukunft mehr Gewicht auf das Verbüssen längerer Haftstrafen in geschlossenen Anstalten als auf Re- sozialisierungsmassnahmen legen?	x
4	Befürworten Sie einen gesetzlichen Mindestlohn von 3000 Franken monatlich?	Befürworten Sie die Einführung eines für alle Arbeitnehmenden gültigen Mindestlohnes von 3'500 Franken (für eine 100%-Stelle)?	Befürworten Sie die Einführung eines für alle Arbeitnehmenden gültigen Mindestlohnes von 3'800 CHF (für eine 100%-Stelle / 40h-Woche)?	x
5	Würden Sie einer Liberalisierung der Geschäftsöffnungszeiten an Abenden und Wochenenden zustimmen?	Sind Sie für eine vollständige Liberalisierung der Geschäftsöffnungszeiten (Geschäfte können die Öffnungszeiten nach freiem Ermessen festlegen)?	Sind Sie für eine vollständige Liberalisierung der Ladenöffnungszeiten (Geschäfte können die Öffnungszeiten nach freiem Ermessen festlegen)?	x
6		Sollen gleichgeschlechtliche Paare Kinder adoptieren dürfen?	Sollen gleichgeschlechtliche Paare, die in eingetragener Partnerschaft leben, Kinder adoptieren dürfen?	
7	Haben Sie der Bewaffnung zum Selbstschutz von Schweizer Soldaten im Ausland zugestimmt?	Befürworten Sie, dass bewaffnete Schweizer Armeeangehörige unter UNO- oder OSZE-Mandat im Ausland eingesetzt werden können?	Die Schweizer Armee kann heute zum Selbstschutz bewaffnet bei friedenserhaltenden Einsätzen unter UNO- oder OSZE-Mandat im Ausland eingesetzt werden. Befürworten Sie dies?	
8	Soll das Stimm- und Wahlrecht für Ausländerinnen und Ausländer auf Gemeindeebene gesamtschweizerisch eingeführt werden?	Soll gesamtschweizerisch das aktive Stimm- und Wahlrecht für Ausländerinnen und Ausländer auf Gemeindeebene eingeführt werden?	Würden Sie es befürworten, wenn für Ausländer/innen, die seit mindestens zehn Jahren in der Schweiz leben, gesamtschweizerisch das Stimm- und Wahlrecht auf Gemeindeebene eingeführt würde?	
9	Unterstützen Sie eine Entkriminalisierung des Konsums von weichen Drogen wie Haschisch oder Marihuana?	Sollen der Besitz und Konsum von Cannabis legalisiert werden?		

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	smartvote 2003	smartvote 2007	smartvote 2011	left-right
10	In den Niederlanden kann auch die direkte, aktive Sterbehilfe straffrei geleistet werden. Sollte diese Regelung auch in der Schweiz eingeführt werden?	In den Niederlanden ist die aktive Sterbehilfe straffrei. Würden Sie eine solche Regelung auch in der Schweiz befürworten?	Würden Sie es befürworten, wenn in der Schweiz die direkte aktive Sterbehilfe durch einen Arzt straffrei möglich wäre?	
11	Soll die Steuerbelastung in allen Kantonen und Gemeinden annähernd gleich hoch sein?	Soll die Steuerbelastung in allen Kantonen und Gemeinden annähernd gleich hoch sein?		x
12	Soll auf Bundesebene ein fakultatives Finanzreferendum eingeführt werden?	Soll auf Bundesebene ein Finanzreferendum eingeführt werden?		x
13	Würden Sie die Zulassung von Parallelimporten (freier Import von marken- und patentgeschützten Gütern) begrüßen?	Sind Sie der Meinung, dass die Schweiz Parallelimporte von patentgeschützten Produkten zulassen sollte?		
14	Befürworten Sie eine Privatisierung der Swisscom?	Soll der Bund seine Aktienmehrheit an der Swisscom abgeben?		x
15	Soll der Staat mit Steuergeldern ein flächendeckendes Poststellennetz erhalten?	Soll der Staat ein flächendeckendes Poststellennetz finanzieren?	Soll die Post verpflichtet werden, ein flächendeckendes Poststellennetz aufrechtzuerhalten?	x
16		Sollen die Schutzbestimmungen für Wölfe gelockert werden?	Befürworten Sie eine Lockerung der Schutzbestimmungen für Grossraubtiere (Luchs, Wolf, Bär)?	
17		Befürworten Sie die unterstützenden Einsätze der Armee zur Wahrung der inneren Sicherheit (WEF, EURO 2008, Bewachung von Botschaften und Konsulaten)?	Finden Sie es richtig, dass die Armee polizeiliche Aufgaben im Innern wahrnimmt (z.B. bei der Bewachung von Botschaften und Konsulaten, beim Grenzschutz oder bei Grossanlässen wie dem WEF)?	
18		Der Bundesrat möchte die Befugnisse der Sicherheitsbehörden zur präventiven Überwachung des Post-, Telefon- und E-Mailverkehrs ausweiten. Finden Sie dies richtig?	Sollen die Befugnisse der Sicherheitsbehörden zur präventiven Überwachung des Post-, Telefon- und E-Mail-Verkehrs ausgeweitet werden?	
19		Sind Sie dafür, dass Leistungen der Komplementärmedizin (Alternativmedizin) umfassend von der Grundversicherung vergütet werden?	Finden Sie es richtig, dass einzelne ärztliche Leistungen der Komplementärmedizin (Alternativmedizin) wieder von der Grundversicherung vergütet werden?	
20		Soll die Schweiz in den nächsten fünf Jahren EU-Beitrittsverhandlungen aufnehmen?	Soll die Schweiz innerhalb der nächsten vier Jahre EU-Beitrittsverhandlungen aufnehmen?	

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	smartvote 2003	smartvote 2007	smartvote 2011	left-right
21		Die Schweiz verfolgt in den letzten Jahren eine aktivere, öffentlichere Aussenpolitik, die sich weniger an der strikten Neutralität orientiert. Begrüssen Sie dies?	Die Schweiz verfolgt seit einigen Jahren eine aktivere, öffentlichere Aussenpolitik, die sich weniger an der strikten Neutralität orientiert. Begrüssen Sie dies?	
22	Soll der freie Personenverkehr auch auf die zukünftigen EU-Länder Mittel- und Osteuropas ausgedehnt werden?	Seit 1. Januar 2007 sind Rumänien und Bulgarien Mitglieder der Europäischen Union (EU). Befürworten Sie, dass der freie Personenverkehr zwischen der Schweiz und der EU auf diese beiden Länder ausgedehnt wird?	Sollen Schweizer Jugendliche frei zwischen einem Militär- oder einem zivilen Ersatzdienst wählen können?	x
23	Befürworten Sie eine freie Wahl zwischen Militärdienst und zivilem Ersatzdienst?	Sollen Schweizer Jugendliche frei zwischen einem Militärdienst und einem zivilen Ersatzdienst (Zivildienst) wählen können?	Eine Volksinitiative verlangt, dass der Bundesrat direkt vom Volk gewählt werden soll.	
24	Würden Sie es begrüssen, wenn der Bundesrat durch das Volk gewählt werden würde?	Soll der Bundesrat direkt vom Volk gewählt werden?	Befürworten Sie dieses Anliegen?	
25	Befürworten Sie das aktive Stimm- und Wahlrecht für Jugendliche ab 16 Jahren?	Würden Sie die Einführung des aktiven Stimm- und Wahlrechtes für Jugendliche ab 16 Jahren befürworten?		x
26	Sollten private Schulen verstärkt vom Staat gefördert und finanziell unterstützt werden?	Finden Sie es richtig, wenn der Staat private Schulen finanziell unterstützt?		x
27		Sind Sie dafür, dass der Status von Sans-Papiers durch eine einmalige kollektive Erteilung von Aufenthaltsbewilligungen legalisiert wird?	Sind Sie dafür, dass der Status von Sans-Papiers durch eine einmalige kollektive Erteilung von Aufenthaltsbewilligungen legalisiert wird?	
28	Würden Sie einer Aufhebung sämtlicher Importzölle und -beschränkungen für landwirtschaftliche Produkte aus Entwicklungsländern zustimmen?	Würden Sie einer Aufhebung sämtlicher Importzölle und -beschränkungen für landwirtschaftliche Produkte aus Entwicklungsländern zustimmen?		
29	Soll die Schweiz aus der Kernenergie aussteigen?	Der Bundesrat will als Ersatz für die bisherigen Atomkraftwerke (AKWs) ein oder zwei neue AKWs bewilligen. Befürworten Sie dies?	Der Bundesrat möchte bis spätestens 2034 aus der Atomenergie aussteigen (d.h. die bestehenden Atomkraftwerke werden stillgelegt und keine neuen mehr gebaut). Unterstützen Sie dieses Vorhaben?	x
30	Befürworten Sie die Anstossfinanzierung von Tagesstätten und Kinderkrippen durch den Bund?	Befürworten Sie die Subventionierung von Tagesstätten und Kinderkrippen durch den Bund?		

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	smartvote 2003	smartvote 2007	smartvote 2011	left-right
31		Soll die Gesamtfläche der Bauzonen in der Schweiz für die nächsten 20 Jahre auf dem heutigen Stand begrenzt werden?	Eine Volksinitiative fordert, dass die Gesamtfläche der Bauzonen in der Schweiz für die nächsten 20 Jahre auf dem heutigen Stand begrenzt wird. Befürworten Sie dieses Anliegen?	x
32	Haben Sie der Vorlage zur Fristenlösung beim Schwangerschaftsabbruch zugestimmt?	Der Schwangerschaftsabbruch ist in der Schweiz in den ersten zwölf Wochen seit der letzten Periode straflos möglich. Finden Sie dies richtig?	Der Schwangerschaftsabbruch ist in der Schweiz in den ersten zwölf Wochen der Schwangerschaft straflos möglich. Finden Sie das richtig?	
33		In der Schweizer Landwirtschaft gilt bis 2010 ein Moratorium für gentechnisch veränderte Organismen. Soll dieses verlängert werden?	Soll das geltende Moratorium für gentechnisch veränderte Pflanzen und Tiere in der Schweizer Landwirtschaft über 2013 hinaus verlängert werden?	
34		Haben für Sie Steuerenkungen bei den Bundessteuern in den nächsten vier Jahren Priorität?	Haben für Sie Senkungen der Bundessteuern in den nächsten vier Jahren Priorität?	x
35	Würden Sie die Einführung des Englischunterrichts als erste Fremdsprache in den Schulen begrüssen?	Soll Englisch landesweit als erste Fremdsprache unterrichtet werden?		
36	Finden Sie es richtig, dass in einigen Gemeinden an der Urne bzw. an der Gemeindeversammlung über Einbürgerungen entschieden wird?	Das Bundesgericht hat 2003 die Möglichkeiten der Gemeinden eingeschränkt, über Einbürgerungen an der Urne oder der Gemeindeversammlung zu entscheiden. Finden Sie dies richtig?		
37	Soll in der Schweiz finanziell mehr für die Integration der Ausländerinnen und Ausländer getan werden?	Soll sich der Bund finanziell stärker für die Integration von Ausländerinnen und Ausländern engagieren?	Soll sich der Staat finanziell stärker für die Integration von Ausländer/innen engagieren?	x
38		Landesverteidigung	Landesverteidigung	x
39		Öffentlicher Verkehr	Öffentlicher Verkehr	x
40		Entwicklungshilfe	Entwicklungshilfe	x
41		Bildung und Grundlagenforschung	Bildung und Forschung	
42		Kulturförderung	Kulturförderung	
43		Landwirtschaft	Landwirtschaft	
44		Umweltschutz	Umweltschutz und Raumordnung	x
45		Privater Verkehr (Strassen)	Strassenverkehr (Bau und Unterhalt)	x