

The role of policy and party information in direct-democratic campaigns

Clau DERMONT¹ and Isabelle STADELMANN-STEFFEN²

¹ Department of Political Science, University of Zurich,

² Institute of Political Science, University of Bern,

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Abstract

Existing research has repeatedly discussed how citizens make up their minds when voting on direct-democratic proposals. While previous studies have emphasized the role of policy information and party cues on opinion formation, we explore the mechanisms behind policy and party effects in greater detail. We conceptualize vote decisions as multidimensional choices, and use a three-wave conjoint analysis to observe if and how policy preferences change over the course of a campaign. We find that preferences towards a policy proposal remain consistent, but may change if an issue is intensively discussed during the campaign and does not already rally strong support or opposition. Moreover, the effect of party information is only tangible for voters with an explicit party affiliation, while larger coalitions of parties in support or in opposition of the proposal do not inherently gather more support.

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Introduction

Public opinion can sometimes undergo dramatic shifts during direct-democratic campaigns (LeDuc 2002). Although the degree of such shifts strongly depends on the proposal at stake (*ibid.*), their very existence suggests that campaigns matter. The present study seeks to provide an in-depth exploration of the mechanisms behind campaign effects and, in particular, of the roles that policy information and party positions play in opinion formation. We depart from the assumption that campaigns can influence voters' preferences through three mechanisms (see e.g., Brady et al. 2006; Kriesi 2012). First, a campaign can produce an information effect, i.e., voters receive new information on the proposal, its strengths, and its weaknesses, but also on its proponents and opponents, and subsequently form or change their opinion based on this new information. Second, campaigns can have a mobilizing effect by, for example, sensitizing voters to the issue at stake and showing them that casting a vote is important for political or personal reasons. Third, a campaign may also involve a simple time effect: as the campaign progresses, voters receive the signal that they need to make up their minds as the voting day approaches. Whereas the first mechanism entails substantial opinion formation or opinion changes, the second and third mechanisms act like triggers that make people either vote or decide, without affecting the voting decision as such.

The primary goal of this study is to shed light on the first mechanism. Whereas our design does not allow us to test campaign effects explicitly, we aim at investigating whether, information on policy proposals exerts the aforementioned effect on citizens' opinion formation over the course of a campaign. The information voters receive can either be *policy information*, i.e., how exactly a policy is designed, or refer to *party positions*, i.e., information about which parties support or reject a ballot proposal.

Thus, the questions we endeavor to answer in this contribution are twofold. Do policy preferences change over the course of a campaign? And how do party positions matter in a

multidimensional decision context? Policy preference here refers to the specific policy design an individual prefers over other possible variations. Voting on ballot proposals is the result of multidimensional choices. A specific ballot proposal consists of various elements, out of which a voter may like some and reject others, i.e., they are faced with trade-offs. An individual vote is the result of balancing the pros and cons of a proposal (Dermont, 2018; Stadelmann-Steffen & Dermont, 2018).

By investigating these matters, we go beyond previous research that suggests that voters consider both information about the policy at stake and party positions on the issue to reach a decision (e.g., Boudreau & MacKenzie, 2014; Bullock, 2011; Colombo & Kriesi, 2016). We do so by combining the main strengths of several existing studies. On the one hand, we expand the experimental survey approach used by Bullock (2011) and Boudreau & MacKenzie (2014) by considering the multidimensional nature of referendum decisions. Thus, our design mirrors a real-world decision situation more closely and can therefore be expected to provide an environment more propitious to the disentangling of the party and the policy effects. Moreover, adopting the strategy of Colombo and Kriesi (2016), we also account for changes over time, i.e., over the course of a campaign.

To answer these questions, we use novel survey data, including both a three-wave panel and a three-wave repeated cross-section, collected during a referendum campaign in Switzerland. Our case study is the 2017 referendum on a new energy law, which prescribes Switzerland's phasing out of nuclear power and the promotion of renewable energies to ensure electricity and energy provision. Methodically, we use panel data to illustrate how vote intentions change over the course of the campaign. We proceed to deploy a repeated conjoint experiment, which allows us to present decision-making as a multi-dimensional task based on several aspects of an issue, such as policy information and heuristics. We conducted the same conjoint module three times to factor in how policy preferences evolve during the campaign.

Whereas the study focuses on one country and one campaign, its findings can be relevant beyond Switzerland and the vote under consideration. On the one hand, even though differences between electoral and direct-democratic campaigns exist (LeDuc, 2002), it can be expected that the mechanisms of citizens' opinion formation are comparable; in particular, if a referendum vote is – similar to elections – characterized by party-political ideological conflicts (ibid., p. 722). This is the case for the new energy law. On the other hand, as direct democracy is on the rise and most loudly called for by populist parties that want to give voters more power in politics, it is highly relevant to learn more about the process behind voters' opinion formation and the mechanisms at play over the course of a campaign.

Based on our multidimensional experimental approach, we conclude that citizens' underlying policy preferences remained rather stable over the course of the campaign for the new energy law. Only for the most hotly debated aspect of the legislation, i.e., its costs, do we find some indication of changing policy preferences. Moreover, the presence of a broad political coalition backing a proposal matters – but only because voters in the middle of the political spectrum seem to be influenced by their preferred party. In contrast, left- and right-wing voters' support or opposition to the proposal is not reinforced by the presence of a broad coalition in favor of their preference. Overall, our results imply that information effects are rather limited.

Party vs. Policy

How do voters make their decisions in a direct democratic vote? Many studies on electoral and direct-democratic campaigns have argued that voters need some information to make up their minds, since they often have to decide on issues on which they have no or only limited previous knowledge (e.g., Bernhard, 2012; Brady & Johnston, 2006; Lachat & Sciarini, 2002; LeDuc, 2002; Hobolt, 2006; Kriesi, 2012, 2005; Sciarini & Tresch, 2011; Selb et al., 2009).

Existing research thereby largely emphasizes the relevance of *party information*, namely information about party positions that voters can use as heuristics. According to the main argument of these studies, due to their limited information, citizens use party cues in order to “infer other information and, by extension, to make decisions” (Bullock, 2011, p. 497). In the same vein, Kriesi (2005, p. 139), refers to these partisan heuristics as “the quintessential shortcut in direct democratic votes.”

More recently, an increasing number of studies have investigated the effect of *policy information*, i.e., explicit information about the provisions and immediate consequences of policies (Bullock 2011, p. 497), on individual opinion formation (see Arceneaux, 2008; Boudreau & MacKenzie, 2014; Bullock, 2011, Nicholson, 2011, Slothuus & de Vreese, 2010; Cohen, 2003; Rahn, 1993). Specifically, Boudreau & MacKenzie (2014) conduct a survey experiment, in which respondents randomly receive either, both or neither a party cue and/or a bit of unidimensional policy information regarding the initiatives on the 2010 California general election ballot. They find that policy information in conflict with voters’ own party’s position can counteract the effect of party cues, especially if the citizens are politically knowledgeable and strongly partisan. In the context of Switzerland, Kriesi’s (2005) and Colombo & Kriesi’s (2016) observational studies have argued that specific arguments related to the ballot proposal play a central role in opinion formation. Most recently, Dermont (2018) and Stadelmann & Dermont (2018) have emphasized the multidimensional nature of voting decisions. According to this conceptualization, when forming their opinion on a ballot proposal, voters may like some elements of a policy while disliking others. Opinion formation on the proposal at stake therefore entails weighing the pros and cons of a proposal against each other. Empirically, these authors demonstrate that voters use multiple pieces of policy information simultaneously to make their decision.

This research suggests that information on both policies and parties may be relevant to individuals' opinion formation within the context of direct-democratic campaigns. The following paragraphs present hypotheses that explore the specific mechanisms behind these potential campaign effects in greater depth.

First, considering policy information, the question arises as to whether and how new information that voters receive during the campaign changes people's thinking about a policy or specific elements of a policy. To answer this question, it is helpful to conceptualize voting decisions on policies as multidimensional choices. Multidimensionality implies that one can empirically observe which elements of a policy are more or less relevant to citizens' opinion formation and how they affect citizens' evaluation of a proposal. From this perspective, new policy information that citizens receive over the course of a campaign can be expected to influence policy preferences in two ways: On the one hand, the relevance of one or another aspect of the policy gains or loses importance in an individual's opinion formation (Druckman, Peterson & Slothuus, 2013). On the other hand, its effect on the decision changes: for example, an aspect that had previously led to opposition (support) is evaluated differently in consideration of the new campaign information and, at the end of the campaign, triggers support (rejection). Such changes in policy preferences should only occur for those aspects of a policy that have come up during the campaign. In contrast, aspects that have not been addressed by the campaign should be characterized by stable policy preferences:

H1: Changes in policy preferences occur with regards to aspects of a policy that have been prominently discussed during the campaign.

, We still lack consistent knowledge about how party information interacts with policy information. Put differently: whether there really is an independent party effect remains unclear. Colombo & Kriesi (2016) show that over the course of the campaign, voters move closer to the position of their preferred party. Nevertheless, their observational approach does

not allow them to determine if such shifts are only due to a biased processing of information, as the motivated reasoning theory would have us believe, or if another effect might also be present (Colombo & Kriesi, 2016; Lau & Redlawsk, 2006; Taber & Lodge, 2006). The aforementioned theory posits that individual (party) preferences influence the selection of and exposure to information during a campaign. Citizens receive more policy-related information in line with their preferred party's view than arguments against this position. Similarly, the policy information that previous experimental studies (Boudreau & MacKenzie, 2014; Bullock, 2011) have used to treat respondents strongly focuses on the potential outcomes or consequences of said policies, which often coincide with party-ideological interpretations. Hence, the partisan and policy information voters receive in the course of a campaign are strongly interconnected and existing studies have found it difficult to disentangle the party effects from the policy information effects. We argue that an independent party effect could take place through two paths.

The first one is closely linked to arguments about party heuristics. Hence, regardless of policy-related information, voters tend to vote in accordance with their preferred party. Technically speaking, individuals react to their preferred party position, whether it is among the supporters or the opponents of a proposal – even when the policy information they receive is controlled for:

H2: There is an independent party heuristic effect whereby voters react to their preferred party's position in the process of forming their opinions even when policy information is controlled for.

A second party information effect would not be directly linked to personal party affiliations, but to the size of the supporting party coalition, thus reflecting the degree of conflict among the political elite (Bornstein & Thalmann, 2008; Stadelmann-Steffen, 2011). Thereby, a broad political coalition supporting a policy proposal could serve as a signal to

voters that the proposal at stake is important enough and of good enough quality for it to be backed by many parties. Such a party coalition effect would manifest itself in the fact that, regardless of policy design and individual party identification, voters would increasingly support a proposal capable of garnering the support of a broad coalition of political parties.

H3: A broader supporting party coalition increases citizens' support for a ballot proposal, independent of policy design and individual party affiliation.

Experimental design

To approach the questions of whether and how policy and party information affect policy preferences over the course of a campaign, this contribution relies on a survey experiment, which measures support for specific policy proposals. Before and during the campaign on the Swiss energy law in May 2017, we conducted a three-wave survey consisting of a panel for the first wave and additional cross-section samples for the subsequent waves. The centerpieces of all three repeated cross-section surveys were the three conjoint experiments (one for each wave) examining voters' preferences for the energy law and including policy and party information, an approach that allowed us to observe how the debate influenced the policy preferences of the population. The panel waves are only considered descriptively in order to depict change in people's voting intention and, thus, to inform about whether attitudes shift over the course of the campaign. The repeated cross-sections are used to test our hypotheses. Below, we explain the setup of the case and the experiment itself. Further detailed information is available in the supplementary materials.

Case

We chose a popular vote on a new energy law in Switzerland to test the relevance of campaigns and policy and party information. Switzerland is home to most direct democratic decisions in the world (Altman, 2010) and therefore a prime example of citizen decision

making. Being regularly confronted with popular initiatives and government proposals on a variety of issues and government levels (i.e., at the national, cantonal and local level), citizens in Switzerland are quite used to voicing an opinion on complicated issues (Linder & Müller, 2017). The case of Switzerland therefore presents a laboratory for investigating voters' decision making and an environment where we would expect citizens to readily engage with the task at hand due to their previous experience with direct democratic rights.

The new energy law, voted on and accepted in May 2017, is a suitable case for several reasons. First, only one national decision was taken on this voting day, which is rarely the case in Switzerland. Whereas campaigns on different issues interfere with one another if several proposals are on the ballot on the same day, on this occasion, the campaign fully focused on the energy issue and can therefore be analyzed in isolation. Second, the energy issue and, consequently, the future of nuclear power in Switzerland have constituted a highly contested issue for a while, but especially after the 2011 incident in Fukushima. The debate has been ongoing and voters were likely to be at least superficially informed about the issue at the beginning of the campaign. Therefore, it is not unreasonable to assume that they were able to make a reasoned decision in all three waves, if they wanted to. Third, the issue offered many different solutions, and several of them were discussed in the course of the preceding parliamentary debate. The experiment therefore echoes the parliamentary debate and enables us to assess what preferences the public held towards the various design options for this energy law. As such, the conducted conjoint experiment resembled the actual decision situation as closely as possible and included the main points raised during the debate.

Overall, while we argue that Switzerland in general and the ballot proposition on the new energy law in particular provide ideal conditions to investigate our hypotheses as far as internal validity is concerned, we acknowledge that we need to be cautious when generalizing the findings to other contexts and votes. On the one hand, policy information is, of course, specific

to a specific vote. Hence, we cannot exclude that our results on policy arguments are also case, i.e., vote, specific. On the other hand, whereas our experimental set-up very closely fits real decision situations in direct-democratic Switzerland, we argue that our main results are also relevant beyond the Swiss case. In fact, it can be assumed that whereas decision processes and citizens' roles vary strongly across country contexts, the mechanisms of individual opinion formation may do so much less. Rather, they may be grounded in the more generic socio-psychological processes of how to treat, weigh, and combine information.

Setup of the Conjoint Experiment and Campaign Context

Following Bullock (2011) and Boudreau & MacKenzie (2014), the experiment used in this study included simultaneous treatments for policy and party information, allowing respondents to choose which information they considered when they made their decision. As suggested by Dermont (2018) and Stadelmann-Steffen and Dermont (2018), instead of single information treatments, we used a conjoint analysis respecting the reality of a multi-dimensional choice.

In the conjoint module of the survey, respondents were shown five paired (5x2) conjoint profiles. The profiles presented fictive policy proposals based on the actual vote and the alternatives discussed in parliament. Respondents answered which one of the two contrasted options they would prefer, and for each profile individually, how likely it was that they would support this policy. For the rating answer, respondents were asked how likely it was that they would support such a (fictive) policy if the vote was to take place the following Sunday, allowing them to refine their support on a scale from 0 to 100.

The respondents received 7 pieces of information— six policy attributes and information describing political parties' position on the (fictive) policy—before they were asked to make

their decision. The aforementioned six attributes included the cost of the policy, the policy measure to support renewable energies, whether or not large hydropower is included in the promotional measures, the source of funding (tax type), exceptions for energy-intense industries, and the treatment of nuclear power plants. The party position treatment informed respondents of which parties supported and which parties opposed the proposal. The three options we used included a left-green vs. a middle-right coalition (Greens & Social Democrats vs. Christian Democrats, Liberals and the People's Party), a left-centrist vs. a right coalition (with Christian Democrats also supporting the proposal), and a grand coalition vs. a far-right coalition (with only the People's Party in opposition to the project). Table A.1 in the appendix documents the attribute levels. Fig. A.1 shows a screenshot of the decision task.

- [Fig. 1 around here] -

We are confident that this experimental design covers all central issues and aspects of the policy that the parliamentary and the public debates brought up during the campaign. Parliamentary discussions focused on identifying the political instruments to be used in promoting renewable energies. In contrast, public debates during the campaign mainly revolved around the costs that the new energy law would inflict on consumers and industry alike. Both concerns are included in the conjoint experiment. The analysis of paid media during the campaign (Heidelberger, 2017) confirms this claim: in this highly intense campaign with over-average paid media advertisements, the overwhelming majority of arguments against the energy law concerned the *costs* on the population the latter would entail. Initially, the financial costs for households and the costs in the form of constraints (e.g., less warm water, less tropical fruits, less punctual trains) took center stage. However, towards the end of the campaign, the critique of *wind energy* received more attention (ibid., p. 15f.).

Meanwhile, the three most prominent aspects that the pro-side sought to highlight had to do with the increase in energy efficiency that the new energy law would entail, the *economic*

gains expected to accrue as a result of energy production in Switzerland, and the *phase-out* of fossil and nuclear energy that the reforms would lead to. It is worth mentioning that the debate about the future of nuclear power has been ongoing since the nineties and has been voted on on several occasions thanks to popular initiatives calling for the phase-out of nuclear power. Summarizing, the public debate, as it was framed by the political elite during the campaign, differed from the debate in parliament. This difference needs to be kept in mind when interpreting the results.

In light of this, respondents in our survey received several pieces of information on how exactly the policy could be designed, as well as information about the party coalition advocating in favor of the proposal. Based on this information, respondents had to indicate how likely they were to support each hypothetical proposal in a ballot vote. Therefore, this rating question captures an individual's vote intention on ten specific proposals. We use it to derive our dependent variable in the models presented below.

Following Hainmueller, Hopkins and Yamamoto (2014), the specific policy design and the party coalitions that were presented to the respondents in the repeated tasks of the experiment were the result of a random combination of pre-defined attributes and attribute levels. Illogical combinations of treatments were excluded. Repeating the conjoint experiment with three cross-sections over the course of the campaign allowed us to observe how the influence of policy information and party cues changed (or remained stable) over time.

To analyze the effects of policy information and party cues, we estimated and discussed the AMCE (average marginal component effects, Hainmueller et al., 2014) of each attribute. The AMCE is the "marginal effect of attribute averaged over the joint distribution of the remaining attributes," i.e., the influence of a specific piece of information similar to a marginal treatment effect when we control for all other combinations of attributes (Hainmueller et al. 2014: 10). Therefore, if the effects of policy information and party cues change over the course

of the campaign, this is an indication of changing policy preferences. To estimate the AMCE and the interaction effects between the attributes and individual variables such as party identification (ACIE, average component interaction effects, Hainmueller et al., 2014), the R package *cjoint* computes generalized linear models, which consider weights and clustered standard errors per individual and accounting for excluded combinations of attribute levels. These models allow us to observe the individual effects of certain attributes and, hence, to disentangle the multidimensional treatment. Due to the randomized setup of the experiment, no explanatory or control variables for policy support itself, such as ideology, age or gender, are needed to obtain valid attribute estimates. Moreover, we also refrain from integrating control variables, since we are not interested in the general levels of support, but in the specific changes in support that are attributable to policy information and party information. The results are presented in the plots in the main body of this study, whereas the full tables of results are available in the appendix. Moreover, the data, code and procedure are available in the supplementary materials.

Data

In the center of this analysis are three waves of a repeated cross-section survey. The first wave collected 2,891 responses, the second wave had 1,020 respondents, and the third wave - 925 responses, summing up to a total of 4,836 responses. This repeated cross-sectional survey will be used for most analyses presented in this study. Moreover, we also collected panel data parallel to the cross-section based on the first wave of the study. That is, the 2,891 respondents from the first wave were contacted twice more. The panel received 1,841 responses in the second wave and 1,253 responses in the third wave. These panel data are used to analyze how vote intentions changed over the course of the campaign.

The three waves of the (repeated cross-sectional and panel) survey were conducted ten weeks, one month and one week prior to the vote (see Fig. 1). The first wave establishes a pre-campaign setting. At the time of the second wave, the campaign had just started to get into its ‘hot’ phase, as illustrated by the start of paid media (newspaper advertisements). It also generally coincided with the distribution of the postal ballots to all citizens, so the early voters had already voted at this point in time. The last wave took place in the last week of the campaign, when many people had already cast their vote or reached a decision. Ballot boxes for elections and popular votes always close on the respective Sunday at 12am, but most voters return their ballot by mail before Sunday. We used Qualtrics to collect all samples from online panels and targeted the population over the age of 18 living in Switzerland. We established language, age, gender and canton (i.e., the subnational units) quotas to reach a representative sample. The survey was available in all three languages--German, French and Italian—official in Switzerland. Nevertheless, recruiting enough Italian speakers for the repeated cross-sections proved challenging and, as a result, the samples are only representative for the French and German part of Switzerland. Further tests for representativeness (see supplementary materials) show that the first wave has a slight overrepresentation of the 25-34 age group, while males are overrepresented in waves two and three and Christian Democrats are underrepresented in all three waves (judging by the 2015 national election results). However, this deviation parallels losses in subnational elections since 2015. We weighted respondents differently based on language, age and gender to correspond to the population of Switzerland. We did not correct for party preference.

Results

The analysis proceeds in two steps. First, we rely on the *panel data* to analyze citizens’ vote intention over the course of the campaign. This provides us with a first hint of whether

the campaign affects vote intentions. However, a campaign effect could also result in changing policy preferences and alter the way voters evaluate and weight specific elements of a ballot proposition. To explore these matters, we present the results of the conjoint analyses in the second empirical step.

- [Fig. 2 around here] -

Figure 2 depicts vote intentions in all three panel waves and, thus, presents a general picture of the dependent variable over the course of the campaign on the new energy law. The figure reveals several relevant insights. Our first impression of the figure suggests that the group of undecided voters became clearly smaller as the voting day drew close. Of course, this is not a surprising finding, but it nevertheless implies that the month before a vote takes place makes people think about the issue at hand. Eventually, most of them are able to form an opinion on the ballot proposal. This observation is also in accordance with findings from the post-poll survey, where roughly half of the voters stated that they had come to their decision at some point during the campaign (Tresch et al., 2017, p. 11). However, our data include a higher share of undecided voters than do the trend analyses published on several instances before the vote. This difference is probably caused by the fact that we only included three response categories (Yes, No, Undecided), while the pre-ballot polls offered two additional categories (i.e., “rather yes” and “rather no”).

Although this figure does not tell us anything about whether and how campaign activities influence this opinion formation process, it implies that the campaign, broadly speaking, matters in that a relatively large group of undecided voters eventually forms and voices a vote intention. In contrast, and this is a second interesting finding, rarely did the campaign change an already formed opinion about the energy law: Only very few voters altered their vote intention from a yes to a no or vice versa. Thirdly, the figure illustrates that the number of yes-voters remained more or less stable, while the group of no-voters increased drastically over the

course of the campaign. Overall, the patterns identifiable in the figure may lead to the conclusion that, in a campaign context, voters form their opinions mostly in response to the aforementioned mobilization and time effects, strong information effects do not alter intended voting behavior.

- [Fig. 3 around here] -

In a second step, we delve deeper into the latter and present the conjoint analyses, which inform us about the elements of the energy policy proposals that voters considered important and the likelihood of respondents' preferences and the relevance of these elements changing over the course of the campaign. Hence, in the following analyses, we are not mainly interested in the dependent variable (i.e., individuals' vote intention, whereby higher values suggest a higher likelihood of voting yes), but in the *policy preferences* that influence these vote intentions. In this vein, we assume that a campaign can influence policy preferences by providing information about the different options (e.g., a different instrument used to promote renewable energy being identified as more efficient, certain costs said to be reasonable etc.), and therewith vote intentions. Fig. 3 depicts some initial results of the conjoint analyses based on the data in the repeated cross-sections. The figure illustrates how the different elements of hypothetical ballot proposals influence vote intention (the support for a given policy) at different times of the campaign. As a reading example, an energy transition policy which includes exceptions for energy intensive industries is evaluated less positively than a policy without exceptions (the AMCE for exceptions is negative). For the first two waves, moreover, this effect is significantly different from zero (the confidence interval does not include zero), while the related AMCE is not significant in the third wave.

The figure reveals that the patterns across the three waves look very similar.¹ Across all three waves, the costs on households that a proposal entails is the most important trigger for rejection, whereas nuclear phase-out, the inclusion of large-scale hydropower, and a large

political coalition in favor of a proposal are the most important factors that increase respondents' support for the energy policy proposals. At the same time, respondents remained indifferent regarding, e.g., the concrete measure and its funding. The prominence of costs and nuclear phase-out reflect the fact that those arguments were supported by the opposing and supporting coalition (Heidelberger, 2017). Thus, the results imply that the campaign on the new energy law did not substantially change the electorate's policy preferences: We do not find evidence that, over the course of the campaign, specific aspects of these policies gained importance in voters' opinion formation process because we do not see different designs exerting a strong influence on policy support.

Nevertheless, there is one notable exception to this pattern of stability. At the beginning of the campaign, the higher the costs associated with a specific proposal were, the lower the support for said proposal turned out to be, and this association was almost linear in nature. Moreover, the very minor cost of 8 CHF per household per month led to a significantly lower likelihood that an individual supported the fictive ballot proposal. As the campaign proceeded, the negative effect of these low costs became smaller. In the third wave, proposals including the aforementioned additional cost of 8 CHF did not do significantly worse than proposals entailing no costs. This development reflects the high importance that the cost factor received in the public debate. While the proponents of the energy law emphasized that the costs on households would be very moderate, but still reasonable for the promotion of renewable energies, its opponents suggested that the new law and energy strategy would cost households thousands of Swiss francs. Our findings imply that this intense discussion on reasonable and expected costs affected citizens' preferences regarding acceptable costs. Moreover, the results further suggest that a majority of citizens did not believe in the excessive costs predicted by the policy's opponents. Given our results, where high costs are still the single most important factor behind the rejection of a proposal at the end of the campaign, the new energy law would

not have received a popular majority if a majority of citizens had believed in the cost predictions of the opponents of the bill.

Summarizing and with respect to hypothesis 1 we conclude that campaigns do not fundamentally change underlying policy preferences for energy policy proposals. Most importantly, they do not change policy preferences as far as aspects that have not been prominent in the campaign are concerned. An example of the latter is the question of which specific measure to use for the promotion of renewables. At the beginning of the campaign, citizens were indifferent to this policy measure: they neither preferred one specific measure, such as feed-in tariffs, tax reliefs, or investment grants or redistribution, nor particularly disliked one. This pattern persisted over the course of the campaign. However, this is not surprising given that the public campaign – in contrast to the parliamentary debate – did not actually involve a discussion of different policy measures and their respective advantages or disadvantages. Hence, we would not have expected the campaign to have an effect on preferences for different policy measures. However, based on the results, we might add an additional condition to our first hypothesis: Even if an aspect is rather intensely discussed in the course of the campaign, if the issue is strongly predisposed, we might not expect the campaign to change people's policy preferences. An example of this pattern is the treatment of existing nuclear power plants. As discussed previously, opposition against this energy source has been mobilizing in Switzerland for decades. As a result, most people in Switzerland have a consistent opinion on nuclear power plants, and this opinion is unlikely to change fundamentally during a campaign.

The results of the conjoint analysis (Fig. 3), provide a first glimpse into how hypotheses 2 and 3 – about the effect of party positions on citizens' support of policies – fare. The estimations reveal that a broad supporting political coalition, including the moderate right parties, is associated with increased citizen support for a proposal. More precisely, identical

fictive proposals exhibited higher levels of support if respondents received the information that not only the middle-left parties, but a broader coalition including the Liberals supported the proposal. Whereas this result implies that party positions seem to matter for citizens' decision making even when policy information is controlled for, the analyses so far do not allow us to parse out if the party effect results from a party affiliation effect or, rather, a coalition effect.

To test hypotheses 2 and 3 more thoroughly, however, we need to analyze how different voter groups, i.e., people grouped together based on their party affiliations, react to the party information. Fig. 4 therefore depicts the results of a model that includes interaction effects between the different conjoint attributes (i.e., policy and party information) and the respondent's preferred party. Interestingly, the included party position treatment is not significant for most voters. However, for voters of the Christian Democrats (CVP) and the Liberals (FDP), i.e., the parties for which the treatment changes between support and opposition in the experiment, a clear reaction to the treatment can be observed: if their party is not in favor of a proposal, even with all other design differences controlled for, support is significantly lower. The effect size is thereby quite large, corresponding to the difference in support between a cost-neutral and the most expensive proposal. Conversely, voters on the left and right do not react to larger coalitions, i.e., they care about the issue itself rather than the broadness of its support.

- [Fig. 4 around here] -

Summarizing, the findings only partially corroborate our expectations, but tend to support hypothesis 2 rather than hypothesis 3. On the one hand, the party position of the preferred party seems to matter, but only for voters in the middle of the political spectrum – the Christian Democrats and the Liberals. These respondents seem to use the party cue as additional relevant information in the making of their decision. In contrast, given that left-green and far-right parties almost consistently support or reject renewable energy policies, their

voters do not gain any new information based on the party treatment. Moreover, the party-specific analyses also imply that there is no general and independent coalition effect. In fact, left-green and far-right voters do not support or oppose renewable energy policies more strongly if they know that their preferred party is in a broader coalition.

Conclusion

In this paper, we have explored whether and how policy and party information affect voters' opinion formation in the context of campaigns before direct democratic ballot votes. We conceptualize ballot decisions as multidimensional choices, which also facilitates the tasks of testing for and isolating the role of policy information and a party effect. In order to accomplish said tasks, we used a novel data set that enabled us to combine the merits of previous research: On the one hand, we study policy preferences at different points in time, i.e., over the course of the campaign (see Colombo & Kriesi, 2016); while on the other we test for the role of policy-related and party information simultaneously in an experimental setting (see Bullock, 2011; Boudreau & MacKenzie, 2014).

We found that the campaign prior to the ballot vote on the case at hand did affect voters' opinion formation to the extent that over the course of the campaign the proportion of undecided voters clearly decreased. Moreover, our results are in accordance with recent research that both policy information and political party cues affect opinion formation in direct-democratic campaigns (Bullock, 2011; Boudreau & MacKenzie, 2014; Colombo & Kriesi, 2016). However, we provide new insights on the mechanisms behind these effects.

Based on our conjoint analyses, we conclude that voters in the case under investigation evaluated the various dimensions of renewable energy policies quite consistently during the campaign. Their policy preferences remained quite stable. The exception to this pattern is the

retrenching relevance of the costs related to the proposal – an aspect that raised controversy and was intensely discussed during the campaign. This example, especially in comparison to aspects like nuclear phasing out, leads us to conclude that the treatment of an aspect in the campaign alone does not suffice to provoke changes in policy preferences. An additional condition for such shifts to occur seems to be that, rather than only mobilizing existing inclinations (as was the case with the nuclear phasing out), the treatment provide new information.

A second result worthy of discussion is that party cues have an independent effect. The latter goes beyond party-specific interpretations of policies and their different elements. Our findings suggest that voters in the middle of the political spectrum strongly react to whether their preferred party supports or rejects a ballot proposal. Conversely, we did not find empirical evidence in support of the assumption that a broad party coalition in favor of a proposal could increase policy support across party affiliation.

The study has some limitations. First, the number of observations for the second and third waves of the survey limits our ability to carry out group-specific analyses. It also affects the comparison between waves. For example, we could only look at differences between either waves or voter groups, while it was not possible to analyze whether, for instance, policy preferences of voters aligning themselves with different parties diverged over the course of the campaign. Second, whereas experimental data have several advantages mainly related to internal validity, they have, by definition, some disadvantages concerning external validity. While we argue that conducting these experimental analyses in the course of a real-world campaign on the issue is the best one can do in terms of external validity (see also Boudreau & MacKenzie, 2014), the fact that we focus on a single campaign in a single country decreases the generalizability of our conclusions. Moreover, a survey accompanying a real ballot vote is not the ballot decision itself, even if designed accordingly, and it is possible that not all citizens would receive all the

information we presented them with in the experimental setup. In order to get additional insights into how different ballot and campaign contexts affect the patterns found in this study, a venue for future research could be to apply a similar research design to several votes and country contexts.

Nevertheless, the presented analyses provide various insights relevant beyond the case under consideration. Methodologically, capturing the relevance of policy information and party information by the means of a multifactorial survey experiment – a conjoint analysis – seems to be worthwhile, as does using this approach to disentangle party and policy effects. Substantially, the persistence of policy preferences suggests that citizens are not susceptible to short-term attempts to influence them. Rather, the political elite needs to inform voters about possible consequences more than only a few weeks prior to a vote or it needs to canvas to convince them to support a policy. While a campaign might influence which aspect of a policy the voters focus on in a decision, our results suggest that only under specific conditions do campaigns affect the underlying policy preferences.

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Footnotes

¹ Note that due to the smaller number of observations in wave 2 and, more importantly, wave 3 the confidence intervals are considerably larger in these waves. If the estimated effects remain more or less constant in magnitude, but become insignificant due to these larger intervals, we do not interpret this as a systematic change in preferences.

Figures

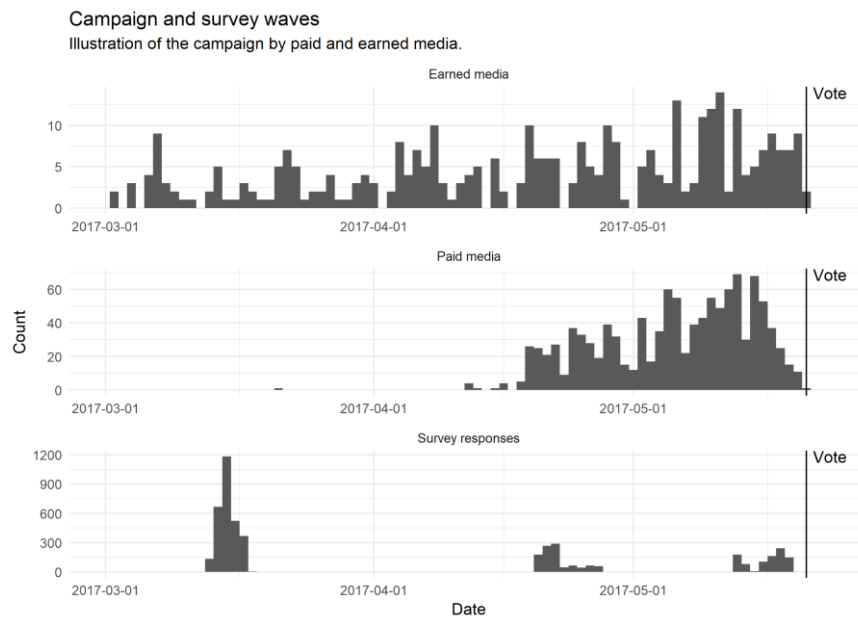


Fig. 1: Media coverage of the issue at stake across the three survey waves (May 21th 2017).

Earned media refers to articles by journalists, while paid media refers to media ads. Source: Heidelberg 2017.

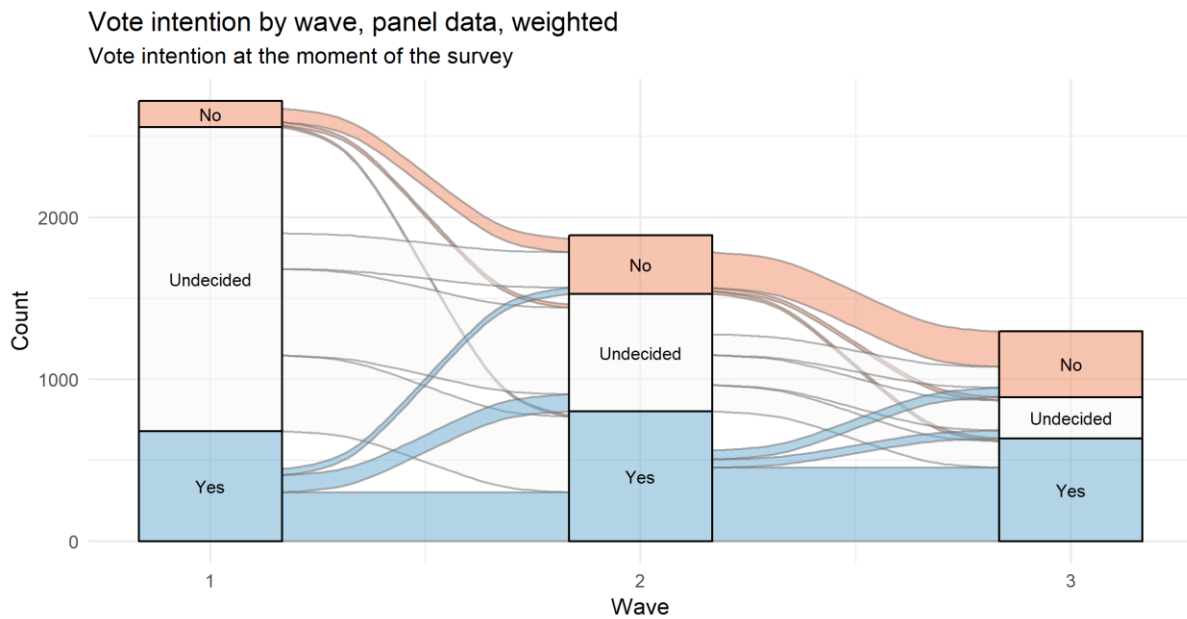


Fig. 2: Vote intentions over the course of the campaign. The share of no votes rises from 6% in the first to 30% in the last wave, and the share of yes votes increases from 26% to 49% in the same interval. The share of undecided voters drops from 68% to 21%. According to the authorities, 58.2% of participants in the actual vote voted «yes» and 41.8% voted «no.» The lowering bars also represent panel mortality. Note: the figure is based on the full sample for each wave, i.e., wave 1 = 2,891 respondents; wave 2 = 1,841 respondents, and wave 3 = 1,253 respondents. A variant without panel mortality both for the panel and the cross section is available in the supplementary materials.

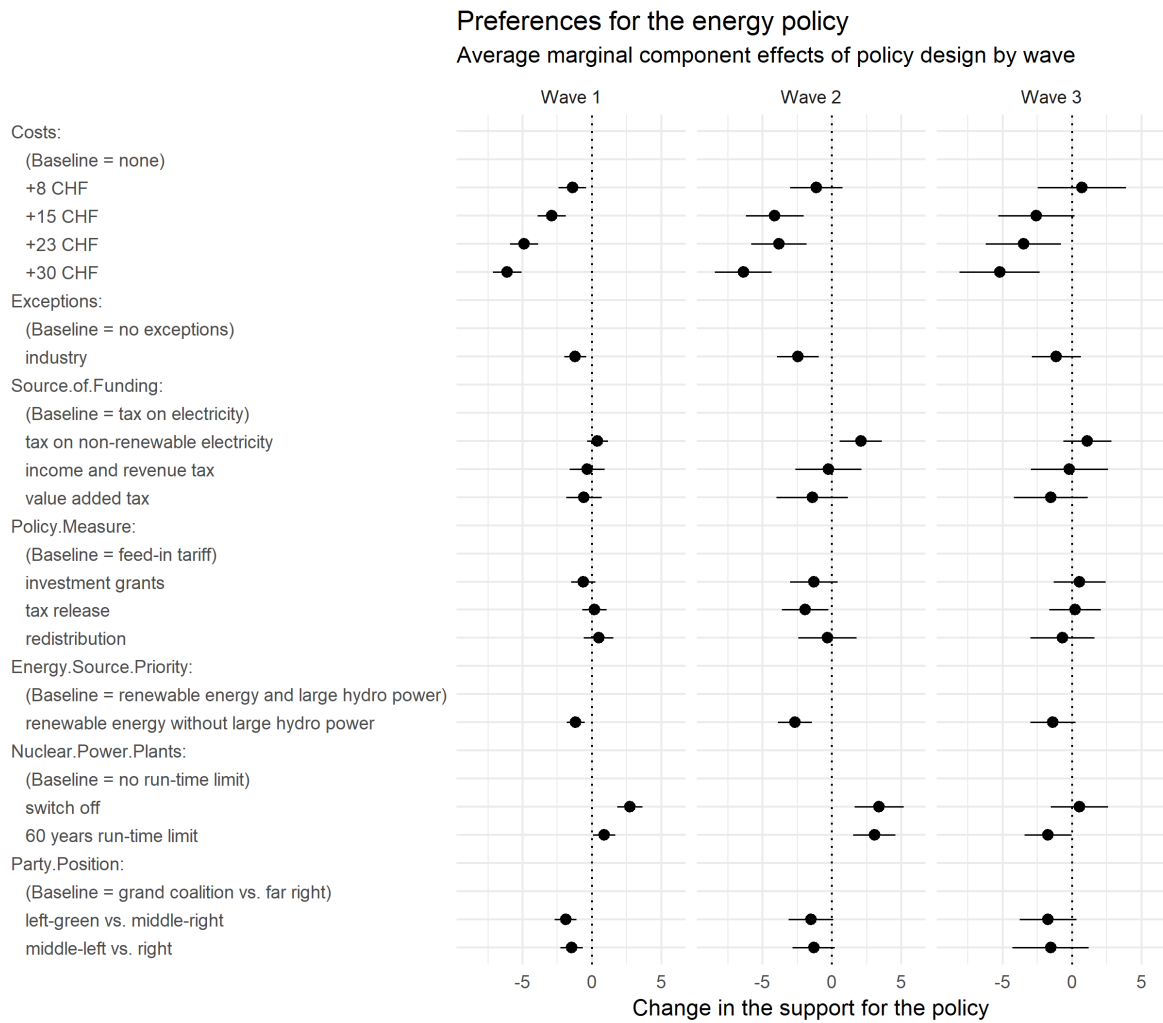


Fig. 3: Support by survey wave. Note: Average Component Interaction Effects (ACIE, mean and 95% confidence interval). N = 4,640. Full results can be found in Tab. A.2 in the Appendix.

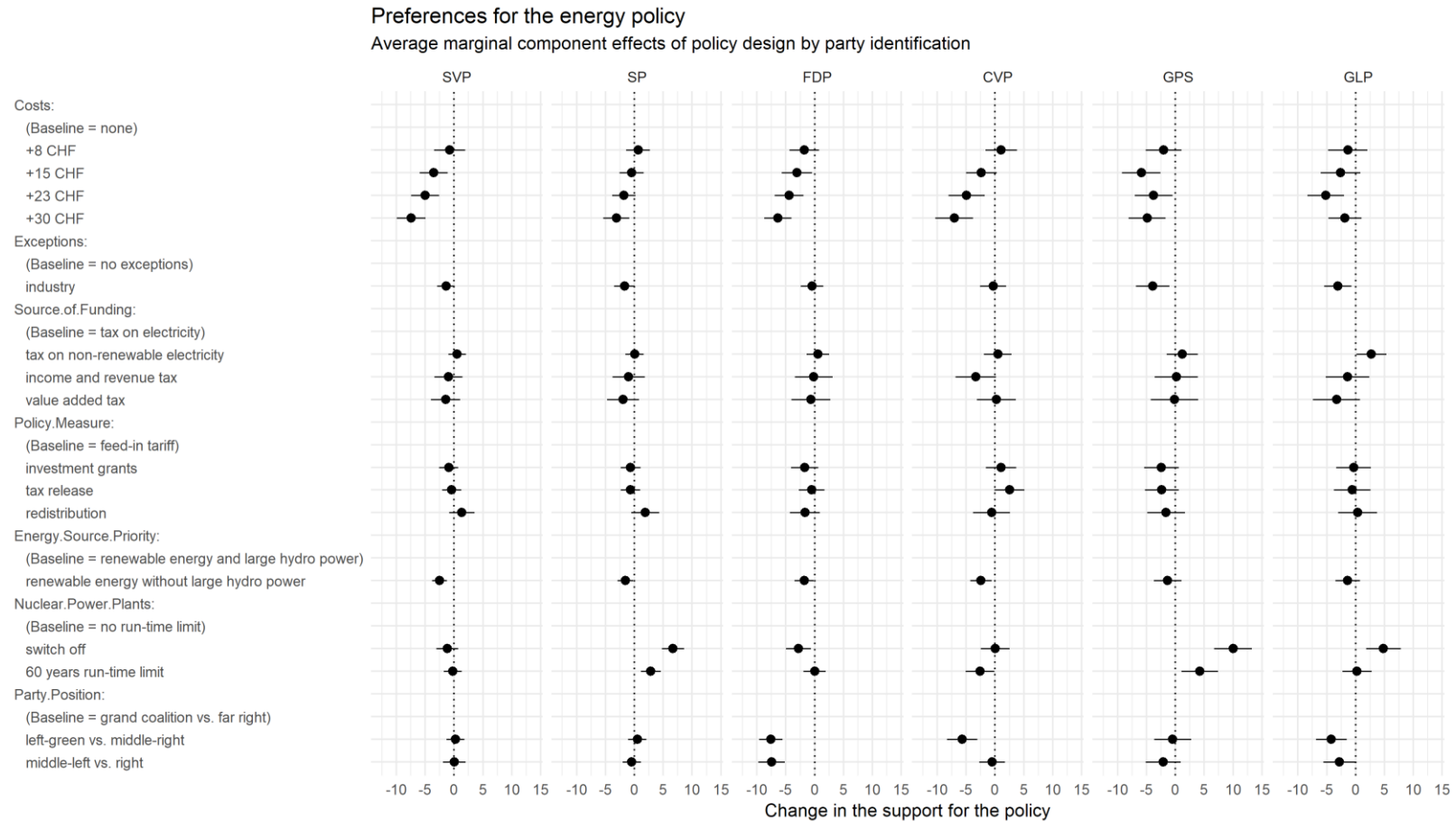


Fig. 4: Support by party preference. Note: Average Component Interaction Effects (ACIE, mean and 95% confidence interval). N = 4,640. The three waves are merged. Full results can be found in Tab. A.3 in the Appendix.

Appendix

ATTRIBUTES	LEVELS
Energy Source Priority	renewable energy with large hydro power renewable energy without large hydro power
Source of Funding	income and revenue tax value added tax (VAT) tax on electricity tax on non-renewable electricity
Policy Measure	investment grants for the construction of a new plant feed-in tariff for renewable electricity tax release for production of renewable electricity redistribution to the population != income and revenue tax, VAT*
Costs	no additional costs around 8. — CHF additional monthly costs around 15. — CHF additional monthly costs around 23. — CHF additional monthly costs around 30. — CHF additional monthly costs
Exceptions	no exceptions for energy intensive industries != income and revenue tax, VAT*
Nuclear Power Plants	switch-off within 5 years 60 years run-time limit no run-time limit
Party Position	Yes: Greens & Social Democrats. No: Christian Democrats, Liberals & the People's Party Yes: Greens, Social Democrats & Christian Democrats. No: Liberals & the People's Party Yes: Greens, Social Democrats, Christian Democrats & Liberals. No: the People's Party

Table A.1: A list of all attributes and levels used in the conjoint analysis. *Notes:* The attributes and levels were assigned to each task in a randomized way. *These combinations were excluded from the conjoint designs, since they do not represent reasonable variants of renewable electricity proposals.

Um den angestrebten Ausstieg aus der Kernenergie und die verstärkte Förderung der erneuerbaren Energien umzusetzen, sind verschiedene Massnahmen in verschiedenen Kombinationen möglich.

Welche dieser zwei Varianten bevorzugen Sie?

	Variante 1	Variante 2
Massnahme	Einspeisevergütung für erneuerbaren Strom ^①	Einspeisevergütung für erneuerbaren Strom ^①
Finanzierung durch	Mehrwertsteuer	allgemeine Steuereinnahmen
Ausnahmen^①	Keine Ausnahmen	Keine Ausnahmen
Umgang mit bestehenden Kernkraftwerken	Laufzeitbeschränkung auf 60 Jahre	Laufzeitbeschränkung auf 60 Jahre
Kostenfolge pro Haushalt^①	Keine zusätzlichen Kosten	Keine zusätzlichen Kosten
Geförderte Energieform	Erneuerbare Energie ohne Grosswasserkraft	Erneuerbare Energie ohne Grosswasserkraft
Parteirollen	Ja: Grüne, SP & CVP. Nein: FDP & SVP	Ja: Grüne, SP, CVP und FDP. Nein: SVP

Variante 1

Variante 2

Unabhängig davon, welche Variante Sie bevorzugen: Wie wahrscheinlich würden Sie diesen Varianten in einer Volksabstimmung zustimmen?

ganz sicher ablehnen 0 10 20 30 40 50 60 70 80 90 100 ganz sicher zustimmen

Variante 1

●

Variante 2

●

Fig. A.1: Screenshot of the conjoint experiment in its German version. Attributes are presented in a random order (party position fixed at the bottom of the form), and the levels are presented randomly with the restrictions mentioned in Tab. A.1.

Attributes	AMCE	Wave 1	Wave 2	Wave 3
Costs (Baseline = none)				
+8 CHF	-1.01*	-1.40**	-1.13	0.70
	(0.49)	(0.51)	(0.97)	(1.63)
+15 CHF	-3.10***	-2.91***	-4.13***	-2.56
	(0.48)	(0.52)	(1.06)	(1.40)
+23 CHF	-4.48***	-4.90***	-3.83***	-3.49*
	(0.46)	(0.52)	(1.02)	(1.38)
+30 CHF	-6.01***	-6.12***	-6.39***	-5.22***
	(0.48)	(0.53)	(1.04)	(1.48)
Energy Source Priority (Baseline = no priority)				
renewable energy without large hydro power	-1.56***	-1.17***	-2.68***	-1.37
	(0.28)	(0.33)	(0.63)	(0.84)
Exceptions (Baseline = no exceptions)				
industry	-1.48***	-1.21**	-2.47**	-1.13
	(0.33)	(0.40)	(0.76)	(0.90)
Nuclear Power Plants (Baseline = switch off)				
switch off	2.50***	2.74***	3.40***	0.53
	(0.39)	(0.46)	(0.91)	(1.05)
60 years run-time limit	0.89**	0.88*	3.05***	-1.73*
	(0.34)	(0.42)	(0.78)	(0.86)
Party Position (Baseline = grand coalition vs. far right)				
left-green vs. middle-right	-1.80***	-1.90***	-1.51	-1.74
	(0.35)	(0.41)	(0.82)	(1.04)
middle-left vs. right	-1.39***	-1.47***	-1.31	-1.54
	(0.37)	(0.41)	(0.78)	(1.41)
Policy Measure (Baseline = feed-in tariff)				
investment grants	-0.55	-0.63	-1.30	0.55
	(0.37)	(0.44)	(0.88)	(0.95)
tax release	-0.26	0.16	-1.94*	0.22
	(0.37)	(0.45)	(0.85)	(0.94)
redistribution	0.15	0.48	-0.32	-0.69
	(0.45)	(0.55)	(1.07)	(1.18)
Source of Funding (Baseline = tax on electricity)				
tax on non-renewable electricity	0.85**	0.40	2.08**	1.11
	(0.33)	(0.39)	(0.77)	(0.88)
income and revenue tax	-0.30	-0.36	-0.26	-0.19
	(0.53)	(0.64)	(1.21)	(1.42)
value added tax	-0.97	-0.58	-1.42	-1.53
	(0.54)	(0.65)	(1.32)	(1.35)

Table A.2: Support by survey wave (Full results of the model presented in Figure 3). Note: Average Marginal Component Effects (AMCE) and Average Component Interaction Effects (ACIE), ordinary least squares regression coefficients and standard errors in parentheses. N = 4,640. More detailed information available in the supplementary materials.

Attributes	AMCE	SVP	SP	FDP	CVP	GPS	GLP	none	other
Costs (Baseline = none)									
+8 CHF	-1.01*	-0.79	0.65	-1.81	1.07	-2.04	-1.35	-1.60	-1.35
	(0.49)	(1.37)	(1.05)	(1.30)	(1.39)	(1.57)	(1.73)	(0.97)	(0.84)
+15 CHF	-3.1***	-3.53**	-0.49	-3.06*	-2.36	-5.89***	-2.61	-3.15***	-4.35***
	(0.48)	(1.24)	(1.07)	(1.34)	(1.35)	(1.69)	(1.76)	(0.90)	(0.98)
+23 CHF	-4.48***	-4.99***	-1.81	-4.42***	-4.91**	-3.76*	-5.17**	-4.88***	-5.43***
	(0.46)	(1.24)	(1.03)	(1.28)	(1.61)	(1.66)	(1.61)	(1.00)	(0.86)
+30 CHF	-6.01***	-7.43***	-3.13**	-6.38***	-7.05***	-4.89**	-1.84	-6.78***	-6.88***
	(0.48)	(1.27)	(1.14)	(1.21)	(1.67)	(1.62)	(1.45)	(0.98)	(0.93)
Energy Source Priority (Baseline = no priority)									
renewable energy without large hydro power	-1.56***	-2.49***	-1.53*	-1.82*	-2.45**	-1.32	-1.38	-1.01	-0.86
	(0.28)	(0.65)	(0.69)	(0.85)	(0.95)	(1.21)	(1.09)	(0.62)	(0.56)
Exceptions (Baseline = no exceptions)									
industry	-1.48***	-1.39	-1.72	-0.48	-0.32	-3.93**	-3.07*	-1.49*	-0.45
	(0.33)	(0.76)	(0.91)	(1.00)	(1.14)	(1.48)	(1.21)	(0.71)	(0.66)
Nuclear Power Plants (Baseline = switch off)									
switch off	2.50***	-1.19	6.70***	-2.81*	0.04	10.02***	4.81**	2.99***	3.29***
	(0.39)	(0.96)	(0.99)	(1.11)	(1.27)	(1.67)	(1.52)	(0.82)	(0.77)
60 years run-time limit	0.89**	-0.24	2.85**	-0.01	-2.59*	4.26**	0.24	1.59*	1.06
	(0.34)	(0.79)	(0.88)	(0.99)	(1.27)	(1.62)	(1.3)	(0.81)	(0.64)
Party Position (Baseline = grand coalition vs. far right)									
left-green vs. middle-right	-1.80***	0.25	0.51	-7.59***	-5.68***	-0.47	-4.20**	-1.39	-1.20
	(0.35)	(0.8)	(0.81)	(1.04)	(1.35)	(1.63)	(1.35)	(0.84)	(0.67)
middle-left vs. far right	-1.39***	0.05	-0.44	-7.45***	-0.50	-2.08	-2.84*	-0.35	-0.35
	(0.37)	(0.99)	(0.80)	(1.16)	(1.14)	(1.55)	(1.38)	(0.80)	(0.65)
Policy Measure (Baseline = feed-in tariff)									
investment grants	-0.55	-0.92	-0.65	-1.74	1.06	-2.40	-0.35	-0.15	0.44
	(0.37)	(0.85)	(0.88)	(1.21)	(1.34)	(1.53)	(1.52)	(0.75)	(0.81)
tax release	-0.26	-0.40	-0.69	-0.51	2.50	-2.36	-0.59	-0.56	0.89
	(0.37)	(0.84)	(0.86)	(1.13)	(1.31)	(1.50)	(1.62)	(0.81)	(0.81)
redistribution	0.15	1.35	1.89	-1.69	-0.59	-1.60	0.35	-0.38	0.18
	(0.45)	(1.12)	(1.23)	(1.32)	(1.63)	(1.67)	(1.72)	(0.96)	(0.92)
Source of Funding (Baseline = tax on electricity)									
tax on non-renewable electricity	0.85**	0.54	0.04	0.57	0.49	1.22	2.71*	0.97	0.51
	(0.33)	(0.78)	(0.80)	(0.99)	(1.22)	(1.37)	(1.32)	(0.7)	(0.66)
income and revenue tax	-0.30	-0.99	-0.98	-0.17	-3.36	0.17	-1.42	0.60	0.77
	(0.53)	(1.24)	(1.44)	(1.67)	(1.79)	(1.90)	(1.92)	(1.15)	(1.06)
value added tax	-0.97	-1.46	-1.93	-0.68	0.22	-0.13	-3.30	1.23	-2.32*
	(0.54)	(1.28)	(1.41)	(1.72)	(1.72)	(2.1)	(2.08)	(1.24)	(1.04)

Table A.3: Support by party affiliation (Full results of the model presented in Fig.4). Note:

Average Marginal Component Effects (AMCE) and Average Component Interaction Effects (ACIE), ordinary least squares regression coefficients and standard errors in parentheses. N = 4,640. The three waves are merged. More detailed information available in the supplementary materials.