

Bottom-up renewal of the Swiss party system

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ABSTRACT

The Swiss party system and the institutional rules guiding elections are an anchor of stability in Swiss politics. This article investigates recent change in cantonal elections, and analyses how electoral swings in cantonal elections diffuse to other cantons, and whether they predict future electoral swings in the national electoral arena. Empirically, the article combines a statistical analysis of electoral results from the period 1990–2017 in cantonal and national elections with a qualitative discussion of the period from 2014 to 2017.

KEYWORDS Electoral swings; subnational elections; diffusion; Switzerland

Introduction

Regional elections matter. Their political impact can go beyond the competences of regional governments, for example as they can send signals to the national government (Anderson and Ward 1996; Rogers 2016). Regional elections can also matter for the analysis of national party systems and their change.

From an analytical perspective concerned with national party systems, we can read and understand regional electoral developments through several lenses (for an overview: Hough and Jeffery 2006). The first focus investigates regional peculiarities, and in issues and grievances that are particularly salient in different regions, related to regional-specific issues (Giger, Müller, and Debus 2011), or to (ethno-)territorial conflicts (e.g. Evans and O’Leary 2000; Caspersen 2006). The second approach views regional elections as second-order elections which allow voters to express grievances with national-level politics or the national economy (e.g. Jeffery and Hough 2003; Rogers 2016). Thirdly, if electoral swings are mirrored at the national and regional level, and across different regions, then regional elections can be read as a barometer for national elections to come (Simon, Ostrom, and Marra 1991;

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Anderson and Ward 1996). Finally, a fourth perspective emphasises local idiosyncrasies (for many others: Wolinetz and Carty 2006).

With an interest in the inter-connection between regional and national elections, this article addresses the case of Switzerland. Most of the previous arguments made about political parties and elections in the Swiss multi-level setting have highlighted regional peculiarities, and accorded little space for general patterns. In the literature on Swiss parties and elections in the Swiss cantons, two of the four above-mentioned analytical perspectives dominate. In line with the first analytical perspective, scholars of Swiss parties describe the party system as territorially fragmented, and elections as highly determined by the cantonal context (Armingeon 1998; Vatter 2002; Ladner 2004), although territorial splits have declined since the 1990s (Bochsler, Mueller, and Bernauer 2016). Furthermore, this literature highlights the extraordinary variety of institutional rules across levels of elections, and between cantons (Lutz and Strohmann 1998; Selb 2006; Leuzinger and Kuster 2018), which makes comparisons between cantonal and national elections largely idiosyncratic (Bochsler and Wasserfallen 2013), a view thus pertaining to the fourth analytical perspective. The second perspective, interested in cantonal elections as second-order elections, is weakly developed, arguably because retrospective economic voting is absent in cantonal elections. Super-large coalitions at all levels of government leave few opportunities to vote for opposition parties (Bochsler and Wasserfallen 2013). In sum, this short overview of the literature might suggest that electoral change in Switzerland occurs erratically, as a product of local peculiarities and idiosyncrasies. However, I am aware only of a single working paper (Ladner and Trippolini 2007), which seeks to identify the regularities, which characterize electoral outcomes in the cantons, and how they relate to national elections.

This article analyses electoral change in Swiss cantonal and national elections, and its inter-connections. In particular, it asks: (1) Is there a pattern of cross-cantonal diffusion of electoral swings? (2) If it exists, how does this pattern relate to electoral swings across the two arenas of electoral contestation, cantonal and national? (3) Are changes driven top-down, so that national elections set a precedent for further developments in the cantons (e.g. due to new cleavages, national institutional change, or national party campaigns), or do changes emerge bottom-up from the cantons, spread across them, and spill over to national elections?

Swiss elections, and the Swiss party system, even though atypical in many aspects, are suited for a study of the spill-over effect of electoral swings. Sub-national elections are held non-simultaneously, allowing for a temporal dependency. The party system is very stable: despite its heavy fractionalization, the Swiss party system is characterized by one of the lowest degrees of inter-election volatility both in Western Europe, and across all democracies.¹ In other words, electoral changes are often very minor, and in particular,

they usually remain significantly below the confidence intervals in pre-election polls. Additionally, in the absence of short-term retrospective economic voting electoral swings or other second-order effects, subnational elections can be indicative of more general electoral swings. Hence, the question emerges of whether Swiss cantonal elections serve as an ideal barometer for national electoral trends.

This study analyses electoral change in Swiss national elections (first chamber) and elections to cantonal parliaments in the period 1990–2017. In line with the overarching question of this special issue, the insights from this analysis are applied to the qualitative discussion of the electoral trends in 2014–2017 in the Swiss cantons, and the parliamentary and governmental election trends are compared to each other.

This article is structured as follows. The next section introduces the institutional order of federal and cantonal elections in Switzerland. Section three introduces the research question, i.e. the articles' focus on the diffusion of electoral change and institutional change, and the empirical research strategy. Section four analyses parliamentary elections in Switzerland in the years 1990–2017, investigating electoral swings across levels using a statistical model. In section five, insights from the quantitative model are employed to analyse the developments in Swiss cantonal elections in the period 2014–2017. Section six summarizes the findings.

The institutional setup and the party system

Elections to regional parliaments and executives in Switzerland are exceptional in the international context, due to their institutional heterogeneity. The 26 Swiss cantons enjoy a very far-reaching autonomy in determining their constitutional structure. The national parliament retains a veto right to constitutional reforms in the cantons, but in reality, it does not intervene in the institutional order of the cantons, so that the Federal Court is the only national body active in providing some limited guidelines for the political organization of the cantons.

The 26 cantons elect their parliaments and governments each according to their own electoral calendar (see [Table 1](#)). For parliamentary elections, all cantons except for five² have moved from majoritarian to proportional election rules (Lutz and Strohmman 1998). The size of proportional districts varies widely.

As a consequence of this wide variance, the number of smaller parties competing for seats and votes differs considerably across and within cantons (Vatter 2003). The electoral system at the cantonal level correlates only partly with the district magnitude in federal elections. In some cantons, federal elections are much more competitive than those that determine cantonal ones, and vice-versa (Selb 2006). This contributes to incongruence between the elections at the two levels.

Table 1. The electoral rules at the cantonal and federal level.

	Federal level lower house	Federal level upper house	Cantons
Parliament size	200	46	49–180 (mean: 102.3)
Election period	4 years	4 years	4 or 5 years
Election rule	proportional, D'Hondt (plurality in 6 single- seat districts)	determined by cantons, majority vote in 24 cantons, 2 PR	proportional, varying formulas (partly) majority vote in 3 cantons
Average district magnitude	7.7	1.8 (1 or 2 seats per canton)	3.08–100 (mean: 21.77)
Legal electoral thresholds	none		mostly none 3–10% in 8 cantons
Government election	indirect, through both chambers		direct, majoritarian (TI: proportional)

Sources: Bochsler and Wasserfallen (2013); Leuzinger and Kuster (2018).

In all 26 cantons, the cantonal executives, counting 5–7 ministers, are elected by the people – mostly by majority vote. Consociational multiparty governments are the rule, not the exception: almost all mandates in cantonal governments are held by the four largest national parties and, more recently, the Greens (Linder 2012, 103–104). However, the inclusiveness and proportionality of these government coalitions has declined as a result of an increasing number of splits within the political majority since the 1990s (Bochsler and Bousbah 2015).

Reforms in the 2014–2017 period

Recent years have been characterized by an exceptional wave of electoral reforms. The cantons have started to harmonize their parliamentary election rules, triggered by a series of decisions by the Federal Court. The Federal Court has the power to assess the constitutionality of the cantonal elections. Since 2004, it has ruled that parliamentary elections by PR with small districts (less than 9 seats) violate voter equality. This has led to a number of electoral reforms where cantons have adopted PR election rules which allow for a proportional allocation of the parliamentary seats at the cantonal level.

In 2014–2017 period, four cantons (Nidwald, Zoug, Schwyz, Valais) elected their cantonal parliaments for the first time according to new, bi-proportional electoral laws. Votes expressed for small parties which fail to win seats in small districts are no longer lost, but contribute to the overall cantonal result of these parties, and are considered in the overall seat allocation. Bi-proportional seat allocation operates using a multi-tier proportional formula, based on the Sainte-Laguë formula. Seats are allocated in small electoral districts, but a cantonal compensation mechanism guarantees proportional seat allocation at the cantonal level, based on the cantonal vote total (Pukelsheim 2009). In contrast to other multi-tier PR models (e.g. in Scandinavian democracies), the bi-proportional formula operates with no upper-tier mandates; all mandates are allocated in electoral districts.

However, as most of the cantons have introduced legal thresholds along with their electoral reforms, the potential effect is contained. Two of the cantons (Zoug, Schwyz) stand out, as they have a considerable number of single-seat districts. Vote returns from these districts are now included in the overall proportional seat allocation. In a fifth canton, Uri, the electoral reform process has stalled at time of writing. Electoral reforms have profited small parties – in particular those on the political left.

Similar to cantonal electoral systems, which were deemed unconstitutional by the Federal Court, the national parliament (first chamber) is elected in very unequally sized districts, with proportional districts ranging between 2 and 35 seats, and 6 councillors from small cantons elected by single-seat plurality. In reaction to the cantonal reforms, several national MPs (some of whom are also involved in cantonal politics) have proposed electoral reforms for national elections along the lines of the cantonal reforms. However, such reforms would produce more losers than winners among the largest parties. It is thus no wonder that the reforms have repeatedly failed to win a majority of votes in parliament. Furthermore, the Federal Court can assess the constitutionality of cantonal laws, including constitutional norms at the cantonal level, but cannot do so for laws applying to the national level.

Other important electoral reforms have taken place in the cantons of Zoug and Basel-City. In 2014, Zoug moved from government elections by PR to majoritarian rules. In 2017, Basel-City decided to abolish legal electoral thresholds. The canton practices the Sainte-Laguë seat allocation formula, with a district magnitude of 11–34. Sainte-Laguë in large districts without any thresholds implies that very small parties can gain representation in parliament.

Territorial splits in the party system

The Swiss party system developed bottom-up. The parties originated in loosely organized political movements around influential politicians at the level of the cantons, which formed party federations at the national level (Gruner 1977). Some of the historical cleavages in Switzerland, in particular the conflict between church and state, or Catholics and a Secular-Protestant alliance, follow territorial lines. This has also led to vastly different party systems, especially with regard to the party representing the centre-right. The Catholic-majority cantons used to be dominated by the Christian Democrats (PPD), the protestant, agrarian cantons were characterized by a strong Swiss People's Party (UDC), whereas the Radicals (PLR) were strong in industrial and urban areas. The Liberals (PLS) used to complement the Radicals with a very similar programmatic profile in the cantons with a French-speaking majority. The Social Democrats (PS) were strong in cities, but their electorate was territorially more evenly distributed. Overall, the party system is more diverse in the urban and protestant cantons (Vatter 2002; Ladner 2004). Only

since the 1990s, have new political cleavages, the nationalization of electoral behaviour (Bochsler, Mueller, and Bernauer 2016), and a degree of gradual professionalization of the parties' central offices (Ladner and Brändle 2001) created a genuine national pattern of competition. Nevertheless, cantonal party branches still profit from a large degree of autonomy.

The rise of a new cultural cleavage around issues related to social liberalization and globalization/European integration, has fundamentally affected the Swiss party system. It has led to a reconfiguration of the left, the rise of the Green party (on the economic left). The Swiss People's Party, a formerly centrist agrarian party, repositioned itself as a nationalist-conservative party (Bornschieer 2015) first in the German-speaking cantons, and only later, and to a lesser extent, in the French-speaking areas. Over the course of this change, since the 1990s, the importance of territorial splits has declined considerably. The change has brought an end to dominant-party systems in the cantons, has led to the establishment of local branches of most major parties in almost all cantons, and has seen the significant electoral decline of the two previously dominant parties of the centre-right, the Christian Democrats and the Radical party (merged with the Liberals in 2007).

New centre-right parties, the Green-Liberals (PVL) and the Bourgeois-Democratic Party (PBD) have expanded gradually: the PVL from a few cantons to primarily urban areas, and the PBD from three German-speaking protestant cantons to other agrarian-protestant areas. They have quickly expanded beyond their traditional fiefs, but remain limited in their electoral appeal, and anchored in the German-speaking parts of the country. The key question is whether the parties will survive, merge with larger parties, or disappear.

While these changes contribute to a harmonization of the party systems in the cantons, and to a nationalization of the national elections, the next section analyses whether electoral swings in cantonal elections precede electoral swings in national elections.

Research question and methodology

The subsequent analysis scrutinizes the cantonal parliamentary elections between 1990 and 2017, and their interplay with the national parliamentary elections. It asks two questions. First, to what degree do parallel electoral swings between Swiss cantons exist? Second, do electoral swings originate in national elections, or do they originate in developments at the level of cantons, which subsequently spread across the country, and affect national elections?

Some narratives relate shifts in the Swiss party system to national factors, such as economic change resulting in the reshaping of the cleavage structure (Bornschieer 2015), or the professionalization of the national party offices, and a

gradual nationalization of media structures and election campaigns. Other narratives relate the changes in the party system to key events at the level of cantons. A paradigmatic case thereof is the nationalist-conservative turn of the UDC, which had its roots in a new strategy of the Zurich branch of the party. In a gradual process, new party cadres with a radical style and position, following the new programmatic direction, took control of other cantonal party branches. In cantons with no previous UDC presence, especially catholic cantons, new party branches loyal to the Zurich party wing were established. While this initially led to fierce programmatic conflicts in the national party, the Zurich-based wing quickly gained control over the party. In a similar vein, the Bourgeois-Democratic Party was founded as a UDC-splinter group in three cantons as a result of programmatic conflict involving both the national and the cantonal level of the party. The Green-Liberals originated from internal party conflicts in the Zurich branch of the Green party, and a split at the cantonal level.

Data and method

Figure 1 offers an overview of the party representation (seat shares) in the cantonal parliaments over the period 1990–2017. I distinguish the two main linguistic regions, i.e. cantons with a German-speaking, and those with a French-speaking majority. The figures are based on the number of party

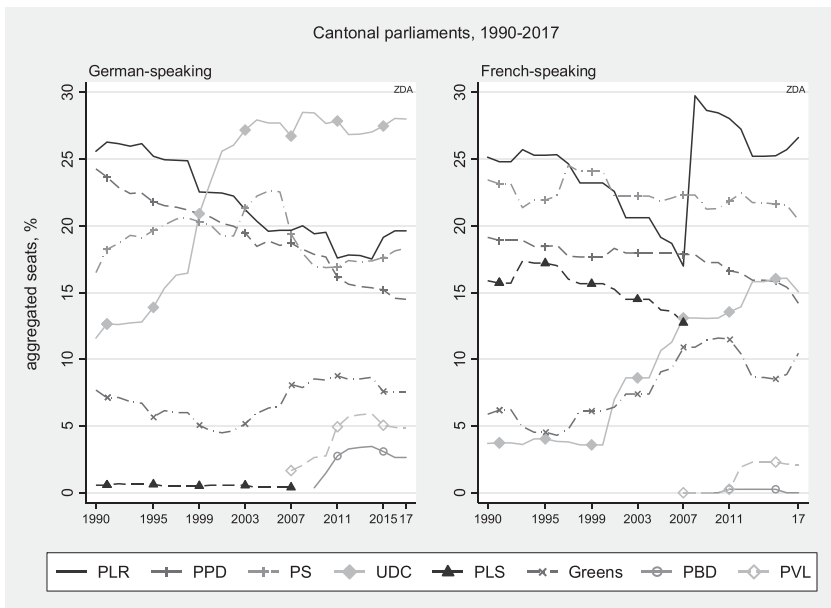


Figure 1. Party seat shares in cantonal parliaments, 1990–2017, by linguistic region.

seats held in each cantonal parliament as a fraction of the total number of mandates. I weight them according to the size of the resident population of the cantons. This population-weighted score allows for comparisons between cantonal and national elections, between the composition of parliaments and governments (which are often quasi-proportional), and for comparisons over time hence overcoming difficulties posed by the fact that many cantons have reduced the number of legislative and/or executive mandates (Bochsler et al. 2004).

Results on the basis of vote shares are only available as of 2013. This partial lack of data is symptomatic for the analysis of Swiss elections. Both the Swiss party system, as well as the election administration are highly federalized. Parties run in electoral alliances across cantons. This is a major challenge for the development of the national election statistics. Earlier data is missing for cantons with majoritarian electoral systems, and for a number of cantons with electoral alliances – even among important parties – which do not allow for a disaggregation of election results. Two improvements in the electoral statistics allow for a systematic assessment of the vote shares over time for almost all cantons back to 2009: vote shares for parties in electoral alliances are estimated using a new method ([Bochsler and Alpiger 2012]), and the election statistics now cover the votes for 24 out of 26 cantons.

The models

I scrutinize different models of electoral swings using cantonal election results for political parties since the 1990s, and national parliamentary election (first chamber) results at the level of the cantons. The cantons serve as the electoral constituencies for national elections. I employ different multivariate models in order to analyse the sequence and diffusion of electoral swings in cantonal elections and in national elections (Table 2). Similar to prediction models, the models highlight conjunctures of electoral change between elections at the same level (cantonal or national), as well as across levels (Figure 2).³ The models offer a descriptive analytical view of the sequencing of national and cantonal electoral swings, and the diffusion of electoral change across cantons. The models build on a range of theoretical models on connections across elections at different levels, as reviewed by Gaines and Crombez (2004).

Each of the two models includes two different sets of variables to understand how electoral change is interconnected.

- The first set of variables, labelled ‘cantonal swings’, suggests that each cantonal party system develops differently. Accordingly, I rely on the experience of previous cantonal elections to predict electoral change in subsequent national elections, and vice-versa, always measuring change in the same canton.

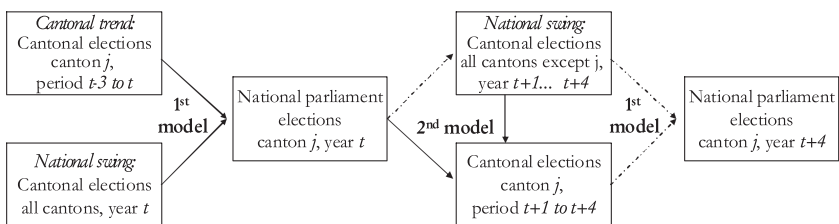
Table 2. Models and variables.

	Dependent variable	Cantonal swing	National swing
		Effects specific to canton; parallel swings across levels	National effects and diffusion between cantons
1st model	National parliamentary elections (first chamber), year t : party vote gains in canton j e.g. <i>national elections 1995</i>	Previous cantonal parliamentary elections in canton j : party vote gains e.g. <i>cantonal elections 1992–1995 in respective canton</i>	Previous cantonal parliamentary elections in election year t : <i>party vote gains, average of all cantons (spatial lag) e.g. all cantonal elections in 1995</i>
2nd model	Cantonal parliamentary elections, year t : party vote gains in canton j e.g. <i>cantonal elections in 1992</i>	Previous national parliamentary elections in canton j : party vote gains e.g. <i>national elections 1991, same canton</i>	Cantonal parliamentary elections in election year t : <i>party vote gains, average of all cantons (spatial lag) e.g. all other cantonal elections in 1992</i>

- The second set of variables measures ‘national swings’. It relies on the expectation that changes in the party system and in electoral trends diffuse between cantons.⁴ Following the literature on diffusion effects, if electoral change in different cantons is linked, then results from cantonal elections might predict electoral change in subsequent elections in other cantons. This effect can apply either for cantonal elections (2nd model) or at the national level (1st model). I assume that all cantons are dependent on each other to a similar degree, i.e. I consider all cantons as belonging to the same dyad of cases.⁵ Going beyond the effects measured by cantonal swings, this second set of variables capitalizes on the data from cantonal elections in all cantons to capture short-term trends which are missing from the model if only elections in the same canton are considered.

In all models, the units of analysis are election results in the cantons, by political party and election year.

Furthermore, institutional factors can alter the effects. First, cantonal elections are not held simultaneously, but are almost equally spread across the four years of the national election cycle (two cantons even have a five-year-


Figure 2. First and second statistical model.

cycle, cf. Table 1). As a result, some cantonal elections are held only a few months after national elections (to the first chamber of parliament), and it is most likely that they echo to the national election campaign from the previous year. Other cantonal parliaments are elected only half a year before the national parliament elections take place, and are widely considered as test elections, which represent the larger electoral trends.⁶ Hence, it is plausible that the strength and direction of cantonal and national swings depends on the timing in the electoral cycle. The statistical models allow for such variation by interacting the variables for cantonal and national swings with a variable for the timing of the election.⁷ The timing of the election is also included in the variance part of the models. In cantons where more time has elapsed between elections at different levels, I expect the predictive capacity of the model to be lower, and the unexplained variance higher.

Second, there is variance in the electoral rules. In the elections to the Swiss national parliament, cantons with only one seat elect their representatives by plurality vote. Generally, elections in very small electoral districts can be highly sensitive to strategic effect and effects of candidate entry (the variance-effect of district magnitude is estimated in Table 3, in the first specification). Therefore, I only include cantons with at least three seats in the national parliament in the calculations. In addition, the canton of Grisons (cantonal elections by majoritarian rules) is excluded, as no vote shares from cantonal elections are available. The district magnitude in the elections to the national parliament is included in the variance part of the model, as I expect that in larger districts, the predictions will be more accurate.

In the first set of models, I assess the electoral change in national parliamentary elections between 1995 and 2015. The vote change in the parties' cantonal electoral results $y_{i,j,t}$ is nested in parties i , cantons j , and election years t .

$$y_{i,j,t} = N(\mu_{i,j,t}, \sigma_{i,j,t}^2)$$

$$\begin{aligned} \mu_{i,j,t} = & \alpha + \beta_1 \cdot \text{cantonal change}_{i,j,t} + \beta_2 \cdot \text{years since cantonal el.}_{j,t} \\ & + \beta_3 \cdot \text{cant change}_{i,j,t} \cdot \text{years}_{j,t} + \beta_4 \cdot \text{national swing}_{i,t} \\ & + \beta_5 \cdot \text{national swing}_{i,t} \cdot \text{years}_{j,t} + \varepsilon \end{aligned}$$

$$\sigma_{i,j,t}^2 = \exp(\alpha_\sigma + \gamma_1 \text{vote share}_{i,j,t} + \gamma_2 \text{years}_{j,t} + \gamma_3 \text{magnitude}_{i,j,t} + \gamma_4 \text{year}_t)$$

Sequencing is crucial both in the first and the second statistical model. Both models show how electoral change is related to electoral volatility in previous elections, thus avoiding possible problems of endogeneity. Only in the second model, for the national swings, do I use the results from cantonal elections in the same year in order to capture (short-term) diffusion effects.

Quantitative analysis, 1990–2017

The empirical models introduced in the previous section explain, first, electoral gains and losses in national elections (with cantonal parties as the unit of analysis), before moving to electoral change in cantonal elections.

Electoral change in national elections (1st step)

I run four models (see Table 3). The first model is a variance-model, predicting not only the vote change in national elections, but also the accuracy of the prediction. The model is more accurate for small parties, cantons with a

Table 3. Explaining cantonal electoral swings in national parliamentary elections, 1995–2015.

	(1) <i>b</i> / <i>rse</i> (variance model; change)	(2) <i>b</i> / <i>se</i> (empty model; change)	(3) <i>b</i> / <i>se</i> (change)	(4) <i>b</i> / <i>se</i> (vote %; lagged DV)
<i>Main part</i>				
Cantonal trend	0.704** (0.115)		0.667** (0.101)	0.616** (0.100)
Years since election	−0.065(*) (0.034)		−0.061 (0.082)	−0.074 (0.081)
Cantonal trend * years	0.227** (0.056)		0.204** (0.044)	0.184** (0.043)
National swings	0.221(*) (0.130)		0.264* (0.121)	0.290* (0.119)
National swings * years	−0.223** (0.061)		−0.236** (0.056)	−0.227** (0.055)
National vote share (lag)				0.957** (0.009)
Constant	−0.113(*) (0.060)	−0.082 (0.123)	−0.122 (0.162)	0.417* (0.196)
<i>Variance part</i>				
Years since election	−0.123 (0.139)			
District magnitude national (ln)	−0.624* (0.258)			
Cantonal vote share (lag)	0.027** (0.008)			
Year	−0.059** (0.022)			
Constant	121.80** (44.39)			
Election-level variance (intercept)		0.000 (0.000)	0.000** (0.000)	0.000** (0.000)
Party-level variance		10.239** (0.278)	6.404** (0.174)	6.200** (0.168)
<i>N</i>	676	676	676	679
Log-Likelihood		−1745.455	−1586.817	−1582.886
BIC		3510.459	3225.764	3224.458
AIC		3496.911	3189.634	3183.772

Note: Only cantons with 3 or more seats in national elections included. Notation: (*) 0.1 * 0.05 ** 0.01

large district magnitude, and for cantons where the cantonal elections are held at the beginning of the national electoral cycle, and it is less accurate for more recent elections. The second model is an empty hierarchical model, the third a fully specified hierarchical model. In the fourth model, I change the dependent variable, and use the vote share in national elections (%) instead of the vote gains, and include a lagged dependent variable. Results are robust across all models, and displayed in [Figure 3](#).

In a nutshell, we see that both cantonal election trends as well as national swings are important for understanding electoral change in national elections. As the left panel in [Figure 3](#) shows, for cantons with cantonal elections in the same year as national elections, the trends in previous cantonal elections are most informative of subsequent national electoral trends in the same canton. However, for cantonal elections which date several years back in the election cycle, cantonal trends alone are insufficient to predict subsequent national election results. In cantons which hold cantonal elections three years before the national parliamentary elections, the cantonal trend has no predictive power. Inversely, in cantons where cantonal elections date back further, short-term national swings are more important for predicting the outcome of national parliamentary elections. These (short-term) national swings are measured through recent election swings in cantonal elections in other cantons ([Figure 3](#), right-hand panel). For cantons which hold cantonal

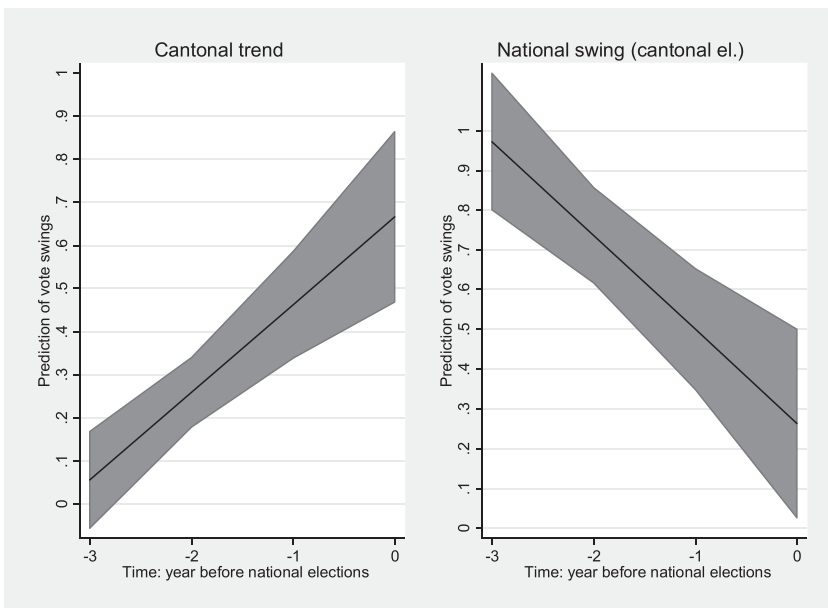


Figure 3. Explaining vote gains in national parliamentary elections: cantonal and national swings (cantonal elections), moderated by election timing.

elections in the same year as national elections, such national trends are less important.

Electoral change in cantonal elections (2nd step)

In the second set of models, I reverse the direction of the analysis: here, I predict the election result in cantonal elections (see [Table 2](#) and [Figure 2](#), 2nd model). It is related again to spill-over effects from electoral change in national parliamentary elections (first chamber), and to diffusion effects from other cantonal elections held in the same year. The dependent variable is the change in the parties' vote share in cantonal elections. The vote change in the parties' cantonal electoral results $y_{ij,t}$ is nested in parties i , cantons j , and election years t .

$$y_{ij,t} = N(\mu_{ij,t}, \sigma_{ij,t}^2)$$

$$\begin{aligned} \mu_{ij,t} = & \alpha + \beta_1 \cdot \text{cantonal change}_{ij,t} + \beta_2 \cdot \text{years since national el.}_{j,t} \\ & + \beta_3 \cdot \text{cant change}_{ij,t} \cdot \text{years}_{j,t} + \beta_4 \cdot \text{national swing}_{i,t} \\ & + \beta_5 \cdot \text{national swing}_{j,t} \cdot \text{years}_{j,t} + \varepsilon \end{aligned}$$

$$\sigma_{ij,t}^2 = \exp(\alpha_\sigma + \gamma_1 \text{vote share}_{i,j,t} + \gamma_2 \text{years}_{j,t} + \gamma_3 \text{magnitude}_{ij,t} + \gamma_4 \text{year}_t)$$

Again, the model excludes cantons with less than three seats in the national parliament. I estimate the same four models as in [Table 4](#). The estimation error is not explained by the same factors as the national elections. Estimation results are consistent across models, and displayed in [Figure 4](#).

The results show similar, although weaker effects, in association with cantonal vote swings. Electoral change in national elections is followed by similar change in subsequent elections in the same cantons: in the first year after a national election, a one percentage point vote gain in national elections will lead on average to a 0.4 percentage point vote gain in subsequent cantonal elections for the same party. However, this effect shrinks to 0.1 percentage points gained in cantonal elections in the fourth year of the national election cycle ([Figure 4](#), left panel). Vice-versa, diffusion effects from other cantonal elections (national swings) are strong throughout the election cycle. In the first year after national elections, the electoral change in cantonal elections is equally strongly determined by the previous national elections as by the electoral swing in other cantonal elections held in the same year. The importance of these national electoral swings, which can be observed in cantonal elections, grows further towards the second part of the national election cycle. Four year after national elections, a one percentage point vote gain (on average) in cantonal elections will lead to a 0.6 percentage point vote gain in other cantonal elections of the same year, i.e. electoral change in

Table 4. Explaining cantonal electoral swings in cantonal parliamentary elections, 1992–2017.

	(1) b/rse (variance model; change)	(2) b/se (empty model; change)	(3) b/se (change)	(4) b/se (vote %; lagged DV)
<i>Main part</i>				
Cantonal trend	0.543** (0.091)		0.509** (0.062)	0.595** (0.085)
Years after election	−0.028 (0.047)		−0.027 (0.071)	−0.467* (0.230)
Cantonal trend * years	−0.117** (0.032)		−0.109** (0.024)	−0.133** (0.034)
National swing	0.178(*) (0.093)		0.218* (0.098)	0.048 (0.134)
National swing * years	0.104** (0.035)		0.099** (0.038)	0.140** (0.051)
Cantonal vote share (lag)				0.943** (0.011)
Constant	−0.42 (0.110)	−0.084 (0.107)	−0.032 (0.181)	2.311** (0.608)
<i>Variance part</i>				
Years after election	0.033 (0.133)			
District magnitude national (ln)	−0.310 (0.240)			
Cantonal vote share (lag)	0.050(*) (0.029)			
Year	−0.005 (0.019)			
Constant	−7.67** (39.06)			
Election-level variance (intercept)		0.000** (0.000)	0.000** (0.000)	5.958** (0.538)
Party-level variance		7.070** (0.201)	4.462** (0.127)	7.636** (0.239)
N	619	619	619	619
Log-Likelihood		−1483.670	−1341.226	−1594.423
BIC		2986.624	2733.876	3246.699
AIC		2973.340	2698.451	3206.846

Note: Only cantons with 3 or more seats in national elections included. Notation: (*) 0.1 * 0.05 ** 0.01.

the cantons is subject to strong short-term diffusion effects. Hence, to a significant degree, national electoral swings can be said to find their origins in cantonal parliamentary elections, in particular as the national election cycle comes to its end. Eventually, as discussed in the first part of the models, these national electoral swings also affect national parliamentary elections, as they closely follow the results of the cantonal elections in the last year of the national election cycle.

In sum, the results of the analysis show that large parts of the electoral change in Switzerland can be predicted by analysing previous cantonal and national elections, within and across cantons.

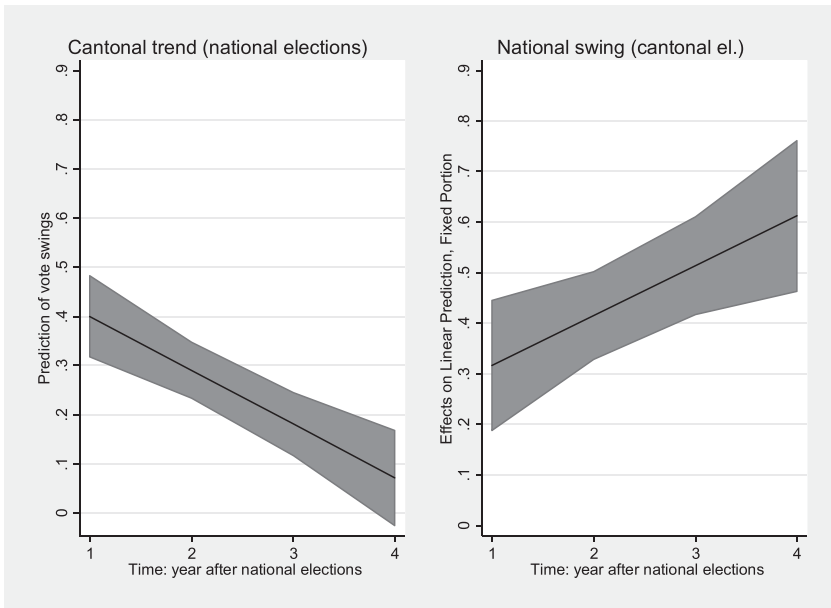


Figure 4. Explaining vote gains in national parliamentary elections: cantonal trend and national swings, moderated by election timing.

National, homogeneous electoral swings are present both in cantonal and national parliamentary elections in all cantons. They are powerful predictors both of national and cantonal elections. National electoral swings diffuse between parliamentary elections in the cantons.

Moreover, there are canton-specific electoral trends which affect both national and cantonal parliamentary elections. Whether they emerge first in national or in cantonal elections largely depends on the timing of the elections in the national election cycle. Cantonal trends can be particularly fruitful for the prediction of future elections if the last elections at the other level were relatively recent. Namely, if a cantonal election is held towards the end of the national election cycle, electoral change is a good predictor for change in the subsequent national parliamentary elections. Vice-versa, there is a similar effect of national parliamentary elections on subsequent cantonal elections, but it is much weaker, and the effect persists mainly in the first year after the national elections, and declines thereafter. Thus, spill-over effects between the national and the cantonal level of elections are anything but symmetrical: while cantonal elections are powerful predictors of national election outcomes (Figure 3, left-hand panel), national parliamentary elections only have a short legacy for cantonal elections (Figure 4, left-hand panel).

Idiosyncratic elements (e.g. candidate prominence, strategic nomination strategies) play an important role, but more so in cantons with small

districts and majoritarian elections. For this reason, the models exclude cantons with only one or two seats in national elections, where institutional effects and candidacy effects are large. One canton with majoritarian institutions for cantonal elections (Grisons) could not be included due to a lack of data access.

Qualitative analysis: electoral trends in cantonal elections, 2014–2017

Parliamentary elections

This subsection does qualitatively describe electoral campaigns and results in the period of 2014–2017, to illustrate the findings of the statistical analysis.⁸ All but one canton (Geneva, with a 5-year election period) held general elections to renew their parliaments and governments between 2014 and the end of 2017. Thirteen cantons scheduled elections between 2014 and the national parliamentary elections in October 2015. Twelve more held general elections either in 2016 or 2017. Furthermore, a number of cantons held by-elections, which occur when ministers quit office prematurely.

If the findings of the previous statistical analysis can be generalized, we should distinguish three different periods: cantonal elections in 2014–2015 can be read as an early signal for the subsequent national elections in 2015. The cantonal elections in 2016 should echo the trends from the national parliamentary elections. And while some of the electoral change in 2017, at the half-way point of the national election cycle, might already be indicative for the trends in the 2019 national elections, the electoral game is still open, and elections in 2017 do not yet allow for an election forecast.

On the right of the political spectrum, the cantonal elections in the period of 2015–2017 saw a continuation of the trends observed in the previous national parliamentary elections of 2015. The Liberal-Radical party was able to make the most important gains on the right. Until 2014, the party was on the losing side, but has since gained grounds in the national parliamentary elections and in most cantonal elections (see [Figure 1](#) and [Figure 5](#), left-hand side).

The Christian Democratic Party (PPD) saw its representation further decline, losing ground in all but five cantonal parliamentary elections in the period of investigation. The most important losses can be observed in the party's strongholds, the catholic-dominated cantons, in some of which it now ranks second after the Swiss People's Party (UDC). The result is disappointing for the new national leadership, which has attempted to reposition the party from a centrist party to a Christian party with a conservative touch.⁹ Vice-versa, the UDC managed to make further gains in some of the previous PPD strongholds, but suffered a strong backlash, losing more than half of

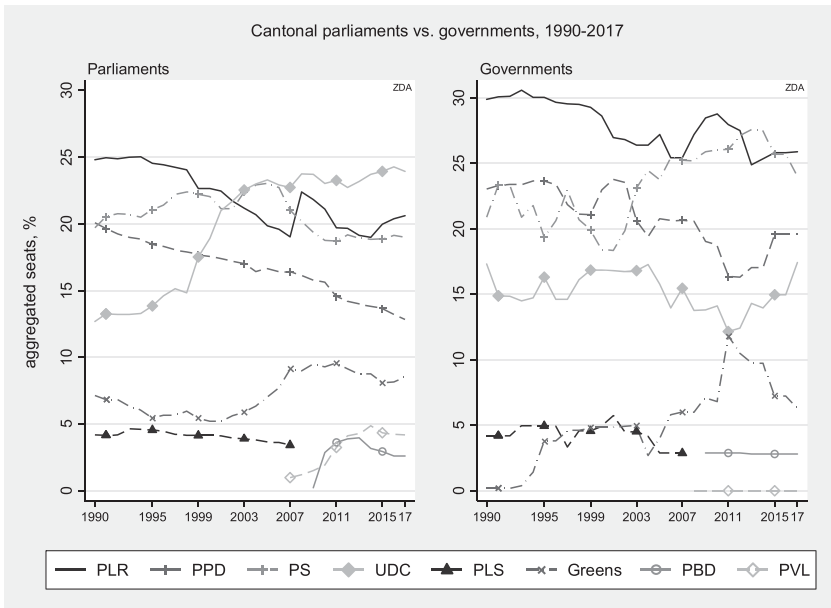


Figure 5. Party seats shares in cantonal parliaments and governments, 1990–2017.

its parliamentary representation in the French-speaking canton of Neuchâtel. The French-speaking cantonal branches of the UDC lag significantly behind the more successful branches in the German-speaking cantons (see Figure 1). Also, the election of a French-speaking UDC representative into the national government did not lead to the upsurge the party was hoping for.¹⁰

The Bourgeois-Democratic Party (PBD), a UDC splinter group, is struggling for survival. In the period of investigation, the party suffered minor electoral losses in some cantons, which do not belong to its strongholds. However, the slowdown of its electoral decline in two of its strongholds in elections in early 2018¹¹ is a crucial factor for survival.

The Green-Liberals (PVL) are stagnating during the period of study. Although they successfully occupy the niche of ecologically oriented right-wing liberals, and of social liberals who are more pragmatic on economic issues, the appeal of the combination of an economic right-wing with an ecological agenda remains limited. The party met its Waterloo when bringing to a popular vote an initiative for an ecological reform of the tax system. While the initiative credibly represented the party's core message, i.e. that of engagement for economic liberal ecological reforms, historically it represented one of the worst results of a popular initiative, with only 8% approval,¹² and it was accompanied by important losses in simultaneous cantonal elections in its two strongholds, Zurich and Lucerne.

Electorally, the entrance of the Green-Liberals, a Green party splinter group, was a threat to left-wing parties, to liberals, and in particular to the Green

party. Still, the Greens were able to hold their electorate. Important PVL electoral gains in the national election year of 2011, both in national- and in a series of cantonal elections, coincided with the Fukushima nuclear catastrophe, putting green energy politics on the national agenda, and profiting ecologically oriented parties. In the next electoral cycle, the issue had lost salience, putting the Green parties under pressure in the 2015 cantonal and national elections. In 2017, the Greens emerged as clear winners of cantonal elections, although the gains are largely concentrated in French-speaking cantons. Still, this raises the possibility that they might recover in the subsequent national elections 2019.

Both the Greens and the Green Liberals could gain mandates in cantons which have introduced a new, more proportional electoral system (Nidwald, Zoug, Schwyz and Valais).¹³

In the aftermath of the right-wing shift in the national parliamentary elections, the Social Democrats presented themselves as the opposition to a new right-wing majority in the lower chamber of the parliament. They mobilized with this message both in national-level referendums and in cantonal elections.

While campaigns are run largely by the cantonal branches, and the cantonal parties determine the issues of their campaigns autonomously, cantonal branches occasionally refer to national political issues, as they are more visible and salient than cantonal ones. Some parties have also recently strengthened the role of their central party office in cantonal campaigns. In particular, the Social Democratic party (PS) has introduced a similar umbrella campaign concept across elections. In a few cantons, militants of the Social Democratic party addressed potential supporters through phone calls.¹⁴ Canvassing is unusual for election campaigns in Switzerland, it was used first by the PS in cantonal elections in Zurich and Lucerne in 2015, followed by the 2016 elections in Basel and Argovia, and in 2017 in Soleure. This allowed the PS to make small electoral gains, although they are confined to the German-speaking cantons. The party somewhat lost ground in the French-speaking areas.

Executive elections

The trends in elections to cantonal parliaments and governments do not evolve in parallel. In elections to cantonal governments, the period since 2014 has seen an end to the trends of the previous decades, and shows a remarkable break in Swiss politics. The Swiss People's Party has won a series of mandates in cantonal executives, and in a few years reached its peak in its representation in executive office. This is mirrored by substantial losses on the political left, both by the Social Democrats and the Greens (see [Figure 5](#)).

While the reasons for gains and losses of single mandates can contain idiosyncratic elements, such as the role of incumbency or local scandals, several of these government changeovers have resulted (also) as a consequence of a renewed alliance of the centre-right parties. This constitutes a major turn in the arithmetic of elections to cantonal governments.

Until the 1990s, elections to Swiss cantonal governments were widely characterized by a pattern of (quasi-)proportionality, popularly referred to as 'voluntary proportionality'. The centre-right wing parties, the PLR, PPD, UDC and/or PLS were in the majority in almost all cantons. In some cantons, one of the parties dominated, and in most other cantons, the centre-right formed a stable alliance, which played an important role in policy-formation and could control the popular elections of governments by majoritarian rule. However, it usually left one or two seats for the political minority, typically the Social Democrats. In almost all cantons, the resulting pattern was a very stable government formula, typically providing for a slight over-representation of the right, and an under-representation of the left, although publically perceived as a roughly proportional government formula. No matter whether the Social Democrats accepted the informal deal or challenged it, they could count on a stable, minority representation in most cantonal executives (Gruner 1977, 24; Bochsler and Bousbah 2015).

The process of polarization of the party system culminated in the 1990s, with a major change in the functioning of the Swiss consociational system of government (Bochsler, Hänggli, and Häusermann 2015). This also changed the nature of executive elections in the cantons: the change in the major cleavages has led to a break in the centre-right alliance. Gradually, canton by canton, the UDC has moved from a position in the political centre to a fierce oppositional role as a nationalist-conservative force. In some cantons, this has directly provoked a massive increase in the competitiveness of governmental elections. Until the 1980s, it was rare for the number of viable candidates to outnumber the number of executive seats, but with the end of electoral alliances, parties began to claim an increased representation in government, and elections became competitive. Where the party elites of the centre-right continued to engage in electoral alliances, they did not lead to the desired results, as partisan voters were no longer willing to support all candidates of the alliance. Either way, the growing split of the centre-right into a moderate camp (PLR and PPD) and a radical pole (UDC) benefitted the left-wing minority: elections became open and competitive, and the unified right-wing electoral blocs disappeared, canton by canton (Bochsler and Bousbah 2015). As a result, the PS and the Greens gained considerably in governmental representation, making the PS the first governing party in the cantons as of 2011.

This trend changed in 2013: the UDC won executive power in a number of cantons, such as Berne, Lucerne, Argovia or Glaris, whereas the left (PS or

Greens) lost ground. In several cantons, this was a result of centre-right electoral alliances. The parties replicated the practice which was common until the 1990s, where the parties of the centre-right (PLR, PPD, UDC) nominated a joint list of candidates for all but a few seats in the executives, and were engaged in a joint campaign. This became more difficult in light of the fragmentation of the centre-right camp, and the decline of regional strongholds, so that the interests of a larger number of parties needed to be reconciled with more polarized positions than back in the 1980s. However, after years of within-bloc struggles, the centre-right campaign reunited in cantons such as Berne, Argovia, or Basel-Landschaft. Jointly, the centre-right has gained the majority of votes in almost all cantons. The trend has not reached the French-speaking cantons (yet), to the contrary: the UDC has lost its traditionally held executive seat in the French-speaking canton of Vaud in 2011. By 2017, the only UDC-held executive cantonal mandates in the French-speaking part of Switzerland were two seats in the bilingual canton of Berne.

Discussion and conclusions

The Swiss party system is built as a federal conglomeration of cantonal party branches. Historically, party-like ideological movements emerged first at the cantonal level, and then joined as national party federations (Thorlakson 2007). The organization of elections is heavily decentralized, and until recently, national parliamentary elections were often also characterized as parallel contests in the 26 cantons. Recent years have seen important changes to the party system: the electorate has re-aligned along altered cleavages, and the parties have become more national (Bochsler, Mueller, and Bernauer 2016).

Analysing party system- and institutional change in the period of 1990–2017, this paper looks at the origins of change, comparing electoral- and institutional change at the national and the cantonal level of elections. In the qualitative discussion, it looks in particular at the trends in cantonal elections between 2014 and 2017. The analysis leads to a number of key findings.

- Institutional laboratories: Historically, the cantons have anticipated major national electoral reforms. For example, there were cantons which anticipated the introduction of proportional representation at the national level (in 1918), and cantons which introduced women's suffrage before the national reform in 1971. The wave of electoral reforms represents just such a laboratory situation, and makes elections by PR rules truly proportional and inclusive, including for small parties in small electoral districts. Initiated by the verdicts of the Federal Court, since 2007, seven cantons have introduced a multi-level PR electoral system with a double-

proportional seat allocation formula. While national parliamentary elections suffer from the very same bias, which the Federal Court has ruled as unconstitutional, the national election law is not subject to court review. Furthermore, while cantonal reforms could be a model for a national electoral reform, in the present partisan composition, reform proposals are unlikely to be passed by either of the chambers of the national parliament.

- **Cantons first:** Most electoral swings emerged first in cantonal elections, before also affecting the national elections. These electoral swings are partly linked to the cantonal political context, but are also national phenomena, and affect other cantons in a similar way. This belies the presence of either a diffusion effect, or a latent national change of electoral cleavages, which – dependent on the election timing – affects national or cantonal elections first.
- **The cantons as echo chambers:** Change in national elections usually also resonates the year after, in subsequent cantonal elections. However, this effect declines quickly. Elections held in the second to fourth year of the national election cycle can best be predicted by looking at the electoral swings in other cantons, and only few trends seem to stem from previous national elections.
- **Local context matters:** There are important differences between national and cantonal elections due to institutional differences between the two levels, but also due to the role of personalities, or other idiosyncratic, context-specific effects. The variance models show that institutional effects and idiosyncratic effects are stronger in cantons with a small number of mandates in the national parliament (and thus stronger institutional restraints) than in larger districts. General rules, which aim to foster an understanding of election swings, do not apply to the same degree to small cantons or majoritarian elections. Instead, strategic and idiosyncratic effects can lead to significant deviations from national trends (Bochsler and Wasserfallen 2013).

The analysis of the cantonal elections between 2014 and 2017, the focus of this issue, corresponds to long-term effects. In the cantonal elections of 2015, the PLR initiated an electoral renewal, which was continued in the national parliamentary elections of 2015. The Green party, one of the main losers of the 2015 national elections, was able to establish a counter-trend in the cantonal elections of 2017, and hopes to recover in the national elections of 2019. The small centre-right parties, PBD and PVL, find themselves under pressure. While the PVL has a broader, but small basis, in a larger number of cantons.

As more data points will become available, future research might analyse further variation of territorial and cross-level spill-over effects, e.g. how they are affected by changes in the party system.

Notes

1. Average of 6 'effective' parties (by their votes) (Laakso and Taagepera 1979), and a Gallagher index (1991) of 3.2 in the period of investigation. Own data.
2. That is, *Appenzell Inner-Rhode* and *Grisons*, voting by majoritarian rules; *Appenzell Outer-Rhode* by majoritarian rules in most electoral districts; *Uri* and *Basel-City* by majoritarian rules in a few electoral districts.
3. For prediction models based on cantonal electoral results, see also Ladner and Trippolini (2007).
4. Following a concept by Stokes (1965), whereby in a country with a nationalised party system, electoral swings are homogeneous in the entire country.
5. As the number of elections for which vote returns are available keeps growing, future research might look into different degrees of inter-dependency between the cantons.
6. National parliamentary elections take place on the third or fourth Sunday in October. The cantonal parliamentary elections are held in national election years, typically between February and May.
7. I have tested other operationalisations, e.g. the inclusion of binary variables for each year of the election cycle, in interaction with the cantonal and national swings. They did not improve the results.
8. Sources, where not stated otherwise: election data (own aggregation), newspaper reports.
9. *Neue Zürcher Zeitung*, 22 August 2017, 'Die CVP will weg vom Windfahnen-Image'.
10. *Le Temps*, 10 December 2015, 'L'UDC vaudoise sous l'effet Parmelin'.
11. Elections in spring 2018 in Bern and Glaris, though important losses in Grisons.
12. <https://www.bk.admin.ch/ch/i/pore/va/20150308/index.html> [last accessed 1 June 2018].
13. Before the introduction of the new, bi-proportional formula, in many electoral constituencies the Greens would not present an own candidate, or would run on a joint list with the Social Democrats. The main losers of the reform were the parties with the strongest representation in these cantons, the PLR, PPD, and in Schwyz and Nidwald, the UDC.
14. Information obtained from Marco Kistler, PS campaign manager.

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References

- Anderson, Christopher J., and Daniel S. Ward. 1996. "Barometer Elections in Comparative Perspective." *Electoral Studies* 15 (4): 447–460.
- Armingeon, Klaus. 1998. "Es gibt sie doch, die Schweizer Wahlen! Die Unterschiedlichkeit des Wahlverhaltens zwischen Kantonen im internationalen Vergleich." In *Schweizer Wahlen 1995*, edited by Hanspeter Kriesi, Ulrich Klöti, and Wolf Linder, 273–295. Bern: Haupt.
- Bochsler, Daniel, and Claudia Alpiger. 2012. *Mischlisten in kantonalen Wahlen. Vier Schätzmodelle im Vergleich*. Aarau: Centre for Democracy Studies Aarau (ZDA).
- Bochsler, Daniel, and Karima Bousbah. 2015. "Competitive Consensus. What Comes after Consociationalism in Switzerland?" *Swiss Political Science Review* 21 (4): 654–679.
- Bochsler, Daniel, Regula Hänggeli, and Silja Häusermann. 2015. "Introduction: Consensus Lost? Disenchanted Democracy in Switzerland." *Swiss Political Science Review* 21 (4): 475–490.
- Bochsler, Daniel, Christophe Koller, Pascal Sciarini, Sylvie Traimond, and Ivar Trippolini. 2004. *Die Schweizer Kantone unter der Lupe. Behörden – Personal – Finanzen*. Bern: Haupt.
- Bochsler, Daniel, Sean Mueller, and Julian Bernauer. 2016. "An Ever Closer Union? The Nationalisation of Political Parties in Switzerland, 1991–2015." *Swiss Political Science Review* 22 (1): 29–40.
- Bochsler, Daniel, and Fabio Wasserfallen. 2013. "Switzerland: Moving towards a Nationalized Party System." In *Regional and National Elections in Western Europe. Territoriality of the Vote in Thirteen Countries*, edited by Régis Dandoy, and Arjan H. Schakel, 234–254. Basingstoke/Houndmills: Palgrave.
- Bornschieer, Simon. 2015. "The New Cultural Conflict, Polarization, and Representation in the Swiss Party System, 1975–2011." *Swiss Political Science Review* 21 (4): 680–701.
- Caspersen, Nina. 2006. "Contingent Nationalist Dominance: Intra-Serb Challenges to the Serb Democratic Party." *Nationalities Papers* 34 (1): 51–69.
- Evans, Geoffrey, and Brendan O'Leary. 2000. "Northern Irish Voters and the British–Irish Agreement: Foundations of a Stable Consociational Settlement?" *The Political Quarterly* 71 (1): 78–101.
- Gaines, Brian J., and Christophe Crombez. 2004. "Another Look at Connections across German Elections." *Journal of Theoretical Politics* 16 (3): 289–319.
- Gallagher, Michael. 1991. "Proportionality, Disproportionality and Electoral Systems." *Electoral Studies* 10 (1): 33–51.
- Giger, Nathalie, Jochen Müller, and Marc Debus. 2011. "Die Bedeutung des regionalen Kontexts für die programmatische Positionierung von Schweizer Kantonalparteien." *Swiss Political Science Review* 17 (3): 259–285.
- Gruner, Erich. 1977. *Die Parteien der Schweiz*. Bern: Francke.
- Hough, Dan, and Charlie Jeffery. 2006. "An Introduction to Multi-Level Electoral Competition." In *Devolution and Electoral Politics*, edited by Dan Hough, and Charlie Jeffery, 2–13. Manchester: Manchester University Press.
- Jeffery, Charlie, and Dan Hough. 2003. "Regional Elections in Multi-Level Systems." *European Urban and Regional Studies* 10 (3): 199–212.
- Laakso, Markku, and Rein Taagepera. 1979. "'Effective' Number of Parties: A Measure with Application to West Europe." *Comparative Political Studies* 12 (1): 3–27.
- Ladner, Andreas. 2004. "Typologien und Wandel: Die kantonalen Demokratien im letzten Drittel des 20. Jahrhunderts." *Swiss Political Science Review* 10 (4): 3–32.

- Ladner, Andreas, and Michael Brändle. 2001. *Die Schweizer Parteien im Wandel: von Mitgliederparteien zu professionalisierten Wählerorganisationen?* Zürich: Seismo.
- Ladner, Andreas, and Ivar Trippolini. 2007. *Wer gewinnt die Nationalratswahlen 2007? Möglichkeiten und Grenzen von Wahlvorhersagen auf der Basis von kantonalen Parlamentswahlen.* Chavannes-près-Renens: Idheap.
- Leuzinger, Lukas, and Claudio Kuster. 2018. Die ultimative Übersicht über die politischen Systeme der Kantone. Accessed June 1, 2018. <https://napoleonsnightmare.ch/2018/04/10/die-ultimative-ubersicht-uber-die-politischen-systeme-der-kantone/>.
- Linder, Wolf. 2012. *Schweizerische Demokratie. Institutionen, Prozesse, Perspektiven.* 3rd ed. Bern: Haupt.
- Lutz, Georg, and Dirk Strohmam. 1998. *Wahl- und Abstimmungsrecht in den Kantonen.* Bern: Haupt.
- Pukelsheim, Friedrich. 2009. "Zurich's New Apportionment." *German Research* 31 (2): 10–12.
- Rogers, Steven. 2016. "National Forces in State Legislative Elections." *The Annals of the American Academy of Political and Social Science* 667 (1): 207–225.
- Selb, Peter. 2006. "Multi-Level Elections in Switzerland." *Swiss Political Science Review* 12 (4): 49–75.
- Simon, Dennis M., Charles W. Ostrom, and Robin F. Marra. 1991. "The President, Referendum Voting, and Subnational Elections in the United States." *The American Political Science Review* 85 (4): 1177–1192.
- Stokes, Donald E. 1965. "A Variance Components Model of Political Effects." *Mathematical Applications in Political Science* 1 (1): 61–85.
- Thorlakson, Lori. 2007. "An Institutional Explanation of Party System Congruence: Evidence from six Federations." *European Journal of Political Research* 46 (1): 69–95.
- Vatter, Adrian. 2002. *Kantonale Demokratien im Vergleich. Entstehungsgründe, Interaktionen und Wirkungen politischer Institutionen in den Schweizer Kantonen.* Opladen: Leske+Budrich.
- Vatter, Adrian. 2003. "Legislative Party Fragmentation in Swiss Cantons: A Function of Cleavage Structures or Electoral Institutions?" *Party Politics* 9 (4): 445–461.
- Wolinetz, Steven B., and R. Ken Carty. 2006. "Disconnected Competition in Canada." In *Devolution and Electoral Politics*, edited by Dan Hough, and Charlie Jeffery, 54–75. Manchester: Manchester University Press.