

# **Strategic choices? Modelling split-ticket voting and its causes in a complex electoral setting**

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First draft – comments are welcome

## **Introduction<sup>1</sup>**

We analyse in this paper the determinants of split-ticket voting in Swiss national elections. Our main interest is to see how voters' choices are influenced by the strategic incentives of their decision context, and how strongly voters' reactions depend on their degree of political sophistication. There is no 'unified' theory of split-ticket voting in the literature. Several models have been applied to explain this behaviour, which rely on different motives and on different types of variables. Some authors focus on individual-level determinants (like socio-demographic characteristics, traditional loyalties, or citizens' degree of political sophistication), while others centre on contextual characteristics (for example the degree of polarisation of the party system) and the incentives they create for voters. In this paper, we shall try to integrate these two streams of research in a single theoretical framework. We first of all consider that split-ticket voting depends on the characteristics of voters' decision context. This assumption is central to all models of strategic voting: voters are expected to react to the strategic incentives they face. Most important among these is the 'viability' of voters' preferred parties. In parallel elections based on proportional and plurality systems, for example, a voter is expected to split her ticket, defecting from her preferred party in the plurality election, if its chances of winning a seat are small. Second, we consider that voters

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vary in their capacity to react to these strategic incentives. Political experts should be more likely than political novices to perceive such incentives and to react accordingly. Such an assumption may seem quite obvious given the central role played by political sophistication in processes of opinion formation and change. However, there are relatively few analyses of split-ticket voting that have systematically modelled the intervening role of political expertise. Beyond this hypothesis, the analyses presented here also bring new results by considering a relatively complex electoral setting. We shall test our hypotheses in the case of Swiss National elections. In this context, split-ticket voting is based on a comparison of the votes for the two chambers of the national parliament. This case is very interesting for analysing the impact of contextual characteristics. Not only are voters confronted with multiple strategic incentives, but they can also react in different ways, beyond the simple opposition between straight-ticket and split-ticket.

In the next section, we review the literature on ticket-splitting and identify the major alternative explanations that have been suggested. This will be followed by the presentation of our model, which integrates several explanatory factors in a single set of assumptions. In the third section, we present the specificities of Swiss national elections and discuss how ticket-splitting can be defined and measured in such a setting. On this basis, we shall then formulate a series of testable hypotheses and discuss the operationalisation of our variables. In the following section, finally, our hypotheses are tested and the results commented.

### **Models of split-ticket voting**

The contrast between ‘split-ticket voting’ and ‘straight-ticket voting’ refers to the way in which individuals distribute their votes within one election or between elections for different offices held on the same day. These notions have been most often used in the context of national elections in the United States, and are usually based on a comparison of citizens’ votes for the presidential and congressional elections. In this context, a voter casts a ‘straight

ticket' if she supports twice the same party, while a 'split ticket' corresponds to a citizen supporting a Democratic presidential candidate and a Republican congressional candidate – or vice-versa. By analogy, the concept of ticket splitting has been applied to other electoral settings: by comparing votes for both chambers of a national parliament (e.g., Dalton, McAllister and Wattenberg 2000), votes in mixed electoral systems (e.g., Bawn 1999; Karp, Vowles et al. 2002; Venturino 2003), votes for a parliamentary election and for the election of the prime minister (Abramson, Aldrich et al. 2001), votes in plurality elections with two-member districts (Kriesi 1998, 2003), or voters' use of *panachage* in proportional elections (Lachat 2004). In all of these cases, the basic definition of split-ticket voting is the same: split-ticket voters are those who choose to divide their votes between several parties. While most analyses are based on a comparison of two votes, the concept of split-ticket voting can easily be extended to the distribution of voters' choices over a larger number of ballots. Beck and his co-authors (1992) for example, have analysed split-ticket voting over a five-office ballot.

Several models have been proposed in the literature to explain split-ticket voting. But there is no agreement on what the 'best' or more powerful explanatory model is. Actually, it is even difficult to make clear distinctions between *alternatives* models. The proposed explanations differ with respect to both the general motives leading to split-ticket voting and to the type of variables that may explain it. As far as the former is concerned, at least three lines of argumentation can be distinguished: a balancing model, strategic voting, and voters' partisan indifference or indecisiveness.

The 'policy-balancing hypothesis' (Fiorina 1992, 1996) sees split-ticket voting as the result of voters' choice for institutional division. In this model, voters with a moderate ideological position are expected to divide their vote between the presidential and congressional elections, in order to favour ideological balance. While this model has played an important role in the

American context, we shall not consider it further here. It has found little empirical support (see for example Born 1994; Mattei and Howes 2000) and it cannot easily be ‘exported’ as its logic is specifically rooted in voters’ perceptions of the respective powers of the American President and Congress.

In the second type of models, split-ticket voting is interpreted as the product of voters’ strategic decisions. Following Fisher (2004: 157), voters are ‘tactical’ or ‘strategic’ if they vote ‘for a party they believe is more likely to win than their preferred party, to best influence who wins in the constituency’. Several studies have analysed split-ticket voting from this point of view, to determine whether split-ticket voters could indeed be qualified as strategic and whether voters responded to the strategic incentives of their electoral context (Bawn 1999; Karp, Vowles et al. 2002; Schoen 1999; Pappi and Thurner 2002).

Finally, split-ticket voting can be explained as a consequence of ‘partisan indifference’ (Schoen 2000). This line of argumentation is most often linked with the dealignment hypothesis: as voters’ attachments to political parties weaken, their voting choices should be less and less influenced by traditional loyalties, and split-ticket voting should become more frequent (Wattenberg 1991; Dalton and Wattenberg 2000; Dalton 2002).

Of course, these three ‘motives’ leading to split-ticket voting are not mutually exclusive. Fiorina (1992: 392), for example, emphasises the role of the ‘weakening of party bonds’ in explaining the increase in split-ticket voting and in the occurrence of divided government. Similarly, dealignment and strategic voting may very well both contribute to the explanation of this behaviour. Actually, the two streams of research should rather be seen as complementary. While models of electoral dealignment tell us that ‘dealigned’ voters (i.e., those with weak ties to parties) are more likely to divide their electoral choices, they do not really propose a model which explains why these voters would split their ticket or under which circumstances they are more likely to do so. Models of strategic voting, on the other hand, offer such a model, by emphasising the role of contextual incentives, as well as of

individual-level variables. But they most often assume that all voters react in the same way to these strategic incentives.

The models of split-ticket voting do not differ only with respect to the motives emphasised, but also regarding the type of variables they rely on. A distinction is sometimes made in the literature between models based on the characteristics of the choice alternatives (i.e., of candidates or parties) and models based on voters' characteristics (Beck, Baum et al. 1992; Roscoe 2003). This twofold classification is a good starting point, but it is not precise enough. Among 'non-individual-level' factors, two different types of variables can be distinguished: contextual factors and characteristics of voters' decision context. Contextual factors are identical for all individuals in a given context – typically in a given constituency. Examples of such factors are the number of candidates competing, the presence of an incumbent, or the fractionalisation of the party system. Characteristics of a voter's decision context (or 'individual-contextual' variables), by contrast, are features of the context or of the choice alternatives that are relevant for a subset of the electorate only. A change in the electoral chances of party A, for example, impacts on the strategic incentives faced by its supporters – but it should not necessarily affect the degree of split-ticket voting among voters who prefer a party on the other end of the ideological spectrum. The difference between contextual and 'individual-contextual' variables lies thus not in the level at which they are measured, but on their expected effects. Such a distinction is made for example in Fiorina's model: individuals' decision to split or not their ticket depends on party polarisation (a contextual characteristic) and on their ideological distance to parties (an 'individual-contextual' variable).

Here, we shall try to explain split-ticket voting by combining both types of explanatory factors and by considering as well interaction effects between micro and macro factors. We

shall then derive from this a series of hypotheses and test them in the case of Swiss national elections. Our model is based on the following four general assumptions:

1. Citizens support the party they consider the most attractive one.
2. Citizens want to avoid wasting their vote.
3. Citizens' capacity to perceive the strategic incentives of their decision context increases with their degree of political sophistication.
4. Party identifiers are less likely than political independents to split their ticket.

The first and second assumptions are the basis of any model of strategic voting (see for example Blais, Nadeau et al. 2001; Blais, Young and Turcotte 2005). We consider that voters have a preferred party and will vote for it, unless they think this would be a wasted vote. If their preferred party has no credible chances to win a seat, they should opt for a second best alternative. The third element of our model extends these basic assumptions of strategic voting by integrating voters' degree of political sophistication. This is a central concept in models of voting behaviour in the field of political psychology. Citizens with a high level of political sophistication (the 'political experts') differ from 'political novices' in several ways: they have a higher level of political knowledge, they organise this information in a more meaningful way, and they are better able to relate new information with what they already know (Fiske and Kinder 1981; Lau and Erber 1985; Fiske, Lau and Smith 1990; Krosnick 1990; Zaller 1992). Political experts should be better able to perceive the strategic incentives of their decision context and should react to these incentives in a more meaningful way. There are only few analyses of split-ticket voting where this moderating impact of political expertise has been considered. An example is Karp et al. (2002), who have shown that political experts react more strongly to the electoral chances of their preferred party than political novices do. Though, they have found evidence of such an interactive effect for only one of their indicators of parties' viability (i.e., party spending at the constituency level). When political

sophistication (or a proxy like education) is included in analyses of split-ticket voting, however, its impact is most often modelled as a direct one. Political experts and political novices are expected to differ from one another in their level of split-ticket voting, but the impact of the strategic incentives is considered to be the same for both groups (see for example Beck, Baum et al. 1992; Gschwend 2004; Kriesi 2003; Roscoe 2003; Venturino 2003).

Our fourth assumption, finally, regards the effect of traditional loyalties. It has been repeatedly shown that party identification has a pronounced impact on the level of split-ticket voting (see among others Beck, Baum et al. 1992; Karp, Vowles et al. 2002; Gschwend 2004), and it seems thus important to integrate this factor in our model.

On the basis of these assumptions, we shall derive a series of hypotheses. Before presenting them, however, it is necessary to introduce the specificities of the elections we are going to study and to present our measure of split-ticket voting. We do this in the following section.

### **Measuring split-ticket voting in a complex electoral setting**

National elections in Switzerland are a very interesting case for an analysis of ticket splitting, as they present important variations regarding the context in which voters make their electoral decision (number of parties presenting candidates, degree of overlap in the political supply for the two elections, etc.). Furthermore, as we are going to see, the possible responses of voters are not limited to casting or not a straight ticket. The Federal Parliament is made up of two chambers, the National Council (lower chamber) and the Council of States (upper chamber).<sup>2</sup> The system is strictly bicameral and voters' choices in the two elections have thus the same importance. For both elections, the constituencies are the 26 cantons (the components of the federal State). In the majority of these constituencies, the two elections take place on the same

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<sup>2</sup> Presentations of the Swiss electoral system in English can be found in Church (2004) or in Wernli (2004).

day.<sup>3</sup> The two elections, however, are based on different electoral rules: the lower chamber is elected on the basis of a proportional list system, while the upper chamber usually follows a ‘two-ballot majority-plurality formula’ (Lijphart 1994: 18)<sup>4</sup>: an absolute majority is required for election on the first ballot; if one (or two) candidates are not elected after the first round, a second round takes place for the remaining seat(s), where a plurality of votes is sufficient for being elected. Similarly to mixed electoral systems, like in Germany, New Zealand, or Italy, voters have to cast their votes in a proportional election and in a majority one – though in our case, the two votes are for different chambers.

The strategic incentives faced by voters are however not limited to this combination of electoral rules. They are also shaped by two characteristics of the constituencies. The first one is district size. It is important, because the number of seats in the National Council allocated to a constituency is proportional to the size of its population and varies from 1 to 34. For the Council of States, on the other hand, 20 constituencies have two seats and six constituencies (the ‘half cantons’) have one seat. As a consequence, in small constituencies, strategic voting is to be expected for both elections. While small parties may have a chance to win a seat in the National Council in large constituencies, this is much more difficult if there are only, let’s say, four of five seats to be distributed. Their supporters may thus be motivated to defect from their preferred party *in both elections* – casting thus a strategic straight-ticket.

The second characteristic is the intensity of partisan competition. Its importance is linked with a particularity of the electoral system used for the election to the upper chamber: two votes can be cast, but ‘plumping’ is also allowed: this means that voters may partially abstain and support only one candidate (Cox 1997: 42f.). Partial abstention is all the more important as most parties present only one candidate in this election. There are few constituencies where a

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<sup>3</sup> There are a few exceptions though: in four constituencies, the election of the Council of States does not take place on the same date as the federal elections (see Lutz and Strohmman 1998). These cases cannot be considered in the analyses presented here.

<sup>4</sup> There are here again a few exceptions: in the canton of Geneva, the election of the upper chamber is based on the first-past-the-post system, and in the canton of Jura, both elections are proportional.

party is strong enough to have realistic chances of winning both seats in the upper chamber. Thus, if voters give one of their votes to their preferred party, they can either support a candidate from a different party with their second vote, or not use their second vote at all. We expect the choice between these two alternatives to depend on the degree of partisan competition. If the competition is intense, meaning that there is close race between the strongest parties, partial abstention is a good strategy: in this way, voters avoid giving one of their votes to a candidate that stands in direct competition with their preferred party.

This combination of electoral rules and of constituencies' characteristics presents a unique set of strategic incentives, which allow one to test more complex hypotheses on the determinants of split-ticket voting. The reverse of the medal, however, is that it strongly increases the number of ways in which votes may be distributed, beyond the traditional opposition between split-ticket and straight-ticket voting. In order to reduce the number of possible combinations to a manageable proportion and to focus on the effects of the most important strategic incentives, we shall make a few simplifications. First of all, we compare the two votes for the Council of States only with the party to which respondents gave *most* votes in the National Council. We do not distinguish between voters who really supported only one party and those who picked up candidates from different lists. Second, and this is the most crucial assumption, we assume that voters' choice in the National Council correspond to their 'preferred' party. This is more problematic: as we have seen above, the effective threshold varies strongly between the constituencies. In cantons with few seats in the National Council, voters may have strong incentives to defect from their preferred party to avoid wasting their vote. By assuming that voters support their preferred party in the National Council, it is likely that we underestimate the effect of strategic incentives on the degree of ticket-splitting. In order to keep this problem within bounds, we shall consider only constituencies with more than ten seats in the National Council. The third simplification is that we limit our analysis to the

respondents who voted in both elections. Finally, we have excluded respondents who voted in the National Council for a party that has no candidate for the Council of States: such voters have no other possibility than to split their ticket and are thus not relevant for our analyses.<sup>5</sup> Keeping them in the sample would only bias our results.

Having introduced the characteristics of the electoral system and the incentives faced by voters, we can present our measure of split-ticket voting. We shall distinguish between the following three categories, which correspond to the most interesting combinations of votes:

1. Straight ticket voting: respondents who voted for the same party in both elections.<sup>6</sup>
2. Partial split-ticket: respondents who gave one of their vote in the Council of States to the party supported in the National Council, but who gave their second vote to a different party.
3. Split-ticket voting: the party supported in the election of the National Council is not supported in the election to the Council of States.

### **Hypotheses, data, and operationalisation**

Following the general assumptions of our model, we expect that split-ticket voting is influenced by the strategic incentives of the electoral context, and that voters' response to these incentives depends on their degree of political sophistication. We focus here on two strategic incentives. The first is the electoral chance of party, which corresponds to the standard 'wasted vote hypothesis' which is central to most models of strategic voting. A voter whose preferred party has only weak chances of winning a seat in the upper house is expected

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<sup>5</sup> These respondents were identified using a database of the candidates for the election to the Council of States, compiled by the Federal Statistical Office.

<sup>6</sup> The majority of these voters (about 94%) are 'partial abstainers': they used only one of their vote in the Council of States and gave it to their preferred party. However, the category also includes respondents who gave both votes in the Council of States to their preferred party.

to split her ticket in favour of a party with better chances. This can be done by partially or entirely splitting her ticket. This leads us to our first hypothesis:

*Hypothesis 1.* The stronger the chance of a voter's preferred party to win a seat in the Council of States, the more likely is this voter to cast a straight ticket rather than a split-ticket or a partial split, and the more likely is this voter to split her ticket partially rather than entirely.

The second incentive is linked with the intensity of the competition between parties.

Depending on the degree of competition, a voter should have stronger or weaker reasons to abstain partially. If her preferred party is much stronger than its competitors, the degree of competition will be low. She may thus give one of her vote to this party and her second vote to one of its competitors, without 'endangering' the chances of her preferred party. If the competition is intense however, meaning that the top contenders are of roughly equal strength, it is safer to abstain partially and to cast a straight ticket.

*Hypothesis 2.* The more intense the competition between parties who have strong chances to win a seat in the Council of states, the more likely are supporters of these parties to cast a straight ticket rather than to split their ticket partially.

Furthermore, as noted above, the impact of these strategic incentives should be stronger among political experts than among political novices. We can accordingly formulate two more hypotheses:

*Hypothesis 3.* The impact of a party's chance on the level of straight-ticket voting among its supporters, as specified in hypothesis 1, is stronger the higher a voter's degree of political sophistication is.

*Hypothesis 4.* The impact of party competition on partial abstention, as specified in hypothesis 3, is stronger the higher a voter's level of political expertise is.

Finally, following the fourth assumption of our model, we expect party identification to impact on the degree of split-ticket voting:

*Hypothesis 5.* Party identifiers are more likely than 'political independents' to cast a straight ticket.

To test these hypotheses, we use data from the 1995, 1999, and 2003 Swiss national election studies.<sup>7</sup> We have pooled the three datasets and we shall analyse them together. It must be emphasised that the resulting sample is not representative of the Swiss electorate. Not only do we pool samples from three elections, but we have also excluded respondents from small constituencies, as explained above. Furthermore, in all three election studies, additional samples have been interviewed in selected constituencies, leading to their overrepresentation.<sup>8</sup> We use here all available observations and not only the main samples.

Split-ticket voting is measured by comparing votes in the National Council and in the Council of States. For the National Council, we consider only the party to which respondents gave most votes. The data on parties' chances and on the degree of competition are based on official electoral results. Following Cox's 'M+1 Rule' (1997: 99), we consider that the number of viable parties for the election to the Council of States is equal to the number of seats plus one (that is three in the 'normal' cantons, and two in the 'half cantons'). A party's chance is thus coded as a dummy, taking the value of 1 if this party is among the three

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<sup>7</sup> These datasets are available at the Swiss information and data archive service for the social sciences (<http://www.sidos.ch>).

<sup>8</sup> Information on the design and methods of these three election studies can be found in Farago (1996), Hirter (2000), and in Selb and Lachat (2004).

strongest ones, and a value of 0 otherwise. To avoid any endogeneity problem, parties' strength is determined on the basis of the results at the *previous* national elections.<sup>9</sup> The intensity of the competition between the viable parties for the Council of States is based on the standard deviation of their results at the previous election. The closer these top contenders are to one another, the smaller will be the standard deviation. This 'raw' measure, however, is strongly skewed: while the first three parties are of relatively equal strength in a large number of constituencies, there are also a few outliers, where one party has a dominant position. In order to have a measure which is approximately normally distributed, we have taken the logarithm of the 'raw' measure. Finally, this variable was centred and multiplied by -1, so that a higher value indicates a stronger degree of competition.

At the individual level, the most important variable is the degree of political sophistication, which we measure with an index of political knowledge. In 1995, this index is based on four questions on 'civics': respondents were asked to mention the number of parties represented in the Federal Council, the name of the President of this council, the number of signatures required to launch a popular initiative at the federal level, and the number of deputies of their cantons in the National Council. In 1999 and 2003, we use the same four questions as well a fifth one, inviting respondents to mention up to three names of candidates to the National Council in their canton. In all three cases, the questions were combined with principal-components factor analyses, which result in one-dimensional solutions.<sup>10</sup> Finally, party identification is coded as a dummy, taking the value 1 for respondents who say they 'feel close' to a political party and equal to 0 otherwise.

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<sup>9</sup> We rely on the results presented in OFS (2003).

<sup>10</sup> More detailed information on the construction and on the validation of this index of political knowledge can be found in Lachat (2004).

## Results

To test our hypotheses, we must estimate a model including individual-level characteristics (political sophistication, party identification), contextual variables (the degree of competition between the top contenders), and characteristics of voters' decision context (the electoral chances of their preferred party). Furthermore, the impact of parties' chances is conditional on voters' degree of political expertise, and the impact of competition intensity is conditional on the chances of voters' preferred party and on their degree of political expertise.

The model we estimate can be written as follows:

$$y = \beta_0 + \beta_1 \cdot \text{chance} + \beta_2 \cdot \text{compet.} + \beta_3 \cdot \text{chance} \cdot \text{compet.} + \beta_4 \cdot \text{id.} + \beta_5 \cdot \text{soph.} + \\ \beta_6 \cdot \text{chance} \cdot \text{soph.} + \beta_7 \cdot \text{compet.} \cdot \text{soph.} + \beta_8 \cdot \text{chance} \cdot \text{compet.} \cdot \text{soph.} + \varepsilon,$$

where 'chance' are the electoral chances of a voter's preferred party, 'compet.' is the degree of competition between the top contenders for the Council of States, 'id' is the dummy variable for party identification, and 'soph.' is a voter's degree of political sophistication. As the dependent variable is categorical, we have estimated this model with a multinomial logistic regression.<sup>11</sup> The results are presented in table 1. To make an interpretation of our results somewhat easier, we present the coefficients for all three contrasts.

First of all, we consider the impact of party identification. We can see that it has a significant impact on all three contrasts: party identifiers, compared to political 'independents', are more likely to support a single party than to split their votes (partially or entirely), and they are more likely to split their ticket partially than entirely. These results are in line with our fifth hypothesis. As formulated by Gschwend (2004), party identifiers have a weaker 'proclivity' to splitting their electoral ticket.

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<sup>11</sup> The assumption of the Independence of Irrelevant Alternatives has been tested with a Hausman specification test (Long 1997: 183f.). This assumption cannot be rejected at the usual levels of significance. We can thus be confident that a multinomial logit model is appropriate in this case.

Table 1. Impact of individual-level and contextual-level characteristics on split-ticket voting. Coefficients and standard errors estimated with a multinomial logistic regression.

	Partial split vs. straight ticket		Split-ticket vs. straight ticket		(Split-ticket vs. partial split)	
	Coef.	Std. Err.	Coef.	Std. Err.	Coef.	Std. Err.
Chance	0.24 <sup>†</sup>	0.13	-1.27***	0.13	-1.51*	0.12
Competition	-0.03	0.15	0.19	0.14	0.22 <sup>†</sup>	0.13
Chance*competition	0.06	0.16	0.16	0.16	0.10	0.14
Party identification	-0.21*	0.09	-0.74***	0.11	-0.53***	0.10
Political sophistication	0.54***	0.13	0.30*	0.13	-0.24*	0.11
Chance*sophistication	-0.16	0.14	-0.30*	0.14	-0.14	0.13
Compet.*sophistication	-0.34*	0.17	-0.06	0.16	0.27*	0.14
Chance*compet.*soph.	0.23	0.18	0.12	0.18	-0.11	0.15
Constant	0.59***	0.14	1.14***	0.13	0.55***	0.11
N				3355		
McFadden R <sup>2</sup>				0.06		

<sup>†</sup>  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

These results are even clearer if we transform them in predicted probabilities.<sup>12</sup> They present the substantial effects of the explanatory variables in a much more tangible way. For an average degree of political sophistication and of party competition, and if their preferred party is among the top contenders, party identifiers have a probability of 0.30 to cast a straight ticket, against 0.24 for political independents. The probability to cast a split-ticket, on the other hand, is higher in the latter group (0.21) than among party identifiers (0.13), while the level of partial splitting, finally, is virtually unaffected by party identification (0.55 vs. 0.57). We now consider the impact of strategic incentives, starting with the main effect of parties' electoral chances. This variable has a significant impact on all three contrasts. In table 2, we present the corresponding predicted probabilities for a voter with an average degree of political sophistication and without a party identification, in a constituency with an average degree of competition. As chances increase, both straight-ticket voting and partial splitting become more frequent, while the probability to split one's ticket entirely strongly diminishes, from 0.53 to 0.21. These results are in line with hypothesis 1, with one exception: contrary to our expectations, the increase in the level of straight-ticket voting (from 0.17 to 0.24) is less

<sup>12</sup> All predicted probabilities presented in this paper have been computed using Clarify for Stata (Tomz, Wittenberg and King 2003; King, Tomz and Wittenberg 2000).

pronounced than the change in the level of partial splitting (0.30 to 0.55). Before discussing this result in more detail, it is however necessary to review the results corresponding to the third hypotheses. As a matter of fact, we also expect the impact of parties' chance to be affected by voters' degree of political sophistication.

Table 2. Impact of the chances of a voters' preferred party on split-ticket voting, for different levels of political sophistication (predicted probabilities)

	Average sophistication		Political novices		Political experts	
	Weak chances	Strong chances	Weak chances	Strong chances	Weak chances	Strong chances
Straight-ticket	0.17	0.24	0.23	0.29	0.12	0.19
Partial split	0.30	0.55	0.24	0.46	0.37	0.64
Split-ticket	0.53	0.21	0.53	0.25	0.51	0.17

We can first extend the previous results by considering how strongly the impact of parties' chances varies across different levels of political sophistication. We have computed similar probabilities, for political experts and for political novices. We focus here on 'typical' variations in the degree of political expertise: the level of political sophistication of political experts and novices differs from the average by a value of plus/minus one standard deviation. The impact of parties' chances among these two groups of voters can also be found in table 2. The changes in the frequency of the three categories of split-ticket voting are always in the same direction as those we have found among voters with an average degree of political sophistication – but their amplitude varies. The decrease in the frequency of split-ticket voting (bottom line of table 2) is more pronounced among experts than among novices. Furthermore, the increase in the level of straight-ticket voting is also stronger among political experts (+58%) than among political novices (+26%). Both sets of results are in line with hypothesis 3. On the other hand, we can still observe a high level of partial ticket splitting, even among political experts. This is surprising and does not seem to fit with hypothesis 1. We expected supporters of viable parties to be characterised by a high level of straight ticket voting. Yet, it is possible that our hypothesis was not precise enough, rather than not valid at all. These results may still fit with our assumptions about voters' strategic behaviour, if one

condition is fulfilled: if supporters of viable parties give their second vote for the Council of States to a party with *weak electoral chances*, it may explain their high level of partial split-ticket and still fit with our main assumptions. To test for this possibility, we have estimated a logit regression where the ‘quality’ of respondents’ second vote (coded 1 for viable parties and 0 otherwise) is regressed on the chances of their preferred party and on their level of political sophistication. Following our argument, the proportion of partial ticket splitters who give their second vote to a ‘non-viable’ party should increase with the chances of their preferred party and should be higher among political experts than among political novices. The corresponding results, presented here only in the form of predicted probabilities, offer some support for this complementary hypothesis (table 3). If the electoral chances of a party increase, its supporters are less likely to give their second vote to a viable party. This fits with the idea that partial ticket splitting may also be a form of strategic voting, as citizens give their second vote to a non-viable party. Like in the case of straight ticket, they avoid in this way supporting a competitor of their preferred party.

Table 3. Proportion of partial ticket splitters who support a viable party with their second vote (predicted probabilities).

	Chances of preferred party	
	Low	High
Political novices	0.88	0.58
Average sophistication	0.86	0.60
Political experts	0.83	0.61

Hypotheses 2 and 4 regard voters’ reaction to changes in the degree of electoral competition. We have argued that voters are more likely to cast a straight ticket by using only one of their votes in the Council of States when there is an intense competition between the top contenders, rather than splitting their ticket partially. In this way, they should avoid supporting a candidate that stands in direct competition with their preferred party. On the basis of the estimated coefficients of our model (presented in table 1), we have again computed series of predicted probabilities, for voters with different levels of political

sophistication, in constituencies with varying degrees of competition between the top contenders. Similarly to the previous case, we focus on ‘typical’ values or changes in the degree of competition. The probabilities were computed for contexts with a low degree of competition (average value of the measure of competition minus one standard deviation), an average degree (average competition intensity), and a strong competition (average value plus one standard deviation). To test hypotheses 2 and 4, we focus on the *ratio* between the level of partial ticket splitting and the level of straight ticket voting. For example, among political novices in constituencies with a low degree of competition, the probability that a voter partially split her ticket is 0.45, while the probability that she casts a straight ticket is 0.33. The corresponding ratio is thus 1.36. Following our hypotheses, we would expect this ratio to *decrease* with the degree of competition, and to do so more strongly among political experts. The corresponding results, presented in table 4, support only partially these hypotheses. Among political experts, we find as expected that an increase in the degree of competition leads to a higher level of straight ticket voting, as compared to partial ticket splitting. In the other two groups, by contrast, the degree of electoral competition has either no impact (among voters with a middle level of sophistication), or its impact is the opposite of what we had expected (among political novices). In the latter group, voters are more likely to give their second vote for the Council of States to an ‘opponent’ if the competition is intense.

Table 4. Impact of competition intensity on the ratio of partial ticket splitting to straight-ticket voting, by level of political sophistication (results based on predicted probabilities)

	Low competition	Average competition	Strong competition
Political novices	1.36	1.59	1.80
Average sophistication	2.23	2.29	2.32
Political experts	3.68	3.37	3.17

Furthermore, these results present another puzzle: while the ratio varies in the expected direction among political experts, its value is much higher than among politically less knowledgeable voters. Whatever the degree of competition, political experts are more than three times more likely to split their ticket for the Council of States, rather than to cast a

straight ticket. While these voters react as expected to *changes* in the strategic incentives, their voting behaviour is still difficult to explain on the basis of our model.

## **Conclusion**

The results presented here offer mixed evidence regarding our hypotheses about the determinants of split-ticket voting. We have focused on the impact of strategic incentives and on the role of voters' level of political sophistication in moderating this impact. While all of our hypotheses could at least be partially confirmed, we also found several surprising results that do not fit with the general assumptions of our model. As expected, we noted that voters tend to defect from their preferred party if its chances of winning a seat are low, and that the impact of this incentive is more pronounced among political experts than among political novices. We also found some evidence showing that the degree of partisan competition between the top contenders for the election to the Council of States affects the voting behaviour of their supporters. In this case, however, our hypothesis holds only among voters with a high level of political sophistication.

On the other hand, our results were sometimes more intriguing. The most surprising finding is certainly the low level of straight ticket voting among political experts. As we explained, casting a straight ticket in the context of Swiss elections means most of the time using only one of the two votes for the election to the Council of States, as few parties present two candidates. We have also argued that this choice was an adequate strategic response when the competition between the top contenders was intense. However, while political experts react 'appropriately' to *changes* in the degree of competition, they are still in general much less likely to use such a strategy. At first sight, this seems to indicate that the voting behaviour of political novices is more consistent with the assumptions of strategic voting. This would however be a very unlikely finding. The problem should rather be related to our measure of split-ticket voting. The three-category schema we have used here is a quite crude summary of

the possible combinations of votes offered by the electoral system. It will thus first be necessary to extend these analyses by using a more detailed model of the strategic incentives faced by voters and of their possible responses.

## References

- Abramson, Paul R., John H. Aldrich, Matthew Diamond et al. (2001). *Prime Minister and Parliament: Strategic Split-Ticket Voting*. Paper prepared for delivery at the 2001 Annual Meeting of the American Political Science Association, San Francisco, August 30 - September 2, 2001.
- Bawn, Kathleen (1999). "Voter Responses to Electoral Complexity: Ticket Splitting, Rational Voters and Representation in the Federal Republic of Germany", *British Journal of Political Science* 29(3): 487-505.
- Beck, Paul Allen, Lawrence Baum, Aage R. Clausen and Charles E. Smith, Jr. (1992). "Patterns and Sources of Ticket Splitting in Subpresidential Voting", *American Political Science Review* 86(4): 916-928.
- Blais, André, Richard Nadeau, Elisabeth Gidengil and Neil Nevitte (2001). "Measuring strategic voting in multiparty plurality elections", *Electoral Studies* 20: 343-352.
- Blais, André, Robert Young and Martin Turcotte (2005). "Direct or indirect? Assessing two approaches to the measurement of strategic voting", *Electoral Studies* 24: 163-176.
- Born, Richard (1994). "Split-Ticket Voters, Divided Government, and Fiorina's Policy-Balancing Model", *Legislative Studies Quarterly* 19(1): 95-115.
- Church, Clive H. (2004). *The Politics and Government of Switzerland*. Houndmills: Palgrave Macmillan.
- Cox, Gary W. (1997). *Making Votes Count: Strategic Coordination in the World's Electoral Systems*. Cambridge: Cambridge University Press.
- Dalton, Russell J. (2002). *Citizen Politics: Public Opinion and Political Parties in Advanced Industrial Democracies*. Third Edition. New York: Chatham House.
- Dalton, Russell J., Ian McAllister and Martin P. Wattenberg (2000). "The Consequences of Partisan Dealignment", in Russell J. Dalton and Martin P. Wattenberg (eds). *Parties without Partisans: Political Change in Advanced Industrial Democracies*. Oxford: Oxford University Press, pp. 37-63.
- Dalton, Russell J. and Martin P. Wattenberg (eds) (2000). *Parties Without Partisans: Political Change in Advanced Industrial Democracies*. Oxford: Oxford University Press.
- Farago, Peter (1996). *Elections 95: Composition et orientations politiques de l'électorat aux élections fédérales 1995*. Berne/Genève/Zürich: Communauté de recherche des départements de science politique des universités de Berne, Genève et Zurich.
- Fiorina, Morris P. (1992). "An Era of Divided Government", *Political Science Quarterly* 107(3): 387-410.
- Fiorina, Morris P. (1996). *Divided Government*. 2nd edition. Boston: Allyn & Bacon.

- Fisher, Stephen D. (2004). "Definition and Measurement of Tactical Voting: The Role of Rational Choice", *British Journal of Political Science* 34(1): 152-166.
- Fiske, Susan T. and Donald R. Kinder (1981). "Involvement, Expertise, and Schema Use: Evidence from Political Cognition", in Nancy Cantor and John F. Kihlstrom (eds). *Personality, Cognition and Social Interaction*. Hillsdale: Erlbaum, pp. 171-190.
- Fiske, Susan T., Richard R. Lau and Richard A. Smith (1990). "On the Varieties and Utilities of Political Expertise", *Social Cognition* 8(1): 31-48.
- Gschwend, Thomas (2004). *Ticket-Splitting and Strategic Voting under Mixed Electoral Rules: Evidence from Germany*. Discussion Paper No. 05-06, Sonderforschungsbereich 504, Rationalitätskonzepte, Entscheidungsverhalten und ökonomische Modellierung, Mannheim, December 2004. Available at <http://www.sfb504.uni-mannheim.de/publications/dp05-06.pdf>.
- Hirter, Hans (2000). *Elections 1999: Composition et orientation politique de l'électorat lors des élections fédérales de 1999*. Berne/Genève/Zurich: Equipe de recherche des départements de science politique des Universités de Berne, Genève et Zurich.
- Karp, Jeffrey A., Jack Vowles, Susan A. Banducci and Todd Donovan (2002). "Strategic voting, party activity, and candidate effects: testing explanations for split voting in New Zealand's new mixed system", *Electoral Studies* 21: 1-22.
- King, Gary, Michael Tomz and Jason Wittenberg (2000). "Making the Most of Statistical Analyses: Improving Interpretation and Presentation", *American Journal of Political Science* 44(2): 347-361.
- Kriesi, Hanspeter (1998). "Straightforward and Strategic Voting in the Elections for the Swiss Council of States in 1995", *Electoral Studies* 17(1): 45-59.
- Kriesi, Hanspeter (2003). "Wahlentscheide bei den Ständeratswahlen", in Pascal Sciarini, Sibylle Hardmeier and Adrian Vatter (eds). *Schweizer Wahlen 1999*. Bern: Haupt, pp. 147-181.
- Krosnick, Jon A. (1990). "Expertise and Political Psychology", *Social Cognition* 8(1): 1-8.
- Lachat, Romain (2004). *A Heterogeneous Electorate: Individual-Level Differences in the Process of Formation of Voting Choices in Germany and Switzerland*. PhD Thesis. University of Zurich.
- Lau, Richard R. and Ralph Erber (1985). "Political Sophistication: An Information-Processing Perspective", in Sidney Kraus and Richard M. Perloff (eds). *Mass Media and Political Thought: An Information-Processing Approach*. Beverly Hills: Sage, pp. 37-64.
- Lijphart, Arend (1994). *Electoral systems and party systems*. Oxford: Oxford University Press.
- Long, J. Scott (1997). *Regression Models for Categorical and Limited Dependent Variables*. Thousand Oaks: Sage.

Lutz, Georg and Dirk Strohmann (1998). *Wahl- und Abstimmungsrecht in den Kantonen*. Bern: Haupt.

Mattei, Franco and John S. Howes (2000). "Competing Explanations of Split-Ticket Voting in American National Elections", *American Politics Quarterly* 28(3): 379-407.

OFS (2003). *Les élections au Conseil national de 2003: L'évolution du paysage politique depuis 1971*. Neuchâtel: Office fédéral de la statistique.

Pappi, Franz Urban and Paul W. Thurner (2002). "Electoral behaviour in a two-vote system: Incentives for ticket splitting in German *Bundestag* elections", *European Journal of Political Research* 41(2): 207-232.

Roscoe, Douglas D. (2003). "The Choosers or the Choices? Voter Characteristics and the Structure of Electoral Competition as Explanations for Ticket Splitting", *The Journal of Politics* 65(4): 1147-1164.

Schoen, Harald (1999). "Split-ticket Voting in German Federal Elections, 1953-1990: An Example of Sophisticated Balloting?", *Electoral Studies* 18: 473-496.

Schoen, Harald (2000). "Stimmensplitting bei Bundestagswahlen - ein Spiegelbild des Verhältnisses zwischen Bürgern und Parteien?", in Markus Klein, Wolfgang Jagodzinski et al. (eds). *50 Jahre empirische Wahlforschung in Deutschland: Entwicklung, Befunde, Perspektiven, Daten*. Wiesbaden: Westdeutscher Verlag, pp. 361-388.

Selb, Peter and Romain Lachat (2004). *Elections 2003. L'évolution du comportement électoral*. Berne/Genève/Zurich: Instituts de science politiques des Universités de Berne, Genève et Zurich.

Tomz, Michael, Jason Wittenberg and Gary King (2003). CLARIFY: Software for Interpreting and Presenting Statistical Results. Version 2.1. Stanford University, University of Wisconsin, and Harvard University. January 5. Available at <http://gking.harvard.edu/>.

Venturino, Fulvio (2003). *Split ticket voting in Italy: Rightist voters in 2001 parliamentary election*. Paper presented at the international conference of the Italian Society of Electoral Studies, Venice, December 18-20, 2003.

Wattenberg, Martin P. (1991). *The Rise of Candidate-Centered Politics: Presidential Elections of the 1980s*. Cambridge: Harvard University Press.

Wernli, Boris (2004). "The Federal Elections in Switzerland", in Ulrich Klöti, Peter Knoepfel et al. (eds). *Handbook of Swiss Politics*. Zurich: Neue Zürcher Zeitung Publishing, pp. 431-478.

Zaller, John (1992). *The Nature and Origins of Mass Opinion*. Cambridge: Cambridge University Press.