

Party strategies, institutions, and electoral system effects

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January 2012

Paper prepared for the conference “Duty and Choice: Participation and Preferences in Democratic Elections”, Montreal, January 20-21.

Abstract

Electoral systems have mechanical and psychological effects. Much is known about the mechanical effect, i.e., about the disproportionality between parties’ shares of votes and seats. Psychological effects on parties’ and voters’ behavior are however more difficult to capture. Yet, a recent contribution by Blais et al. (2011) has suggested a method for quantifying all three effects in the case of parallel elections based on different electoral systems. This method opens up new possibilities for explaining the strength of electoral system effects. This paper builds on this research by examining which factors influence the relative importance of the various electoral system effects. The analysis focuses on the case of Switzerland, comparing the outcomes of the PR election of the National Council and of the majoritarian election of the Council of States – the two houses of the Swiss federal parliament. Both institutional and partisan factors are considered: district magnitude, the presence and number of incumbents and small party challengers, and coordination failures within the left-wing or right-wing political camp.

1. Introduction

We know at least since the classical study of Duverger (1951) that electoral systems influence the distribution of seats as well as the behavior of parties and voters. Political actors anticipate the consequences of the rules used to transform the votes cast into seats (Cox 1997; Lijphart 1994). Three effects of electoral systems usually are distinguished: a mechanical effect and two psychological effects. The *mechanical effect* of an electoral system is a direct consequence of the electoral formula. Depending on the distribution of votes and on the degree of proportionality of the electoral formula, the seats share received by each of the parties in competition will match more or less closely its share of votes. Given the limited number of seats to be distributed, however, even the most proportional electoral system will create disparities, with some parties receiving a disproportionately high share of seats, and others receiving less seats than votes or even no seats at all. This mechanical effect leads voters and parties to strategically adapt their behavior. This is reflected in two indirect electoral system effects. The *psychological effect on voters* means that some citizens will vote in a strategic way. They will avoid wasting their votes by not supporting parties or candidates which have no real chances of winning a seat (Alvarez and Nagler 2000; Blais et al. 2001). The *psychological effect on parties*, finally, means that some parties will refrain from entering the race and spending resources in electoral districts in which their chances of success are too thin. The general expectation formulated in the literature is that less proportional electoral systems have stronger effects. That is, a less proportional electoral system will lead to more parties deciding not to enter the race, to more frequent strategic desertion from non-viable parties, and to larger disparities between the distributions of votes and seats.

Although these effects have been known for quite a long time, research has long been hampered by the difficulties of identifying and quantifying these effects. This is particularly true of the “elusive” psychological effects on voters and parties (Blais and Carty 1991; Clark and Golder 2006). However, a recent article by Blais et al. (2011) has suggested a methodology for disentangling and measuring the three effects of electoral systems. This method is based on the comparison of parallel elections that differ only in the electoral system used. It allows determining how differences in the partisan distribution of seats between the two elections can be attributed to a psychological effect on parties, on voters, or to the mechanical effect of the electoral system.

This new approach offers interesting possibilities for measuring electoral system effects. Furthermore, as the effects are measured using the same metric, their size can be compared to one another. Most important, this methodology also offers new possibilities for explaining differences in the size of electoral system effects. Several studies have already dealt with the size of the mechanical effect, which can be more easily quantified, using for instance a measure of the disproportionality of the allocation of seats, compared to the distribution of votes (e.g., Gallagher 1991; Lijphart 1990). But quantitative analyses dealing with all three effects and with their relative importance are largely missing so far.

This paper analyzes electoral system effects in the case of Switzerland, which is one of the two countries on the basis of which the methodology of Blais et al. (2011) was developed. The focus is on the difference between the outcomes of the election of the lower house (National Council) and upper house (Council of States) of the Swiss federal parliament, in the nine elections that took place from 1971 to 2003. For both Councils, the electoral districts correspond to the 26 cantons, the units of the federal State. The National Council is elected with a PR system, for which district magnitude ranges from 1 to 35. The Council of States election is a two-round majority election, with districts of magnitude 1 or 2. The two elections differ only in the electoral system used. The two houses of the federal parliament have exactly the same powers and the same citizens have the right to vote in both elections (Kriesi and Trechsel 2008; Lachat 2006). Any difference between the two outcomes can thus be attributed to an effect of the electoral system.¹

Several possible explanations for the relative size of the electoral system effects will be investigated. I will first consider the relations between the three partial effects, that is, the degree to which the strength of one electoral system effect depends on the strength of the others. Second, I will focus on the role of institutional and strategic factors. I will test hypotheses about the role of district magnitude, about the presence of incumbents and of small party challengers, and about differences in the degree of coordination of left-wing and right-wing parties. The rest of this paper is structured as follows. The method used to measure the total effect of the electoral system and its three components is introduced in section 2. Section 3 discusses the hypotheses about the effects of district magnitude and of the partisan

¹ Some cases, that is, canton by year combinations, were however excluded from the analysis because of additional differences between the two elections. This pertains to cantons which use a different electoral system for the upper house election (different electoral rule or elections in a popular assembly or through the cantonal parliament) and to cantons in which the elections take place on different days.

configuration of candidates. The empirical results are presented in the following three sections. First, descriptive results about the distribution of the electoral system effects are introduced in section 4. Section 5 discusses the relation among the electoral system effects. Finally, the hypotheses about the role of institutional and partisan factors are tested in section 6.

2. Measuring electoral system effects

This study aims to explain the difference in the outcome of two parallel elections, which only differ from one another in the electoral system used. Taking the PR election of the National Council as the reference point, the electoral system effect is defined as the effect on the election outcome of using a majority rule and small districts rather than a PR rule with districts of varying magnitude. That is, the effect of the majoritarian electoral system is defined not in comparison with a hypothetical perfectly proportional system, but by comparing its outcome with that of another, more proportional electoral system.

The majoritarian electoral system of the Council of States elections leads to a concentration of votes and seats on a smaller number of parties, compared to the outcome of the National Council election. Following the logic of Duverger, three partial effects can be distinguished: a psychological effect on parties, a psychological effect on voters, and a mechanical effect. To better understand how these three partial effects can be disentangled and measured, it is important to emphasize two important properties: First, the effects are sequential, that is, they take place one after the other and not simultaneously. Second, they influence other aspects of the electoral process.

The sequence of electoral system effects is presented in Figure 1. The difference between the outcomes of the two elections corresponds to the total effect of the electoral system. This total effect is the cumulative result of three partial effects. First in the sequence is the psychological effect on parties. It takes place before votes are cast and it influences the number of parties in competition. The majoritarian electoral system of the Council of States election is less permissive, meaning that it makes it more difficult for small parties to gain representation. As a consequence, some parties who compete for the National Council will prefer not to do so for the Council of States.

<Figure 1 about here>

The second effect is the psychological effect on voters. It takes place at the moment of the vote and influences how votes are distributed. Some supporters of parties who have only weak chances of winning a seat in the Council of States will prefer supporting another candidate, choosing from among the viable candidates. The psychological effect on voters should thus lead to a concentration of votes on the front-runners. Last of all, the mechanical effect takes place after votes were cast. It influences how votes are transformed into seats. The majoritarian electoral system should lead to larger disparities between parties' shares of votes and their shares of seats. In the Council of States election, only one or two parties will win a seat in a given canton, and all others will receive none.

In order to be able to compare more easily the various electoral system effects with one another, they must be expressed using the same metric. Blais et al. (2011) suggest expressing each effect as a change in the effective number of parliamentary parties (ENPP, Laakso and Taagepera 1979). This is relatively straightforward as far as the total effect is concerned: to compare the outcomes of the two elections, one can summarize the distribution of seats in each council using the ENPP, and take the difference between these two figures:

$$\text{Total effect} = \text{ENPP}_{\text{nonpr}} - \text{ENPP}_{\text{pr}}.$$

To measure the mechanical effect, one needs to compare the outcome of the Council of States election (that is, after all three partial effects played their role) with the outcome that would have resulted from having both psychological effects but no mechanical effect. The latter hypothetical outcome corresponds to distributing the Council of States votes with the electoral formula and districts of the PR election. Following the notation of Blais et al. (2011), the latter outcome is called simulation 1.

$$\text{Mechanical effect} = \text{ENPP}_{\text{nonpr}} - \text{ENPP}_{\text{sim1}}.$$

It follows that the total psychological effect (the sum of the psychological effects on both parties and voters) is equal to the difference between the total effect and the mechanical one, which can be expressed as

$$\text{Total psychological effect} = \text{ENPP}_{\text{sim1}} - \text{ENPP}_{\text{pr}}.$$

Next, the psychological effect on voters corresponds again to the difference between two (hypothetical) electoral outcomes: when voters respond to strategic incentives and when they do not. Both of these outcomes are derived from a regression model of the votes received by the various parties competing in the Council of States election. Parties' vote shares are regressed on their electoral strength in the PR election of the National Council, on their viability in a majoritarian election, and on an interaction term between the two. Using this regression model, one can predict parties' vote shares under two scenarios: when citizens respond to parties' viability (simulation 2), that is, when the psychological effect on voters play, and when all parties are considered to be viable (simulation 3), that is, canceling the psychological effect on voters. These votes are then transformed into seats using the rules of the PR election. The corresponding distributions of seats are summarized with the ENPP, which allows computing the effect on voters:

$$\text{Psychological effect on voters} = \text{ENPP}_{\text{sim2}} - \text{ENPP}_{\text{sim3}}.$$

The psychological effect on parties, finally, corresponds simply to the difference between the total psychological effect and the effect on voters:

$$\text{Psychological effect on parties} = (\text{ENPP}_{\text{sim1}} - \text{ENPP}_{\text{pr}}) - (\text{ENPP}_{\text{sim2}} - \text{ENPP}_{\text{sim3}}).$$

The method and data used to compute these effects are identical with those of Blais et al. (2011), who also offer a more detailed presentation of the method. The results from the regression model used to perform simulations 2 and 3 can be found in the same article.²

These estimated electoral system effects can be conceived of in both absolute and relative terms. In absolute terms, they simply express the corresponding change in the effective number of parties. The total effect in a given electoral district and election could for instance be of reducing the effective number of parties by 3. This effect corresponds to the sum of the three partial effects. These could take different values, for instance a reduction of 1.5 parties due to the psychological effect on parties, of 0.5 parties due to the effect on voters, with the rest being a consequence of the mechanical effect.

² A step-by-step example of the method can be found in the online appendix of Blais et al. (2011), available at <http://www.romain-lachat.ch/cps2011/index.html>.

When expressed in relative terms, the effects correspond to the proportion of the total effect explained by the corresponding partial effect. In the above example, the effect on parties would represent half of the total effect, the effect on voters 17% and the mechanical effect 33%. In relative terms, thus, the three partial effects sum by definition to 1. Both absolute and relative effects are useful and they allow answering different questions, as we will see below. All this is relatively straightforward, but one small complication must be emphasized: As will be shown below in the presentation of the results, the estimated electoral system effects can sometimes be positive, that is, in the opposite direction of the total effect. This may appear to be counterintuitive and I will offer below some examples and additional explanations to show why this can happen. For the purpose of computing relative electoral system effects, however, I have simply set positive effects to 0. Positive effects then have a relative effect of 0 (they do not contribute at all to the total reduction in the effective number of parties). When partial effects are negative, which happens in the vast majority of cases, their relative impact is computed as their size divided by the sum of all negative effects.³

3. Explaining electoral system effects

The goal of this paper is to analyze the role of a series of factors likely to influence the size of electoral system effects. Three types of explanatory factors will be considered. First, I will look at the relations among effects, that is, the degree to which earlier effects constrain or influence subsequent effects. Second, the role of electoral institutions will be considered. In the Swiss context, the most important institutional variable is district magnitude: it varies considerably in the PR election of the National Council while being almost constant in the majoritarian election of the Council of States. Third, the paper will consider the role of party strategies and of the partisan configuration of candidates. As the latter factors already are part of the effect on parties, this last series of analyses will be limited to how these variables affect voters and the mechanical effect of the electoral system.

3.1 Relation among effects

As mentioned above, the effects are sequential. This is likely to lead to strong relations among the three partial effects. The size of the psychological effect on parties, for instance, should constrain the size of the subsequent effects. If parties strongly respond to the anticipated mechanical effect, so that no weak candidate takes part in the majoritarian election, the further

³ In the rare event that all effects are equal to 0, relative effects are set to missing.

effects can only be small. In more general terms, one would expect that there is less room for subsequent effects if previous effects are strong. This hypothesis may appear to be relatively trivial, and it would indeed be quite surprising to find no such relationship. However, some questions remain open. For instance, it is a priori unclear if the effect on parties constrain both the effect on voters and the mechanical effect, or only one of these. Also, when focusing on absolute effects, rather than relative ones, the relation among electoral system effects may or may not be strong. In some cantons, all effects could be large, while in others, they could all be small.

3.2 District magnitude

The second type of explanatory factor that will be considered is district magnitude. There is much variation in this respect between the electoral districts. As mentioned above, district magnitude for the National Council election varies from 1 to 35. In the Council of States election, most cantons have 2 seats, while a few cantons have a single seat. This means that in some cantons, there are large differences in district magnitude between the PR and the majoritarian election, while in other cantons, the difference is small. This variation allows testing the impact of district magnitude on the size of electoral system effects. To this end, I start from the *difference* between the PR district magnitude and the majoritarian district magnitude. This difference is positive in most cases, as district magnitude is normally larger in the PR election than in the majoritarian one. But it is equal to 0 in a few cases, and even negative (-1) in one case. The latter is for a canton which has two seats in the upper house, but a single one in the lower house.⁴ As the distribution of this difference is strongly asymmetric (mean value 8.6 with the median at 6), I take its logarithm (after having added 2 to all values in order to have only positive values).

As proportionality and the fear of wasted votes are the factors that drive electoral systems effects, the difference in the district magnitude of the two elections should have a strong effect. Here, too, it would be surprising to find no relation. The larger is the difference in the magnitude of the districts, the stronger should be the absolute electoral system effects. However, it is an open question as to which of the effects is most strongly influenced by district magnitude. That is, it is more difficult to formulate a clear hypothesis about the impact

⁴ In this case, as well as in the five cantons/years in which district magnitude is the same in both elections, the total electoral system effect turns out to be equal to 0.

of district magnitude on the *relative* electoral system effects. It could be, for instance, that parties strongly react to district magnitude, but that voters do so only to a lesser extent.

3.3 Party supply

The third group of explanatory factors pertains to the type and configuration of parties which compete in the election of the Council of States. As this is a consequence of parties' decision to enter or not to enter this race, it forms part of the psychological effect on parties. As a consequence, such factors can only be considered when explaining subsequent electoral system effects, that is, the effect on voters and the mechanical effect. The first relevant characteristic of the partisan configuration is the presence and number of incumbents.

Incumbency sends voters a strong signal about the viability of a candidate. When one or both of the Councilors of States decide not to run again, it may be more difficult for voters to know which of the candidates are viable. Accordingly, I expect the psychological effect on voters to be smaller – and the mechanical effect to be larger – when one or both of the incumbents decide not to compete for an additional mandate.

The second relevant aspect of the party configuration is the presence of small challengers. The upper house of the Swiss parliament is largely dominated by the main four Swiss parties: the Social Democratic Party (SPS), the Christian Democratic Party (CVP), the Liberal Party (FDP), and the Swiss People's Party (SVP). These four parties formed the federal government from 1959 to 2008. In the elections considered in this article, these parties won all but 1 or 2 seats in the Council of States. Nonetheless, challengers from smaller parties are often competing in this election. I expect the presence of small party challengers to increase the relative importance of the psychological effect on voters, compared to the mechanical effect. When only candidates from large parties are running, it may be quite difficult for voters to sort out viable from non-viable candidates. By contrast, when candidates which are clearly non-viable in a majoritarian election also enter the race, these candidates should be recognized more easily by citizens. The variable used to capture this aspect of the partisan configuration simply counts how many candidates in the Council of States election are from a party other than the main four parties.⁵

⁵ I made one exception to this rule. In the canton of Zurich, the League of Independents (LdU) won a seat in the Council of States in five of the nine elections under study. As a consequence I did not count the LdU candidate as a small party candidate in that canton.

Finally, I consider the degree of coordination in the various political camps. In particular, I look at differences between the left-wing and right-wing camps. There are strong incentives for parties of similar ideological orientation to coordinate around common candidatures. In most cantons, it is for instance virtually impossible that left-wing parties can claim both seats. If two left-wing candidates enter the race, the chances that any of them will win a seat will be reduced. Such coordination failures are all the more important when they are unilateral. That is, if left-wing parties coordinate successfully but right-wing parties do not, the latter will be in a more difficult position, as they face the risk that the votes from their supporters will be divided between several candidates (Kriesi 1998a, 1998b). However, this situation may also strengthen the incentives for strategic voting. In the situation sketched above, right-wing supporters may recognize the increased need for strategic voting and concentrate on the stronger candidates from their political camp. Accordingly, I expect a unilateral coordination failure to reinforce the psychological effect on voters.

To identify such cases of “coordination failures”, I start from the difference between the number of left-wing candidates and the number of right-wing candidates in each canton and each election year. I then take the median value of this difference in each canton. In some cantons, for instance, right-wing parties usually present two candidates and left-wing parties a single one, resulting in a median difference of 1. In other cantons, both left-wing parties and right-wing parties usually present two candidates, leading to a median difference of 0. In other words, this gives me the “baseline” or usual difference between the numbers of candidates presented by each camp. Then, for each canton/election, I compute how the left-right difference differs from the baseline. Take for example the canton of Neuchatel. In most elections, there were an equal number of candidates on the left and on the right, resulting in a median difference of 0. In 1999, however, six left-wing candidates entered the race, against only two right-wing candidates. This indicates a strong coordination failure on the left: the difference between the two camps in the number of candidates was higher than the median difference by a value of 4.

4. The distribution of electoral system effects

The analyses are divided into three parts. First, I discuss some descriptive results on the distribution of absolute and relative electoral system effects. Second, I turn to the question of how effects constrain each other. Finally, I present results on the effects of both district magnitude and the partisan configuration of candidates.

Figure 2 summarizes the distribution of the total effect of the electoral system and of its three components. The left-hand panel shows the distribution of absolute effects, and the right-hand panel of relative effects. Considering first absolute effects, one can note a substantial variation in the size of the total effect (the fourth boxplot in the left-hand panel). It ranges from a value of 0 to a value of -5 . A value of 0 corresponds to the weakest possible effect. It means that the effective number of parties in a given canton/year is the same in both houses of the parliament, despite the difference in the electoral system. The strongest effect observed is a reduction of five effective parties between the National Council and the Council of States. The median value is -1.6 .

<Figure 2 about here>

Based on the median values of the effects, the strongest of the partial effects is the mechanical one (-0.8), followed by the psychological effects on parties (-0.6) and the effect on voters (-0.2). The distribution of the partial effects expressed in relative terms, in the right-hand panel, confirms that the psychological effect on voters contributes least to explaining the smaller number of effective parties observed in the Council of States. At the same time, this figure shows considerable variation across cantons and elections in the relative importance of the three partial effects. For each of them, there are cases in which they do not contribute at all to the total electoral system effect. On the other hand, there are cases in which the entire electoral system effect is due either to the psychological effect on parties or to the mechanical effect.

Apart from the strong variation in the size of effects, another striking result in Figure 2 is that the partial effects can be positive. This finding may be counterintuitive and it requires some explanation. The estimated effects show the difference in terms of the ENPP resulting from the use of a majoritarian system (with small districts) rather than a PR system (with districts of varying magnitude). One would expect the effective number of parties always to be smaller (or at least not to be larger) under a majoritarian rule, as this system leads to a concentration of votes and seats on the strongest competitors. While this is the case for the total effect, its components may in some cases work in opposite directions.

Consider first the mechanical effect. This is the simplest case as it only involves a change of the seat allocation rule, based on the same distribution of votes. While this effect has the expected negative value in most cases, it is positive in 13 out of 145 cases. The largest value is an increase in the ENPP of 0.2 in the canton of Schwyz in the 1991, 1995 and 1999 elections. That is, the effective number of parties is higher with the majoritarian rule (and 2 seats) than if the Council of States votes had been distributed using the same rules than for the National Council election, that is, a PR rule with a district magnitude of 3. In the Council of States election, votes were heavily concentrated on the main three candidates, two from the CVP and one from the FDP. The ENPP in the upper chamber was equal to 2, as each of these parties received one seat. But with a PR rule, the CVP would have won 2 of the 3 seats, and the FDP 1, resulting in a smaller ENPP of 1.8. The use of a PR electoral rule would thus have decreased the effective number of parties, compared to the majoritarian rule and a slightly smaller district magnitude.

Psychological effects also can be positive. For the effect on voters, this happens however in only two cases: Thurgau in 1971 and Luzern in 1975. In both cases, the psychological effect on parties was already so strong, that only the two front-runners presented candidates for the Council of States. In both of those cases, the distribution of votes simulated by canceling the impact of strategic factors lead to a slightly higher share of votes for the strongest party, which reduces the ENPP (from about 2 to 1.8 in both cases). Positive values are more frequent for the psychological effect on parties (40 out of 145 cases), and a few of them are relatively large. Such positive effects are most likely to occur when some large parties refrain from presenting any candidate for the Council of States, while many small parties decide to do so (see Blais et al. 2011). This type of configuration has become particularly frequent in recent elections. It implies an increase in the effective number of parties, because small parties would benefit from the withdrawal of some of the major competitors. This situation, of course, is in reality compensated for later by the psychological effect on voters and by the mechanical effect, which will both reduce the effective number of parties.

5. Relations among effects

Having presented some descriptive statistics on the distribution of the effects, I can now turn to the first part of the analysis, considering the relations among effects. Table 1 presents the correlations among both absolute and relative effects. As expected, the effects are related to one another. But there are important differences in the strength of these associations. It is

more interesting to consider the associations between the relative effects. One would expect strong negative relations: when one effect is larger, there is less room for further effects to influence the distribution of votes and seats. Such relations can be observed with respect to the first effect in the sequence, that is, the effect on parties. The larger is the effect on parties, the weaker are the effect on voters and the mechanical effect. The association between the effect on voters and the mechanical effect, by contrast, is not significant. A larger effect on voters does not necessarily imply a weaker mechanical effect. This means that voters do not compensate entirely for the lack of coordination among parties. A large effect on voters is only possible when the effect on parties is relatively weak, that is, when parties without realistic electoral chances nonetheless decide to field candidates for the upper house election. In such a situation, voters' response to strategic incentives is more consequential, but not to the point of making the mechanical effect irrelevant.

<Table 1 about here>

6. Impact of institutions and party strategies

The first potential explanatory factor to be considered is related to the institutional context: it is the (log of the) difference between the district magnitude for the PR election and the district magnitude for the majoritarian election. Table 2 shows how this difference is related with the size of the electoral system effects. First, one can notice a negative association with the total effect. This is not surprising and just confirms a general property of electoral system effects. The decrease in the ENPP resulting from using a majoritarian rather than a proportional electoral system is all the more important as the district magnitude of the PR election is large. Also, the first column in Table 2, which shows the associations with the *absolute* partial effects, reveals that the associations are negative. Again, this was to be expected.

<Table 2 about here>

More interesting are the relations between district magnitude and the *relative* effects, shown in the right-hand column of Table 2. In cantons with larger districts for the National Council election the effect on parties represents a smaller part of the total effect, while the mechanical effect represents a larger part. The relative importance of the effect on voters, by contrast, does not appear to vary systematically with district magnitude. These results point to a difference in the nature of electoral system effects between smaller and larger cantons. In

small cantons, i.e., cantons with a limited number of seats in both Councils, the number of parties that can gain representation is limited. This is likely to reduce the coordination problems in the various political camps and is therefore linked with a stronger partisan effect. In large cantons, by contrast, the larger number of parties competing in the PR election makes coordination more difficult. Even parties that have virtually no chances of success in the upper chamber may still decide to compete, in order to be more visible and to try to increase their electoral prospects in the parallel PR election (Kriesi 1998a). This relatively weaker effect on parties in larger district is mainly compensated by a larger mechanical effect – but not by a larger effect on voters. While larger districts are characterized by larger electoral effects in absolute terms, the relative importance of the psychological effects is smaller.

Turning to the role of partisan factors, Table 3 shows the average relative effects for different configurations of incumbents and challengers. In cantons with a single seat, I distinguish the cases where the incumbent is running again and those where he or she does not. In cantons with two seats in the upper house, the effects are summarized separately for elections with zero, one or two incumbents. The presence of incumbents increases the relative size of the psychological effect on parties. In cantons with a single seat in the upper chamber, the effect on parties accounts for 57% of the total effect when the incumbent is not running again, and this effect increase to 83% when the incumbent runs for an additional mandate. In the latter situation, there is very little room left for the other effects. An incumbent running again apparently sends a strong signal to the other parties and many of them refrain from entering the race.

<Table 3 about here>

A similar effect can be observed in cantons with two seats in the Council of States. The effect on parties makes up a larger share of the total effect when both incumbents are running again than when none of them is running again. The increase in the relative size of the psychological effect on parties (from 26% to 44%) is even larger than in the first group of cantons.

The other two characteristics of the partisan configuration are the presence and number of candidates from small parties, on the one hand, and coordination failures among left-wing or right-wing parties, on the other. I expected both of these variables to reinforce the

psychological effect on voters, compared to the mechanical effect. As both hypotheses are based on a similar logic, I will discuss the corresponding results simultaneously. Table 4 presents the size of the electoral system effects for different number of candidates from small parties, and Table 5 presents the same type of results for different “coordination differentials” between the main two political camps. As explained above, both a larger number of small party candidates and a unilateral coordination failure mean that the effect on parties has been smaller. It is thus simply logical to observe that these variables are very strongly related with the relative importance of the psychological effect on parties.

<Tables 4 and 5 about here>

The interesting results are those pertaining to the effect on voters and to the mechanical effect. When the relative effect on parties becomes smaller, both subsequent effects become larger. The psychological effect on voters, however, is more strongly influenced. It is quite small when no small party fields a candidate in the upper house election (representing 10% of the total effect, Table 4) or when both political camps are equally coordinated (accounting then for 15% of the total effect, Table 5). Yet, it increases rapidly as small party candidates enter the race or as coordination failures become more evident. In every case, it remains smaller than the mechanical effect. As we have already seen before, the effect on voters generally is weaker than the other electoral system effects. But it comes closer to the mechanical effect in situations that make strategic voting easier. In Table 4, for instance, we see that the effect on voters is almost three times smaller than the mechanical effect when small parties keep out of the majoritarian election. In contrast, when two or more small party candidates compete, the mechanical effect is “only” about one and a half time larger than the effect on voters. A similar increase in the relative importance of the psychological effect on voters can be observed in Table 5, when comparing races with and without coordination failures.

7. Conclusion

The method proposed by Blais et al. (2011) to quantify electoral system opens up new possibilities for examining how parties and citizens react to the strategic incentives linked with different electoral rules. Although this method is limited to the special case of having two parallel elections based on different electoral systems, it represents an interesting opportunity for analyzing which factors may influence the relative importance of the three electoral system effects, that is, the psychological effects on parties and voters, as well as the

mechanical effect. This paper focused on the case of Switzerland in order to estimate how these effects were influenced by district magnitude as well as by various characteristics of the configuration of parties in competition. In the Swiss context, the effects on voters and parties and the mechanical effect can be measured by contrasting the outcome of the National Council election, based on a PR system with districts of varying magnitude, with that of the Council of States election, involving a majoritarian election with small districts.

The analysis of these elections in the 1971-2003 period has shown that both the effect on parties and the mechanical effect are strong, while the psychological effect on voters is comparatively less important. Parties and voters do anticipate the effects of the majoritarian rule used in the Council of States election. Some parties refrain from presenting candidates in that election and voters tend to concentrate on the more viable parties. However, these psychological effects account only for a part of the total effect of the electoral system. The psychological effect on voters, in particular, appears to be relatively limited. It is also less strongly related to the effect on parties than is the mechanical effect. The effect on parties is weak when many non-viable parties compete in the majoritarian election, leaving more room for subsequent effects to influence the electoral outcomes. But the relative importance of the mechanical effect increases more strongly than that of the psychological effect on voters. Citizens' limited capacity to compensate for a weak effect on parties was also evident from the analysis of the role of district magnitude. In cantons with a larger number of seats in the lower house, more parties tend to compete for both the National Council and the Council of States. The psychological effect on parties is thus negatively related with district magnitude. While this means there are more opportunities for citizens to vote in a strategic way by deserting weak candidates, the relative importance of the effect on parties does not significantly vary with district magnitude.

On the other hand, the analysis of the role of partisan factors has revealed that voters do respond to specific strategic situations. The psychological effect on voters is clearly stronger when small parties field candidates in the majoritarian election of the upper house. Similarly, the impact of strategic voting is more pronounced when left-wing or right-wing parties fail to coordinate on a small number of common candidatures. In both situations, the configuration of parties in competition makes it easier for citizens to identify non-viable candidates or reinforces the incentives to defect from such non-viable candidates. Voters do respond to this type of strategic incentives, increasing the relative importance of the psychological effect on voters, compared to the mechanical effect.

8. References

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Figure 1. The sequence of psychological and mechanical effects

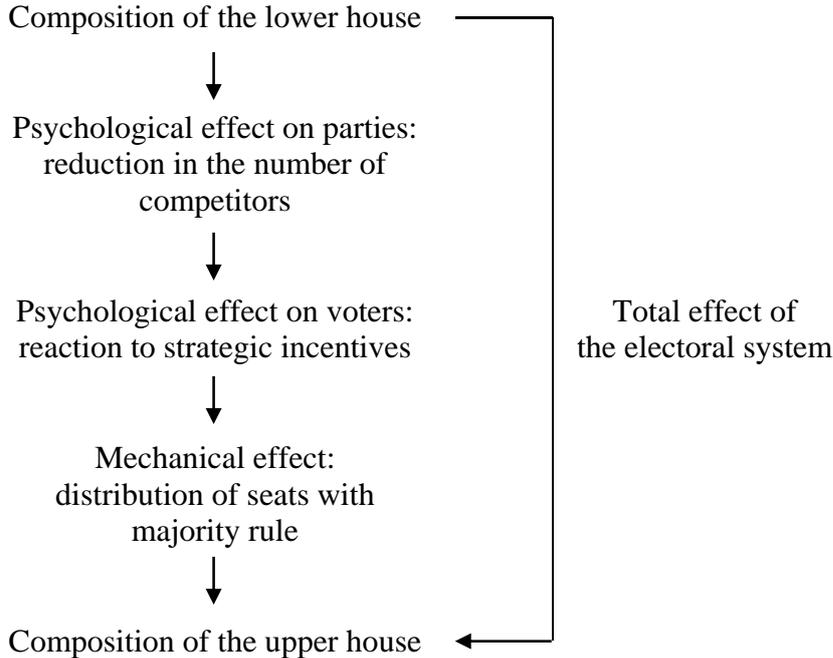


Figure 2. Distribution of absolute and relative electoral system effects.

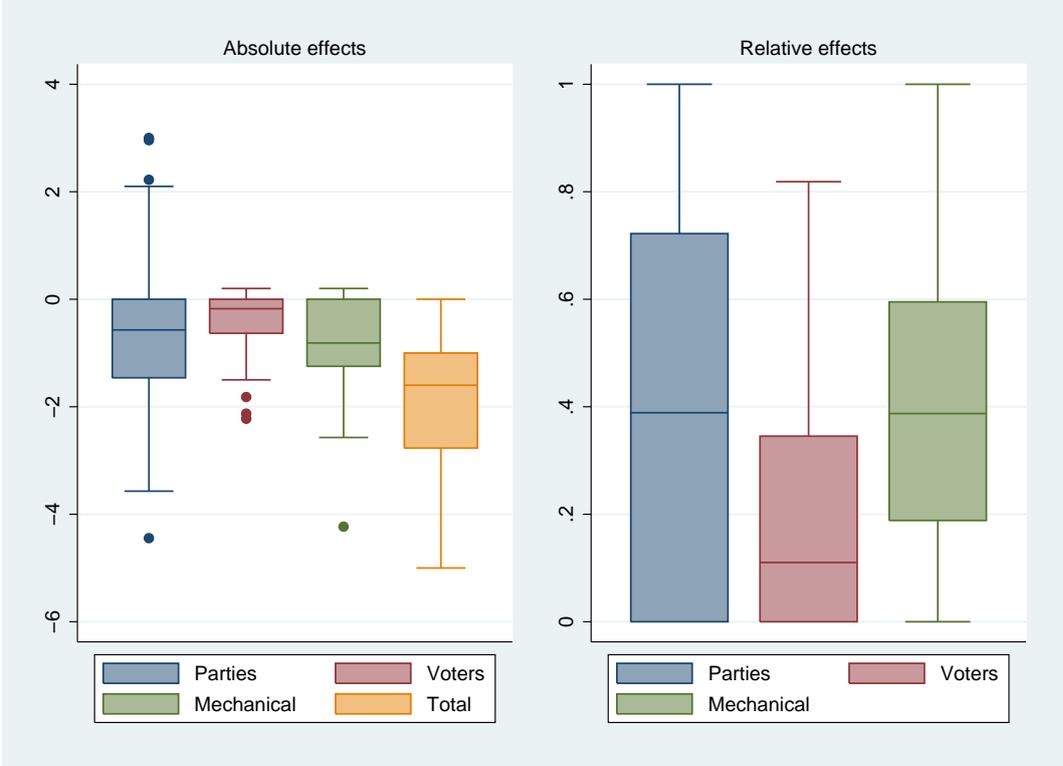


Table 1. Correlations among absolute and relative effects

	Total	Parties	Voters	Mechanical
Absolute effects (N=145)				
Parties	0.62***			
Voters	0.07	-0.64***		
Mechanical	0.46***	-0.37***		0.59***
Relative effects (N=139)				
Voters	-	-0.69***		
Mechanical	-	-0.84***		0.18*

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 2. Correlations between the seats difference (log) and the electoral system effects

	Absolute effects	Relative effects
Total effect	-0.59***	
Psychological effect on parties	-0.12	-0.26**
Psychological effect on voters	-0.26**	0.10
Mechanical effect	-0.57***	0.28***
N	145	139

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 3. Average total effect and average relative effects by number of incumbents

	Total	Parties	Voters	Mechanical	N
<i>Cantons with 1 seat</i>					
No incumbent	-2.28	0.57	0.21	0.21	6
1 incumbent	-2.52	0.83	0.03	0.14	19
<i>Cantons with 2 seats</i>					
No incumbent	-1.84	0.26	0.23	0.50	12
1 incumbent	-1.83	0.29	0.24	0.46	47
2 incumbents	-1.76	0.44	0.17	0.40	61

Table 4. Average total effect and average relative effects by number of small party candidates

Candidates from small parties	Total	Parties	Voters	Mechanical	N
0	-1.75	0.63	0.10	0.27	73
1	-1.88	0.31	0.21	0.48	38
2 or more	-2.28	0.15	0.32	0.53	34

Table 5. Average total effect and average relative effects by coordination differential between left-wing and right-wing camps

Absolute difference from median	Total	Parties	Voters	Mechanical	N
0	-1.84	0.49	0.15	0.36	96
1	-2.09	0.36	0.22	0.42	41
2 or more	-1.82	0.14	0.32	0.54	8