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# The Swiss 2011 Rolling Cross-Section study: Design, field work, and data quality

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# Summary

Rolling cross-section surveys (RCS) have become increasingly popular in recent years and have been implemented in many countries – also in Switzerland in the run-up to the 2011 elections.<sup>1</sup> In an RCS, a given number of interviews are conducted every day during the entire campaign period. New addresses are added every day and the treatment of the addresses and the field work are designed in a way that interviews conducted every day constitute a random sample. The design offers many advantages for studying the influence of election campaigns on citizens' voting behaviour, but it also provides some methodological challenges. While the theoretical concepts for using such a design are well known, little has been published on the actual fieldwork of RCS studies so far. This working paper helps to fill this gap by describing in detail the design, the fieldwork, and the methodological and practical challenges encountered during the implementation of the 2011 Swiss RCS study. We show that although there was no previous experience with the design in Switzerland, and despite some inevitable difficulties with the fieldwork, it was possible to gather high quality data. However, different challenges remain. Our experience shows some of the pitfalls to avoid and questions to be tackled when implementing such a survey. Since such information has been until now almost non-existent, we believe this might be a valuable contribution to the literature.

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<sup>1</sup> Detailed information on the Swiss Electoral Studies, the first results of the Selects 2011 project, as well as the RCS data and the associated media content analysis can be found on the project website: [www.selects.ch](http://www.selects.ch).

# The Swiss 2011 Rolling Cross-Section Study: design, field work, and data quality

Georg Lutz<sup>2</sup>, Thomas De Rocchi<sup>3</sup> & Nicolas Pekari<sup>4</sup>

## 1. Introduction

While electoral research has proved to be successful in explaining stability in citizens' voting behaviour, e.g. with regard to the impact of party identifications or cleavages, it has revealed more difficulties with the explanation of change – especially *short-term changes*. However, such changes do occur, and they can potentially be decisive. As the first analysis of Switzerland's 2011 National Council elections suggests, almost 40 percent of voters casted their ballot for a party different from the one they had reported they intended to vote for during the last weeks of the campaign (Lutz 2012: 55). To explain such last-minute vote shifts, one must therefore analyse how campaigns influence the way in which citizens evaluate parties, form their vote intentions, and take their vote decisions. And since campaigns are highly dynamic phenomena, as Bartels (2006: 134) states, "good campaign studies must be dynamic too. [Therefore...] time must enter the analysis either directly or indirectly (as a proxy for campaign activities or events)."

An increasingly popular possibility to study such short-term effects is the implementation of *RCS surveys*. The basic idea of this innovative design is to "spread a conventional cross-section [...] over a certain period of time, distributing the interviews in a strictly controlled way. Properly done, the date on which a respondent is interviewed is therefore as much a product of random selection as the initial inclusion of that respondent into the sample" (Johnston and Brady 2002: 283). The data collected in an RCS allow a fine-grained analysis of dynamic phenomena of public opinion, e.g. of aggregate shifts in the electorate's attitudes or opinions. In particular the possibility of comparisons from day to day offers researchers a much more flexible way to capture campaign dynamics and allows the detection of *short-term shifts* in public opinion. Other methods, such as repeated cross-sections or panel designs, typically cannot offer such flexibility since the time intervals between their successive waves are usually much larger.<sup>5</sup> This is the main reason why the RCS design has been

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<sup>5</sup> An exception is the so-called "rolling panel study" invented by Faas and Blumenberg (2012), which combines the advantages of both the panel and the RCS design (see also footnote 12).

widely used in different election studies around the globe<sup>6</sup> and some national election studies, for example the German Longitudinal Election Study (GLES), have included an RCS survey as a standard component of their study since 2005.

### 1.1. The basic RCS design

Parties and candidates spend a lot of time, effort, and money to convince the voters to vote for them. However, what we usually study is not so much how campaigns affect the way in which citizens evaluate candidates and parties, but rather what comes out at the end of this process: the effective vote choice. Research on electoral behaviour usually relies on post-election surveys conducted in the days and weeks after an election and those studies do not allow to analyse the actual process of opinion formation very well.

As Thomas Holbrook (1996: 46) rightly noted, it is “difficult [to understand...] the effect of any process [...] if the focus is only on what comes out at the end of the process.” With a view to the supposed effects of election campaigns he therefore took a stand for expanding the respective analyses to “include studying the dynamics of public opinion during the campaign period.” Following this argument, Schmitt-Beck and his colleagues (2006: 16) even declared it to be the main task of campaign research to unhide changes in the opinions and attitudes of the electorate – and to explain them with the events of the campaign. Election campaigns can thereby be understood as a series of information-rich events (Hillygus and Jackman 2003: 584), which might include the participation of candidates in various events as well as the parties’ advertisements and – maybe most importantly – the media reports that are generated every day (see e.g. Kenski 2006a).

How to study campaign dynamics has been a great challenge for researchers of electoral behaviour for a long time. Cross-section surveys usually capture only one (or a few) time points during a campaign and they do not allow drawing conclusions with regard to change in individual behaviour. Panel designs in turn do allow the analysis of changes in individual behaviour but suffer from *panel attrition* – people dropping out from the panel in a non-random way and thus biasing the sample – and *panel conditioning* – the fact that being in the panel might shape respondents’ behaviour (e.g. making them more likely to vote or increasing political awareness).<sup>7</sup> In addition, the number of panel waves is limited and the timing of the waves cannot be planned in a way that captures all the main campaign events, as it is not necessarily known in advance what the important campaign events will be and because there is a limit as to how often the same respondents can be contacted. The analysis of campaign dynamics therefore calls for instruments that allow both a finer-grained measurement, as well as the detection of possible short-term effects. With the use of the RCS design

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<sup>6</sup> The first RCS was conducted as part of the American National Election Study in 1984. Since then the design has become increasingly popular. RCS studies with the aim to analyse campaign dynamics were realized in a number of countries (e.g. Canada, Great Britain, New Zealand, Italy, or Germany) and others are in the planning stage (for an overview, see Schmitt-Beck et al. 2010).

<sup>7</sup> For an overview of studies on both panel attrition and panel conditioning, see e.g. Das et al. 2011, for panel effects in election surveys, see e.g. Bartels 1999.

it becomes possible to study campaign effects on a day-to-day basis, by linking them directly with subsequent opinion changes. The RCS thus allows researchers to watch a campaign *evolve* (Winnege et al. 2006: 33).

The idea of an RCS is simple: A regular cross-section is spread over “an a priori defined period of time in such a way that not only the entire sample, but also the respondents interviewed on a given day of the field period constitute random samples (Schmitt-Beck et al. 2006: 13-14).”<sup>8</sup> Interviews realised on different field days should therefore differ in nothing except the date, or in other words: the basic sample characteristics of the daily samples should not vary systematically (see e.g. Kenski 2006b: 73). If this is the case, all changes in perceptions or attitudes that are identified over time can have only two sources: random sampling error or real change under the influence of campaign events. And these can be separated by appropriate statistical methods (Schmitt-Beck et al. 2006: 20; see also Johnston et al. 1992; Brady and Johnston 2006; Romer et al. 2004). When it comes to the data collection, the following requirements have to be met:

(1) New blocks of randomly drawn addresses, often called “replicates”, are released on each field day and they are used for a specific pre-defined period of time. The number of addresses must thereby be large enough to avoid small-N problems while analysing the data.

(2) The fieldwork must be carried out according to a strict contact scheme, to ensure that every address has the same probability to be contacted. The survey company is therefore obliged to make a fixed number of attempts every day to contact every address in a given replicate, spread across fixed time-slots. It must also be ensured that citizens who are hard to reach (such as full-time workers or singles) can also be interviewed, and addresses thus need to be kept open for a sufficiently long period of time. However, this presents no problem to the logic of the RCS, quite the contrary. Only through a somewhat stable mix of fresh and older addresses – and hence of respondents who are easy and respondents who are harder to reach – the daily samples become comparable, and thus meet the requirement of random samples.

In this second point the RCS design differs significantly from conventional cross-sections, in which all the addresses are usually released “en bloc”. The daily release of new addresses and the strict contact scheme moreover predetermine the use of computer assisted telephone interviews (CATI) as survey mode. However, first trials with online surveys have led to promising results (see e.g. Faas and Blumenberg 2012; Johnston 2008).

## 1.2. Advantages and Limitations

In comparison with more traditional designs (for an overview, see Kenski 2006a: 58-65), the RCS offers a number of advantages, but also one major limitation. To start with

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<sup>8</sup> In principle an RCS might also be conducted on a weekly basis, but due the nature of political campaigns („many things happen in the news environment daily“), the use of the day as the unit of the release schedule seems more appropriate (Kenski 2006a: 60). Incompatible with the logic of the RCS, however, are uneven intervals between the measurement points (Schmitt-Beck et al. 2006: 18).

an obvious advantage, the tight temporal spacing of the interviews in an RCS allows a much more fine-grained analysis of aggregate shifts than both *panels* and *repeated cross-sections*. In the context of the latter two, the interviews are usually not conducted according to a strict contact scheme. Apart from this, the successive waves of panels or repeated cross-sections do not necessarily cover the whole campaign period, as already mentioned. This makes it very hard for a researcher to identify single events that might have caused an observed change in the citizens' opinions or attitudes between two measurement points. The RCS therefore appears to be the only design at the time that allows the detection of possible short-term effects as well as the analysis of unexpected events, be they of a political or a more general nature, which have the potential to affect the citizens' voting behaviour. Furthermore, the RCS design avoids conditioning effects since all respondents are new to the survey (Brady and Johnston 2006: 164).

Another big advantage of the RCS design is the analytical flexibility that the data offer a researcher. They may be used directly, to identify trends in the citizens' opinions over the course of a campaign (and to visualize them, if desired), or, as Schmitt-Beck et al. (2010: 5) note, they may be aggregated according to either formal or substantive criteria.<sup>9</sup> In general, any accumulation of consecutive daily samples is possible. The day of the interview also has the potential to serve as an anchor to link a respondent's opinions with possible explanatory factors on the context level, such as media reports or pre-election polls.<sup>10</sup> RCS data are therefore well suited for linkages with additional data sources such as a media content analysis (see e.g. Dobrzynska et al. 2003).

However, the basic RCS design also has a significant limitation, especially in comparison with a panel survey: It does not allow the analysis of *individual changes*. Since every respondent is interviewed only once in the course of a campaign, the data merely allow claims about *aggregate changes* in specific groups of voters or the electorate as a whole (Schmitt-Beck et al. 2006: 21). However, it is noted that aggregate changes also are hard to detect, since the number of respondents in the daily samples is usually relatively small – in the case of the Swiss study 100 interviews on average. Any sample of such a size may produce a large error and campaign effects have to be large to overcome the random error. In addition, RCS surveys are comparatively expensive and require more planning than a more traditional design (Kenski 2006a: 61).

While small samples and high costs will remain an issue in any scenario, the limitation stemming from the fact that the basic RCS cannot capture individual change can be overcome relatively easily with an extension of the design with a complementary post-election panel wave. Such a combination has proven to be an excellent method to analyse campaign dynamics in recent years, since it allows researchers to take

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<sup>9</sup> An example for the former would be a week-wise clustering of respondents, e.g. to avoid possible small N problems. A thorough discussion of the necessary number of cases and the issue of statistical power can be found in Zaller (2002). A comparison of the expectations of all the respondents that were interviewed before and after the publication of the results of a pre-election poll on the other hand might be an example for the latter.

<sup>10</sup> For the analysis of the data, the replicates mentioned in Chapter 1.1 are no longer important.

advantage of both the benefits of panel and RCS designs (see e.g. Johnston 2001).<sup>11</sup> Therefore such a combined design was also implemented in Switzerland's first RCS in an electoral context, which will be outlined in the following chapter.

## 2. Fieldwork: Experiences and challenges

### 2.1. General design

While the idea of an RCS is quite simple in theory, the practical implementation of the design requires a number of important decisions to be taken.

(1) The first is to decide *how many interviews* are wanted and *over how many days*. Ideally, an RCS spans over a very long period with a high number of interviews every day. However, every survey has financial constraints and therefore the number of days and interviews has to be limited. In the framework of the 2011 Selects project, we opted to cover 41 days with a target of 100 interviews per day. We did not want to go below 100 interviews per day because Switzerland has a multi-member party system and in general turnout is also low. This requires a relatively high number of daily interviews so as to meaningfully capture the number of individuals who plan to vote or have voted for a particular party. Regarding the field time, we wanted to cover the final phase of the electoral campaign. In Switzerland, this is dependent on the school summer holiday calendar. Summer holidays last until mid/end August, depending on the canton, but in general, parties do not launch their final campaigns before September, because it is difficult to reach people with political messages during the summer holiday. We thus started the interviews on Monday 12 September 2011 and ended on Saturday 22 October 2011, the day before the elections. While general surveys are usually conducted in three languages in Switzerland, we decided to limit the study to the French and German speaking part and leave the Italian part out, which amounts to about 7 percent of the population. This was done to facilitate fieldwork and because the number of interviews in the Italian speaking part would have been too small to obtain meaningful results.

(2) One of the trickiest decisions was to choose the *number of addresses to be added every day* and how the addresses should subsequently be treated. There was no experience in Switzerland for this kind of design and experience from other countries cannot be easily transferred. In addition, there was still scarce experience with the new sampling frame (see next section). In order to plan the fieldwork, we therefore had to make assumptions about both the expected response rates and when interviews could actually be conducted with a sample member. Contrary to other surveys, it is problematic to change the procedure and adapt designs once the fieldwork has started if difficulties occur in this type of survey because this can corrupt the entire design and have long term consequences (see Wagner 2008, Groves and Heringa 2006). Adding

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<sup>11</sup> Faas and Blumenberg (2012) recently tested an even further integration of the advantages of the two designs by launching repeated panels waves within the logic of an RCS to analyze the campaign in the run-up to the Baden-Wuerttemberg state election.

too few or too many addresses has consequences for the total duration that each address is active. In turn, changing the treatment of addresses during the fieldwork influences the probability of contact and interview for each address.

(3) How long to keep the addresses in the field? We decided on *keeping each address open for two weeks*, after which the address was deactivated if no contact had been made. We assumed that after two weeks without contacts, it was unlikely that we establish a contact with that address at all. We then also made predictions about response rates over the two-week period and per day. This made it possible to reach an estimate about the number of addresses needed in total and about the number of addresses to be added every day. We then established a contact scheme that provides five attempts to contact each address each day. Each address is contacted only once during each fixed time slot. Those time slots were 9am-12pm, 12pm-2pm, 2pm-5pm, 5pm-7pm, and 7pm-9pm on weekdays and 10am-12pm, 12pm-2pm, and 2pm-5pm on Saturday and Sunday.

A last decision to make was *whether to run a standalone RCS or to combine it with a pre-campaign panel or post-election component*. Some advocates of the RCS design argue that in order to study campaign effects there should be a measurement of preferences prior to the campaign, which can then be combined with the preference measured during the RCS. Such a design would, among other things, allow capturing individual shifts in the voters' opinions or attitudes. While this is a valid argument, there are some disadvantages to this proposition. As discussed, panels traditionally suffer from both panel conditioning and panel attrition, which increase the risks of biasing the results. This may be especially problematic in political surveys, since key political variables such as turnout and political interest may be affected (see e.g. Bartels 1999). Because we did not want to take the risk to bias the RCS we opted not to run a pre-RCS panel interview. We did however implement a post-election panel component to inquire about actual voting behaviour in a short interview.

## 2.2. The new sampling frame

For the Selects 2011 surveys it was possible for the first time to use a new sampling frame managed by the Federal Statistical Office (FSO). The new sampling frame is established as a by-product of the new register based census. Information from the local population registers is centralized four times a year and the register includes some key information on all the residents such as date of birth, gender, municipality of birth, nationality, marital status, and correspondence language, in addition to the names and addresses. While mainly used by the FSO under specific conditions, this sample frame is also available for other projects. In the case of academic research, the project needs to be either a regular scientific research project financed and considered of national importance by the Swiss national science foundation (SNSF) or an international research project co-financed by the SNSF.<sup>12</sup>

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<sup>12</sup> See the *Verordnung über die Durchführung von statistischen Erhebungen des Bundes*, Art. 13c ([http://www.admin.ch/ch/d/sr/431\\_012\\_1/a13c.html](http://www.admin.ch/ch/d/sr/431_012_1/a13c.html) - In German, French, and Italian)

This new sampling frame offers a number of advantages (see also Lipps et al. 2013, Roberts et al. 2013):

(1) The sample base offers practically one hundred percent coverage of Swiss residents and the information is very accurate. Indeed, residents in Switzerland by law have to officially register in a community. There are however people who may not necessarily live and be reachable where they are registered, either because they have a second home, are weekly commuters, or are registered for various reasons in another place (such as convenience, avoiding taxes, or other benefits).

(2) It is possible to directly draw samples based on individuals instead of the usual two-step procedure of sampling households from telephone registers and then individuals within a household. This saves time and, reduces the error of doing the interview with the “wrong” person, and decreases the number of contacts needed and thus of occasions for refusals.

(3) Sampling can be more specific because additional demographic information is available and can be used to stratify the sample or draw a sample among sub-groups. For Selects 2011, it was possible to draw a sample restricted to Swiss citizens 18 years or older, the population of interest in an election survey. In addition, it is not necessary to ask respondents about some of the socio-demographics questions or this information can be used to double check interviewer performance.

The main downside is that the register does not include the telephone numbers needed for CATI interviews. The numbers thus need to be added in a separate step. The FSO uses a register of officially registered landline numbers and matches those numbers to the drawn sample. Through this procedure the FSO delivered 69% of the addresses in the sample with a telephone number. To improve coverage, the survey company made supplementary efforts to retrieve additional numbers using commercial software based on the public registers as well as telemarketing directories. As a consequence, it was possible to add another 16 percent of telephone numbers, so in total telephone numbers were available for 85% of the sample.

Nevertheless this leaves a very substantial number (15 percent) of sampled individuals without a valid telephone number and as a consequence it was not possible to contact those people in the RCS. The population without a telephone number is not a random selection either, but has some specific socio-demographic characteristics. In our sample, 25 to 35 year old singles in city centres born outside Switzerland are more likely to not have a telephone number than the youngest age group or the over 45 old, married, and living on the countryside (Lipps et al. 2013). The under-coverage is most significant in the 25 to 35 age group, many of which have become part of the “cell phone only” population and thus cannot be contacted anymore.

### **2.3. Day-to-day fieldwork**

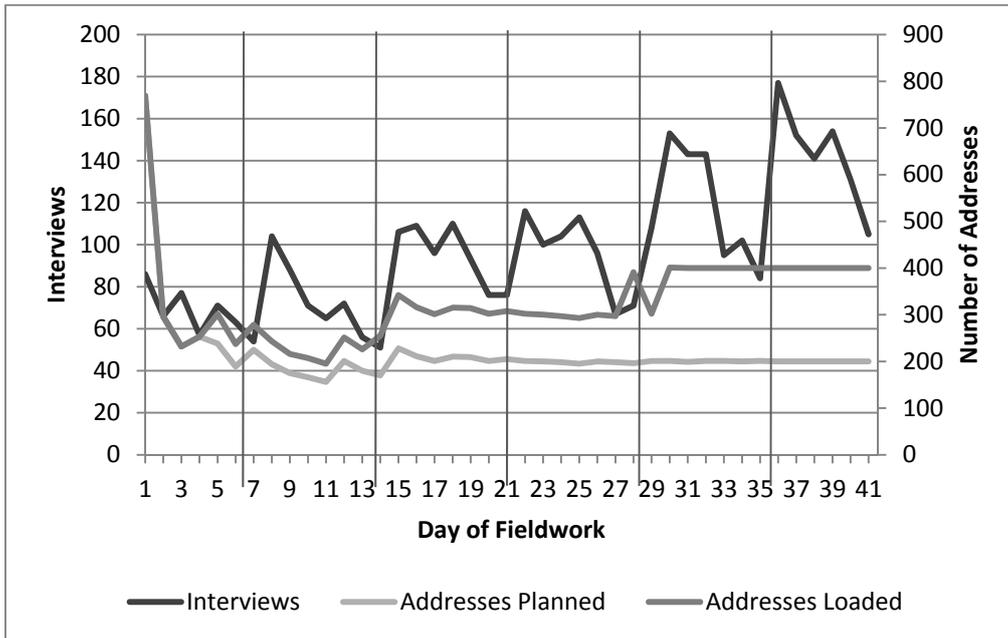
We now turn to the description of the fieldwork and present figures regarding the most important aspects of our experience with the RCS fieldwork. Firstly, Figure 1 shows the number of completed interviews, as well as the planned and actual number of addresses loaded during the field period. This illustrates how easy or difficult it is to reach the target of 100 interviews on any given day, as well as how we adapted the

number of addresses and the effects of these adaptations on the subsequent number of interviews.

As is evident from Figure 1, it is not an easy task to consistently meet the target number of interviews when following the RCS design. Indeed, during the field period, the number of interviews varied between 51 and 177 interviews. Due to the fixed contact scheme, it was not possible to increase effort only during the weekends and decrease it during the weekdays so as not to exceed the 100 target interviews. Thus it was necessary to add to the overall number of addresses so as to increase the number of interviews during weekends but at the same time this caused a spike on Mondays when people were again more easily reachable. Despite adding addresses, we were unable to reach the target of 100 interviews during the weekends, except for the two last Saturdays, which indicates that it might be necessary to revise the protocol for conducting interviews on weekends. However, this is delicate, both due to respondents being unhappy about being called during this time and due to the risk of influencing the mix of respondents.

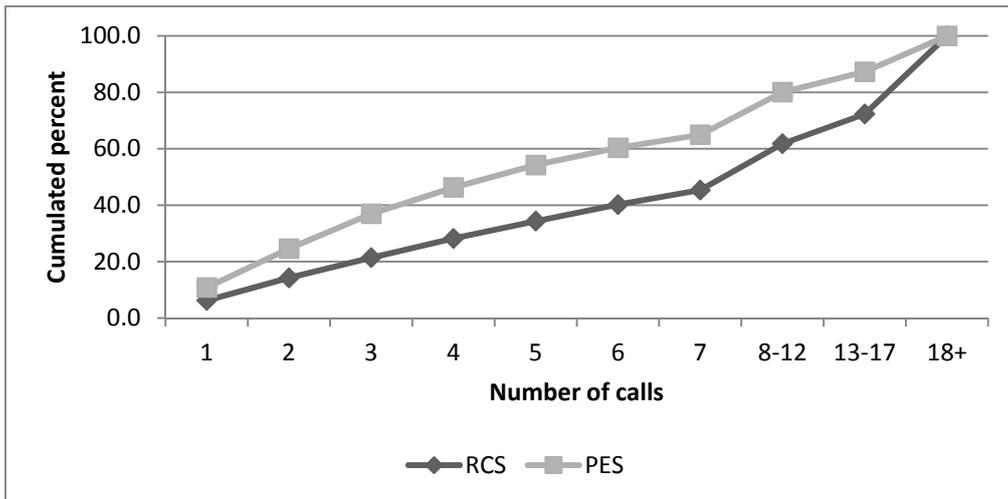
Figure 1 also shows the number of addresses that were initially planned to be added each day, as well as the actual figures from the fieldwork. The dimension of the adjustments made roughly corresponds to a 10 percent increase beginning on the 5<sup>th</sup> day of fieldwork, followed by a 20 percent increase beginning on the Sunday of the second week, and an increase of about one third during the two last weeks. It could be argued that it was quickly evident that the number of addresses was insufficient and that increases should have been done before the 5<sup>th</sup> day. The late reaction was partly due to insufficient resources and monitoring. However, as we have seen, the exact effects of adding addresses are difficult to predict and adjustments have therefore to be done with much care. It is also known that a certain build-up time is necessary in RCS studies to get a somewhat stable mix of easy and hard to reach addresses (see also Chapter 3.1), which partly accounts for the low figures in the beginning. A too rapid increase could jeopardize the mix of addresses. At any rate, the challenges we encountered clearly underline the importance of following the advancement of the field closely and being able to make adjustments when needed.

Figure 1: Number of interviews, number of addresses initially planned, and number of addresses actually loaded by day of fieldwork (vertical bars indicate Sundays)



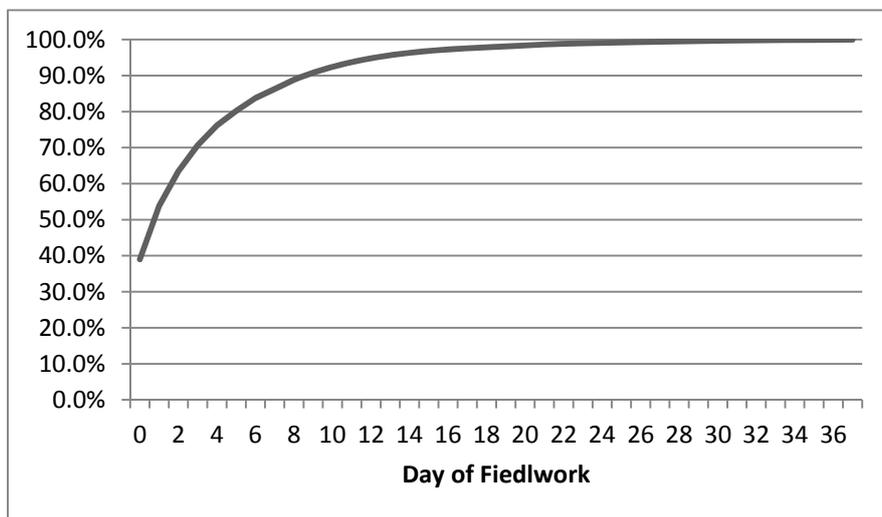
When it comes to the number of calls needed to complete an interview, Figure 2 shows that this number was relatively high with regard to the RCS, at least when comparing it to the traditional post-electoral survey (PES): over 50 percent of the interviews were realized after eight calls or more, while in the PES more than half of the interviews were realized with five calls or less. In the RCS, only around 6 percent of the interviews were conducted after the first call and almost 30 percent were conducted after more than 17 calls. In the PES, on the other hand, almost twice as many interviews (11 percent) were realized with the first call, compared to the RCS. However, the response rates were similar in both surveys; the difference therefore seems to be more a consequence of non-contact than of non-cooperation. This finding can be explained by the strict contact scheme which leads to more calls with no contact at hours when it is unlikely to reach people, whereas in the PES, substantially more interviewers are working in the morning and in the evening in order to increase the number of calls during periods when people are easier to reach.

Figure 2: Number of calls necessary for interview



As shown in Figure 3, about 39 percent of all interviews were conducted during the first day the address was released to the field. After one week, a little less than 85 percent of the interviews had taken place. After the two weeks period that an address remains active, around 95 percent of the interviews were completed. The remaining 5 percent being appointments made after the two-week period. It could be argued that a one-week period might be a sufficient fielding period. However, it is well known that easy to reach and hard to reach individuals differ in many aspects, including socio-demographics and substantive variables, and the two-week period is thus seen as necessary to reach also these hardest to reach individuals.

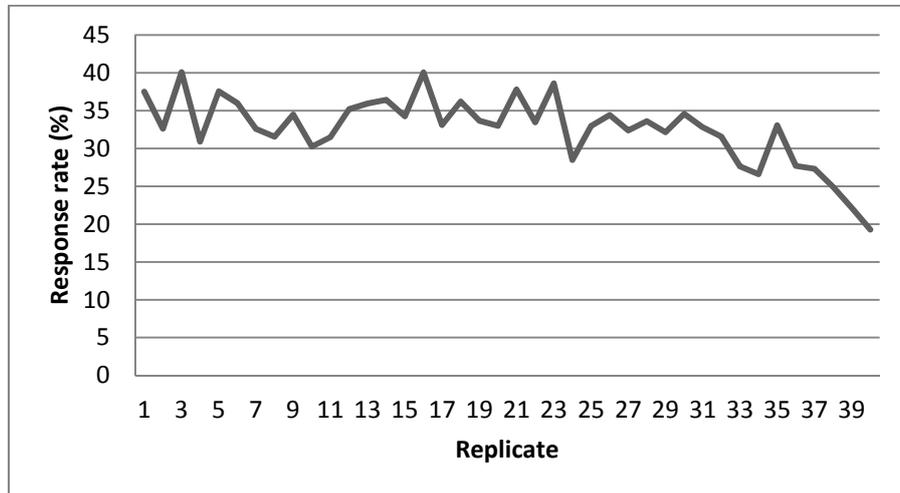
Figure 3: Days between the load of the address and completed interview



We can see that the response rate remains quite stable across replicates (or in other words: across the days on which the addresses were released to the field), except for the final period (see Figure 4). This is because the addresses kept open less than the normal two-week period, as the fieldwork period is coming to an end. During the 30 first days, the rate oscillates between 29 and just over 40 percent and drops to about 19 percent the last day. There is no clear effect regarding the day of the week the addresses were loaded and the response rate, which is as expected. Due to the limited time in the field of each address, and an even shorter period for the addresses loaded

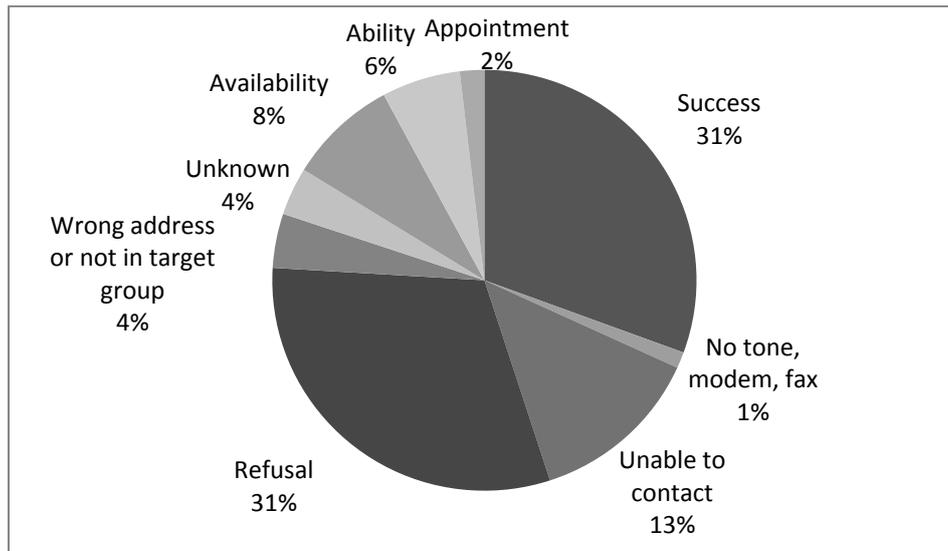
at the end of the fieldwork, we would expect a lower overall response rate compared to the post-electoral study (35%). This is however not the case. The much shorter duration of the questionnaire (15 minutes versus 35 minutes) very probably explains to a great extent the stronger willingness of people to participate in the RCS study compared to the PES.

Figure 4: Response rate by replicate



The response rate was relatively low compared to our expectations, even after taking into consideration the specificities of an RCS study. A great variety of reasons contributed to this, and it is difficult to pinpoint a particular shortcoming in the fieldwork. However, as Figure 5 shows, refusals were the reason behind almost a third of the interviews that could not be conducted, which would point to a potential for improvement in this area. People citing availability issues or who could not be contacted accounted for about one fifth. About 6 percent of the people did not feel able to do the survey due reasons such as age or health. The rest of the losses were due to different issues with addresses and phone numbers (no dial tone, wrong address, etc.), as well as some pending appointments, which might have been scheduled by mistake by the interviewer to a date which was after the end of the fieldwork period.

Figure 5: Final status of loaded addresses in percentages



## 2.4. Survey agency

As an RCS is a relatively complex design, it puts high demands on the capability of survey agencies to handle the day-to-day fieldwork. One of the key challenges of this type of survey is that it follows a different procedure than most other CATI surveys. These usually have a start day, a pre-defined field period, and addresses are loaded at the beginning. In a classic post-electoral survey for instance, the goal is to get a maximum of interviews in the shortest possible period to make sure that people remember correctly their voting behaviour and that the elections are still “fresh” in respondents’ memories. Survey agencies are typically used to this kind of maximization of the number of interviews, and therefore following a fixed contact scheme is counter to their usual logic. For instance, if falling behind on the target one day, it is not simply possible add addresses to meet the target. Even when adding addresses later on, this has consequences for the next 14 days, it is necessary to fine-tune carefully. The number of measures to increase response rates is also very limited since these almost inevitably would lead to changes in the contact probabilities for addresses before and after the measures are in place.

Several issues were found to be problematic in the field work:

(1) The system with *fixed time slots* made it sometimes difficult for the survey agencies to plan the number of interviewers necessary because while it was clear how many address are loaded every day, it was not at all clear how many interviews would be done – and at what time of day. Sometimes interviewers had too few addresses to work with – which is costly for survey agencies – and sometimes too many, which made it difficult to follow the contact scheme properly.

(2) The *limited management capacity* of both the survey agency and the Selects team to steer the survey proved to be a burden. While the RCS was in the field, the Selects team was at the same time busy preparing for the large post-election studies which included a substantial CATI post-election voter survey, a survey among Swiss living

abroad, an experimental online survey, as well as a candidate survey. With this workload, it was not always possible to carefully monitor the progress of the survey and to investigate the causes of the problems encountered. This would have been necessary in order to fine-tune the fieldwork on a day-to-day basis. The reporting was not defined clearly beforehand either, in terms of content and frequency, to take informed decisions.

(3) Our *assumptions regarding response rates proved to be too optimistic*. It was never possible to achieve a response rate as high as 50 percent of the loaded interviews during the 14 days each address was loaded. In fact, the response rate was only 30 percent, substantially lower than what we had hoped for. It is not possible to state clearly why this was the case, losses occurred at all stages of the interview process. The number of refusals was however quite high, especially for a relatively short interview. We thus believe the training of the interviewers, especially with regards to convincing participants, to be something that needs to be focused on more in the future.

(4) A further problem we encountered was the *increase of refusals and non-contact during the weekends*, especially on Sundays (see Figure 1). Doing interviews on a Sunday is against the code of conduct of the survey agencies and one needs good arguments for an exception. In most cantons, it is even necessary to ask for an official permission. For the RCS, the argument was that Sunday newspapers are very important for the campaigns in Switzerland and thus we wanted to capture the effects on the same day. Many people, however, did not appreciate at all being called by a survey agency on a Sunday, which can be seen clearly in the drop in the number of interviews. In order to compensate for those losses, it would have been possible to boost the Sunday sample. However, there would have been a backlash for such a measure as the number of interviews conducted on Mondays would have gone even higher than they already did.

(5) We opted for a *very high number of contacts* in the RCS (which is again against the code of conduct of survey agencies). Respondents were called up to 70 times. Since phones that show call information are now common, this was also a source of complaints when people were absent for longer periods and saw that they had been called many times, including on weekends and evenings.

## **2.5. Challenges ahead**

Based on our experience with the RCS design, we see a number of challenges ahead:

*How many interviews on how many days?* The variance of many key variables remains rather low in the course of the entire field period (see Chapter 3.2). In addition, the many parties competing for elections and the low turnout require a high number of interviews per day. These key parameters need to be discussed when planning a future RCS survey in Switzerland.

*How to plan and to monitor the field work?* Both a closer collaboration with the survey agency and a closer monitoring should be sought. Each step of the survey needs to be planned in detail with the survey company. This includes procedures prior and during the field period as well as reporting systems and possible measures to be taken if

targets are not met. It also includes a solid interviewer training at the beginning of the field work, with a special focus on convincing people to participate.

*How far do we go when hunting respondents?* Contacting people as many times and also on the weekends proved to be a challenge as some people were offended by this. Whether it makes sense to contact people on Sundays in the future will have to be discussed, even when we see that this did not have a negative influence on the response rates in general: It was not more difficult to conduct interviews with the addresses that were added on Sundays although it was more difficult to conduct interviews on Sundays.

*The future of CATI surveys on landline phones?* On a more general level, the number of people without a known telephone number and who cannot be contacted is already a problem now and will become a greater problem in the future (see Ernst Staehli 2012; Von der Lippe et al. 2011). For an RCS, options are more limited than for other types of surveys, because with mixed-mode designs or with other types of surveys (such as online surveys), it is more difficult to control that every citizen's probability to get contacted and interviewed remains stable.

### 3. Quality of the data

After having gone through the description of the data collection in the Swiss RCS, the goal of the next section is to examine the data quality. To evaluate the quality of the data collected during an RCS, the primary task is to verify if the core premise of the design was respected: that both the inclusion of a respondent's address in the sample as well as the date on which he or she is contacted for an interview are products of random selection. If this is the case, the daily samples should be relatively stable in their structure. Therefore only random variations with regard to their socio-demographic composition are permissible (Schmitt-Beck et al. 2010: 15-16). To meet this requirement, the daily samples need to fulfill two compelling properties:

- (1) They must consist of a somewhat stable mix of respondents that are easy and such that are harder to reach.
- (2) The socio-demographic characteristics of their members must not vary significantly over the course of the campaign.

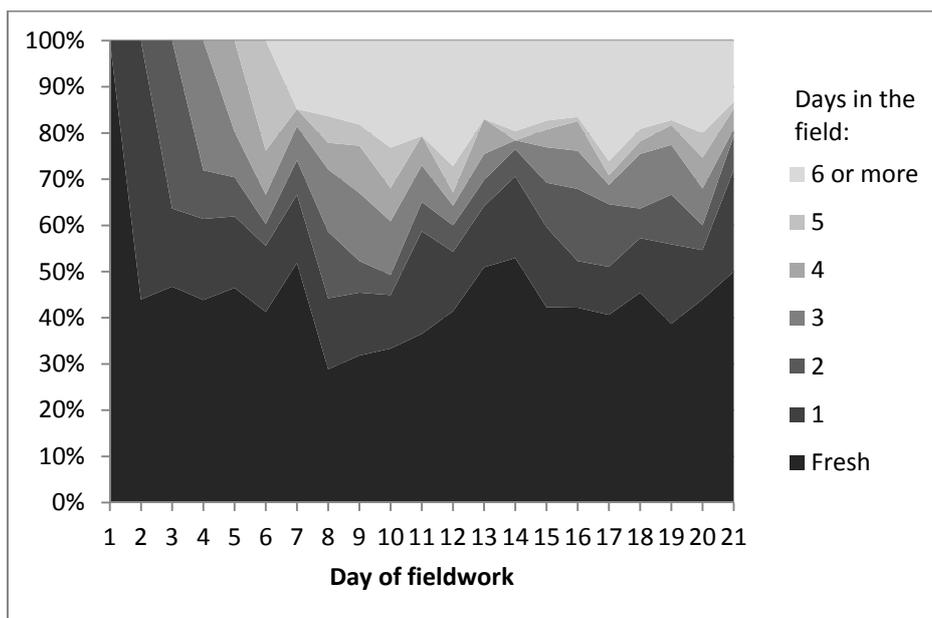
Whether these two conditions – which, of course, are closely related – are fulfilled, and if the data collected in the run-up to the 2011 National Council elections in Switzerland are able to deliver what the RCS design promises, will be analyzed in the following two chapters.

#### 3.1. Accessibility of the respondents

Every survey shows that some respondents are easy to reach while it is more demanding to get a hold of others. In a conventional survey this is solved through adding all addresses at once and then stretching the fieldwork until most sample members finally cooperate. In an RCS, however, “the proportion of respondents who completed an interview after having been called only a few times and those who

completed an interview after being called numerous times” needs to be stable (Kenski 2006b: 73). This is important, because “the respondents who answer the survey in the initial few calls may be different from those who are harder to reach” (p. 76). Each daily sample, in order to be random, should therefore consist of new and older addresses assuming that the older addresses include individuals who are more difficult to reach. As we can show in Figure 6, it took about a week until the daily samples consisted of a somewhat stable mix of fresh and older addresses – and hence of respondents who were easy and respondents who were harder to reach.<sup>13</sup> This pattern is typical for RCS designs, since at the beginning of the field period the daily samples solely consist of respondents who have been reached with the first few calls. However, the fact that in these first days the daily samples are different from the other daily samples must be taken into account when analysing the data. Various authors recommend that they should not be included when analysing the data across time (Kenski 2006b: 76; see also Johnston and Brady 2002; Schmitt-Beck et al. 2006), however, given that they still represent a random selection of individuals this may be a somewhat radical decision. In the following subchapter, we will therefore analyse to what extent both the in- an exclusion of the first seven days affect the quality of the collected data.

Figure 6: The daily mix of fresh and older addresses



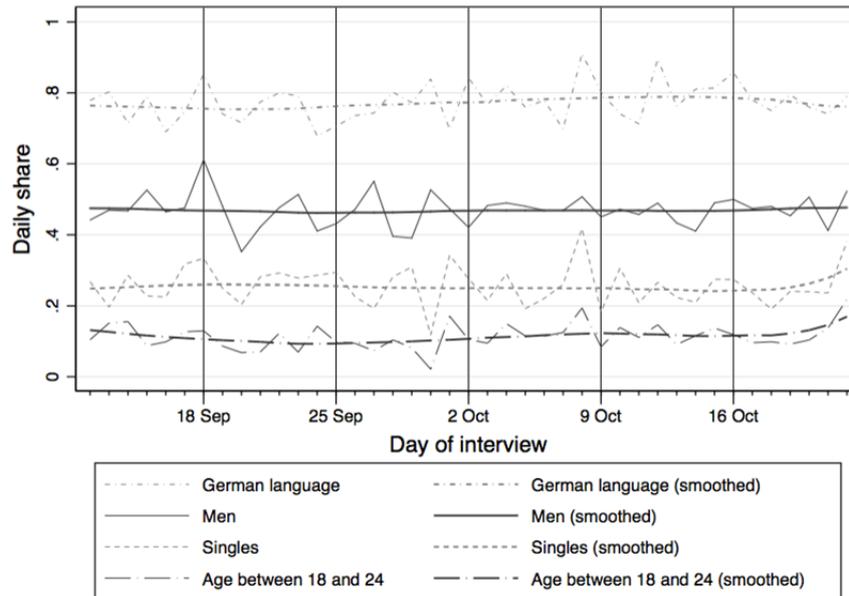
### 3.2. Stability of socio-demographic characteristics over time

If the daily samples are comparable with regard to their composition, the socio-demographic characteristics of their respective members must not vary significantly over the course of the campaign. Or in other words: they must not be correlated with the day of the interview. To verify whether this is the case, we use graphical smoothing techniques to get a first visual impression of the stability of the socio-demographic characteristics over time. As shown in Figure 7, which in fact also contains the first days of the study, there are *no major differences* over the course of the campaign with

<sup>13</sup> For the sake of a better readability, the graph is limited to the first three weeks of the field period.

regard to the respondents' spoken language, their gender, their marital status or their age.<sup>14</sup> The same goes for all other characteristics we tested for. However, some days of the week proved to be particularly suitable to contact certain groups of voters. This explains most of the fluctuation with regard to the actual daily averages. On Saturdays, for example, it was generally easier to reach young citizens and singles, as the figure shows as well. However, the visual analysis of the distribution of the socio-demographic characteristics across the daily samples does not indicate any systematic effects of the temporal stage of the campaign on the composition of the daily samples.

Figure 7: Stability of socio-demographic characteristics over time



To check whether the impression of stability with regard to socio-demographic characteristics also withstands an inferential statistical test, we applied a method that had already been used in the framework of several German Elections (Schmitt-Beck et al. 2006, 2010; Faas and Blumenberg 2012). For every possible pair of field days we compared the daily proportions of a number of socio-demographic characteristics and identified all those pairs that showed a significant deviation. Statistically, a significant deviation would be expected in five percent of all the possible pairs due to chance alone.<sup>15</sup>

<sup>14</sup> The thin lines in Figure 7 depict the actual daily averages, while the thicker lines show the smoothed trends over the course of the campaign. The latter were created with a so-called LOWESS smoother (locally weighted scatterplot smoother; bandwidth 0.5). This procedure was developed by Cleveland (1979) and proved to be particularly useful for the analysis of RCS data (see e.g. Brady and Johnston 2002; Schmitt-Beck et al. 2006, 2010). The vertical thin lines in the graph indicate the five last Sundays prior to the Election Day on 23 October 2011.

<sup>15</sup> A significant deviation exists if the coefficient of the dummy variable that separates between the two field days is beyond the 95 percent confidence interval. A detailed description of the procedure can be found in Schmitt-Beck et al. (2010: 18).

Table 11: Proportion of significant differences in pair-wise comparison of field days  
( $p < 0.05$ , figures in percentages)

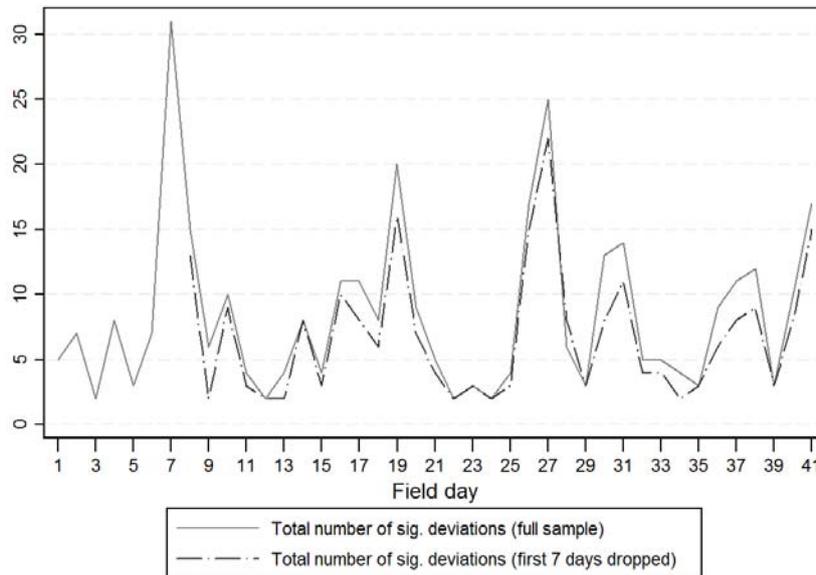
	every weekday	without weekends	without first 7 days	without first 7 days and weekends
Sex	1.7	1.1	0.7	1.3
Age	4.5	2.3	4.8	2.3
Language: German	3.3	2.1	4.1	3.0
Urban	2.1	1.4	2.3	1.7
Marital status: Single	3.9	2.5	4.5	3.0
Employment: Full time	3.9	3.7	3.9	4.7
Education: University level	1.8	1.6	0.4	0.7
Number of pairs	820	435	561	300

As Table 1 shows, for *none of the characteristics* is this five percent margin exceeded – irrespectively of whether the weekends and/or the first seven days are excluded from the analysis. While dropping the weekends from the full sample leads to a slight improvement of all values, which can be explained with the above mentioned differences in the accessibility of certain groups of individuals and the generally lower willingness to participate in a survey (see Chapter 2.4), the exclusion of weekends from the reduced sample (without the first seven days) produces a somewhat mixed picture. In general, the exclusion of the first field days (see Chapter 3.1) only partially leads to the expected improvement of the values (e.g. with regard to gender or education). This might be a hint that possible outliers with regard to the other characteristics are not necessarily to be found within these first days only. As Figure 8 shows, this assumption proves to be correct for two out of the three days with the highest total number of significant deviations to other field days – but not for the most glaring outlier.<sup>16</sup> Day 7, the first Sunday, is the field day with the highest total number of significant deviations, and taking into account that the daily mix of fresh and older addresses was far from stable during the first week (see Figure 6), some users of the RCS data may opt for the exclusion of the first days from the analysis. The respondents interviewed within the first seven days will therefore not be included in the analyses that will follow in Chapter 4.1.

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<sup>16</sup> The fact that the total number of significant deviations is always lower in the reduced sample is a consequence of the pair-wise nature of the comparison. If, for example, a day in the first week reveals a significant deviation compared to a day in the fourth week, the exclusion of the first seven days will also reduce the total number of deviations in the fourth week. The daily numbers of deviations in the two samples would only be identical if none of the pairs that showed a significant deviation would include one of the first seven field days.

Figure 8: Total number of significant deviations per field day



To sum up, the results of our statistical test with regard to the comparability of the daily samples can be viewed as *satisfactory*, since the proportion of significant differences between the field days remains below the five percent margin across-the-board. The data collected during Switzerland's first RCS therefore seem to deliver what the design promises.

## 4. Potential for analyses

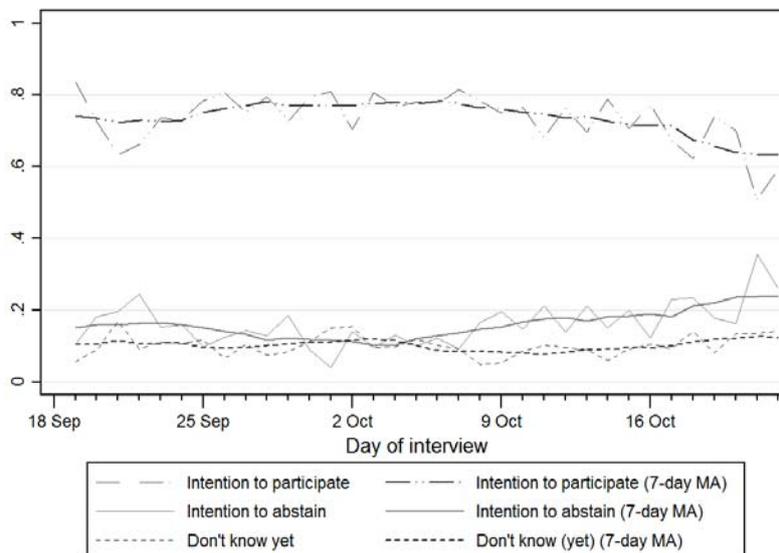
The data collected during the RCS survey in the run-up to the 2011 National Council elections offer the possibility for a wide range of analyses. On one hand, the hierarchical structure of the RCS data – respondents are nested within field days – allow the detection of changes in the respondents' attitudes and intentions over the course of the campaign, and the linkage of these changes with possible explanatory factors such as media content or published poll results, using the respective day of the interview as an anchor. On the other hand, the panel component also allows a pre-post-election comparison of some of those attitudes, as well as of the stated vote intentions and a respondent's actual vote choice (or abstention). The following three subchapters will therefore shed light on the variance observed with regard to a number of key variables and point out their analytical potential. They will also indicate the potential of both the post-election panel wave, as well as the media content analysis that was carried out parallel to the RCS, for possible future analyses

### 4.1. Variance of key variables

An obvious starting point for the discussion of possible key variables for future analyses is the *intention to participate* in an election as well as the *intention to vote for a certain party* – the key dependent variables of numerous electoral studies. As shown in Figure 9, the respondents' intentions to participate in the 2011 National Council

election were quite stable at the beginning of the campaign period, before they slightly diminished in the last two weeks prior to election day. A possible explanation would be that many of the citizens who had the intention to vote already did so at this time. The remaining respondents might therefore belong to the group of citizens who is more likely not to vote. The opposite pattern can be observed with regard to the intention to abstain. The proportion of respondents who didn't know (yet) if they would participate at the day of the interview stayed more or less stable over the whole time.<sup>17</sup> Due to the widely used possibilities of postal voting in Switzerland (see e.g. Lutz 2012: 48), some respondents had already cast their ballots at the day of the interview. Since those respondents are no longer able to express an intention to participate, they were excluded from the analysis, together with all the 474 respondents that were interviewed in the first seven field days. The analysis was therefore restricted to the intentions of the remaining 2786 respondents.

Figure 9: Intentions to participate and to abstain



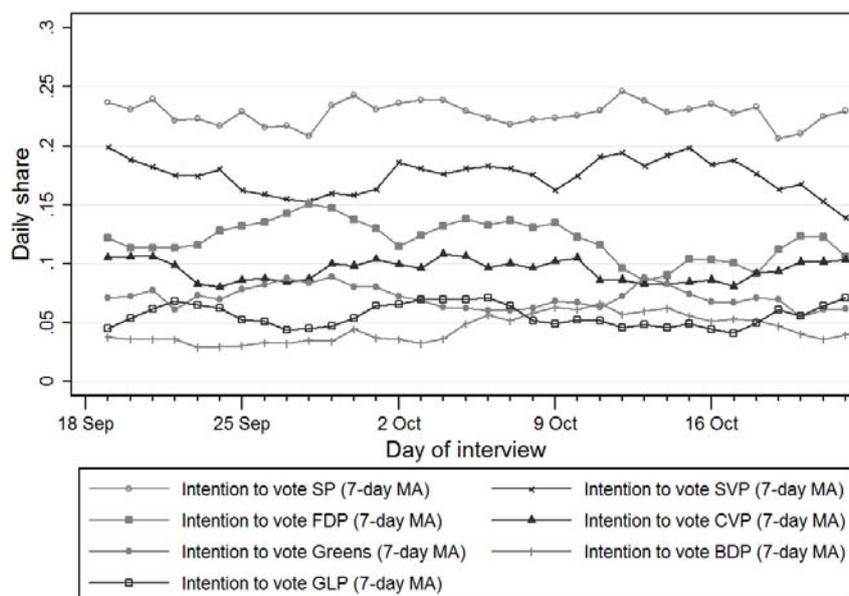
With regard to the parties those respondents intended to vote for at the day of the interview, Figure 10 shows that there were only marginal shifts ( $\pm 2$  percentage points across all parties) on the aggregate level in the course of the campaign.<sup>18</sup> More interesting is the ranking order of the parties. In the case of the four largest parties (SVP, SP, FDP, and CVP), it did not change anymore. Regarding the respondents' intentions to vote for the Greens, the GLP, and the BDP, however, there were various shifts that changed the ranking order of the three parties – at least for a certain period of time. Apart from that, the low degree of net changes at the aggregate level does not necessarily imply that there were as few changes at the individual level. Quite the

<sup>17</sup> All the respondents who answered the question regarding their intention to participate with “Certainly” or “Rather sure” were coded as having the intention to participate. The respondents who answered with “Rather not” or “Certainly not” were coded as having an intention to abstain. The respondents who answered “Maybe” or “Don’t know” were coded as not knowing (yet) if they intend to vote or to abstain.

<sup>18</sup> The markers in Figure 10 (as well as the ones in Figure 12) are only used to increase the distinctness of the plotted lines. Like in the graphs shown on the following pages, those lines are smoothed trend lines, depicting moving averages, no directly observable values.

contrary: As the first results of the Selects 2011 project suggest, last-minute vote shifts – to be understood as differences between a respondent’s stated vote intention and his or her (self-declared) actual vote choice or abstention – were fairly common. According to Lutz (2012: 55-56), some of the parties lost up to 40 percent of their potential voters during the hot phase of the campaign.

Figure 10: Vote intentions for major seven parties



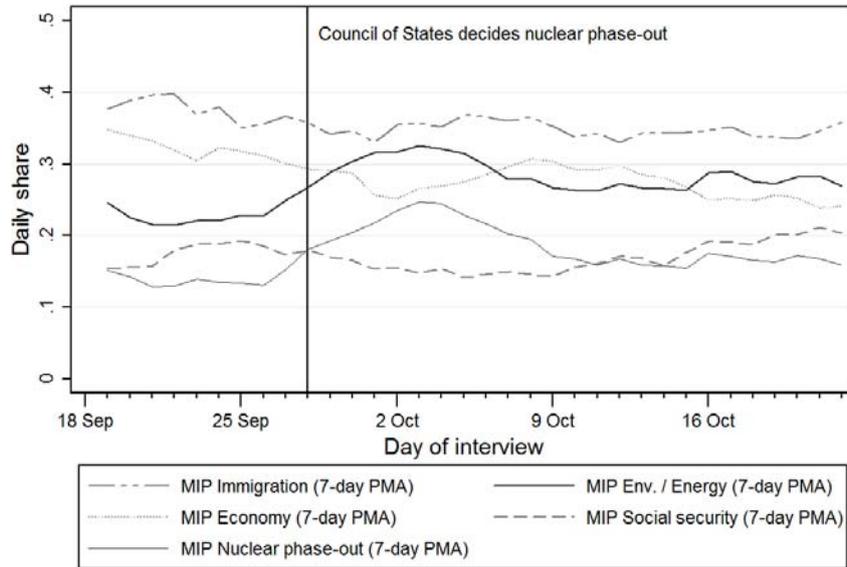
A possible explanatory factor for shifts in respondents’ intentions to vote for a certain party may be the *issues* most important to a respondent – e.g. because he or she considers them as a problem – and their salience in the media (for an overview on issue voting, see Kriesi and Sciarini 2004). Figure 11 shows the four issues that were most often mentioned by the respondents as Switzerland’s most important problems (MIPs) at the time of the interview: immigration, the economy, the environment, and social security.<sup>19</sup> While immigration was the highest-ranking issue over the whole campaign period, the economic issue, which ranked second at the beginning of the campaign, steadily lost importance. The opposite can be observed for the social security issue, which gained in importance, although only to a small extent. The most noticeable shift occurred with regard to the perceived importance of the environment. Since this category (see footnote 21) also contains the energy issues, one might suspect that the remarkable shift may have been a consequence of the lively debate in the Council of States concerning Switzerland’s planned nuclear phase-out and the respective media coverage in the follow-up of the decision that was taken on September 28.<sup>20</sup> To a certain degree, this assumption is confirmed by the more or less

<sup>19</sup> Together these four issues cover almost two thirds of all the answers (1<sup>st</sup> and 2<sup>nd</sup> mentions) to the respective open question in the RCS. They were originally translated into 73 separate codes and later recoded into 17 broader categories such as the ones shown in Figure 11.

<sup>20</sup> To better identify possible turning points in the respondents’ perceptions, the following graphs depict so-called prior moving averages (PMA’s). This special type of moving average takes into account the day of the interview as well as a certain number of days before (see e.g. Brady and Johnston 2006).

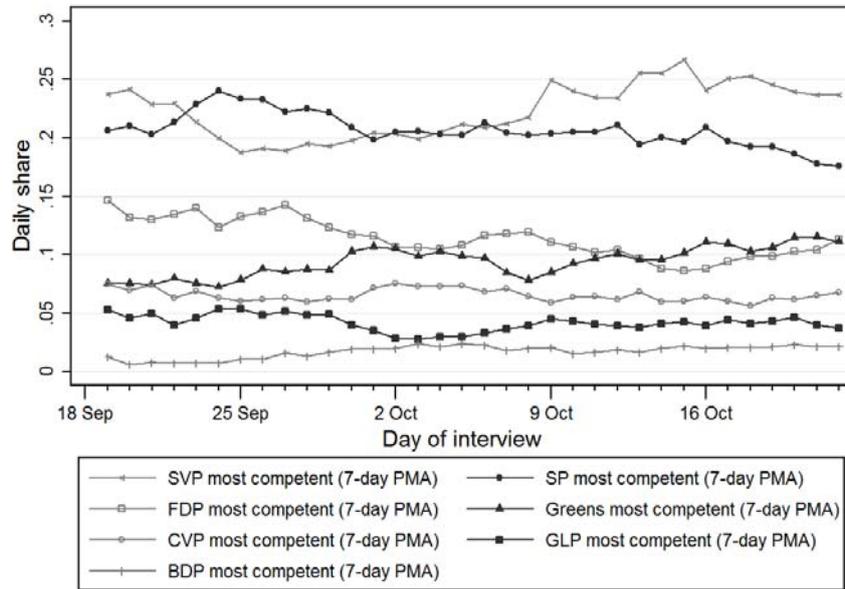
identical pattern of the nuclear phase-out issue alone (thin solid line in the graph), if it is analysed independent of the other environmental issues. However, to analyse if the temporary rise of the environment/energy issue really is related to the discussions in the Council of States, and how it affected the respondents' voting behaviour, the RCS data needs to be linked with the media analysis (see Chapter 4.3).

Figure 8: The four most important problems (1st and 2nd mentions)



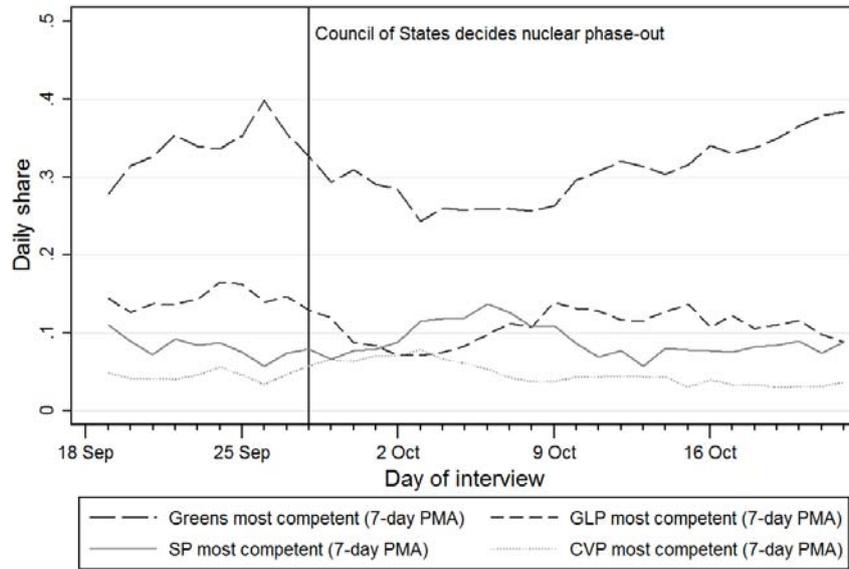
A key variable with regard to MIPs is the *competence* that the respondents assign a party to handle this issue. While some issues might be “owned” by a party over a prolonged period of time (on issue ownership, see e.g. Budge and Farlie 1983; Petrocik 1996), others may be new and therefore “vacant”. Figure 12 shows the shifts in the overall handling competence assigned to the major seven parties, without distinguishing between the individual issues perceived as MIP. Two things catch one’s eyes: There are noticeable shifts in the level of competence assigned to the two strongest parties, the SP and the SVP, over the course of the campaign, and the perceived competence of the BDP to handle any issue seems to be close to inexistent.

Figure 9: Parties most competent to handle the MIP (1st and 2nd mentions)



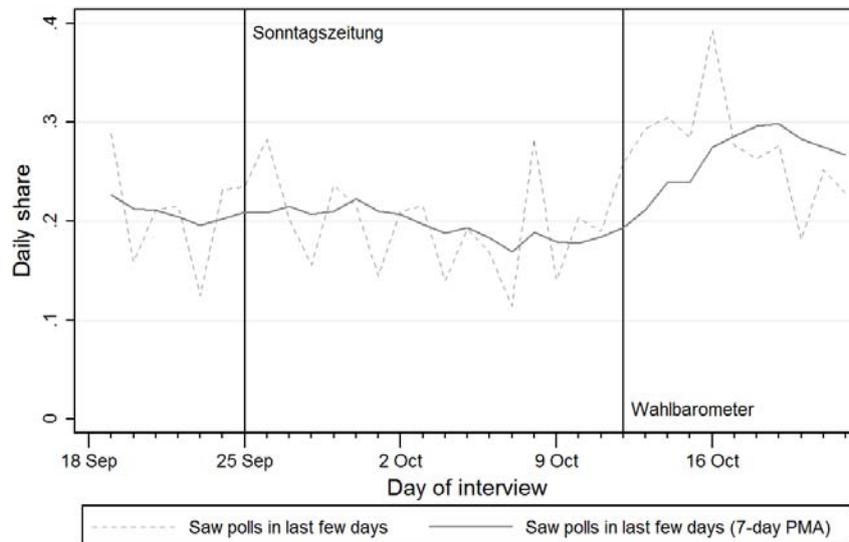
Much more interesting is the analysis of the competence assigned to certain parties to handle one specific issue. To demonstrate the potential of the RCS data in this regard, Figure 13 takes up the example of the environment/energy issue again and shows which parties are perceived as most competent to handle it. Remarkably, the rates of both parties that label themselves as “green”, the Greens and the Green-Liberals, dropped significantly in the days prior and after the Council of States’ decision in favour of Switzerland’s nuclear phase-out, whereas other parties such as the CVP, which were never among the advocates of a nuclear phase-out until the Fukushima Daiichi disaster, suddenly seemed more competent to handle this issue in the eyes of the electorate. However, as the graph shows as well, these shifts were of a short duration only and the Greens never lost their “traditional” ownership of the environment/energy issue.

Figure 10: Parties most competent to handle the environment/energy issue



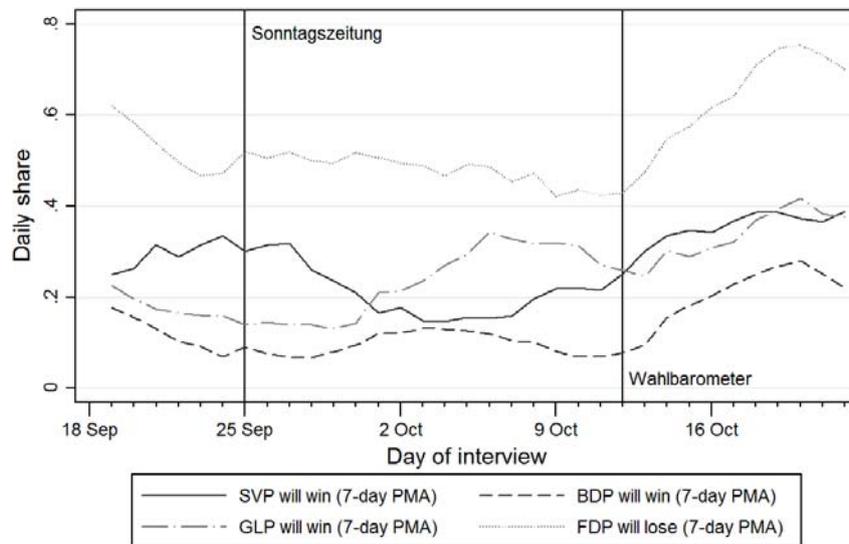
The last key variable we will discuss with regard to the variance observed over the course of the campaign is the perception of the published results of *pre-election polls*. Compared to other countries, especially the United States, but also Germany, polls are rather rare in Switzerland. During the field time of the rolling cross-section survey, only two were published: one in the “Sonntagszeitung” on 25 September and the seventh and last wave of the “Wahlbarometer” on 12 October.

Figure 11: Perception of pre-election polls



Based solely on the smoothed trend depicted in Figure 14, only the publication of the “Wahlbarometer” seems to have been perceived by the respondents.<sup>21</sup> However, the picture is slightly clearer if one takes into account the parties mentioned as the expected winners and losers of the election (according to the poll). As Figure 15 shows, the respondents who stated that they have seen a poll in the last few days prior to the interview not only named the correct winners (GLP and BDP) and loser (FDP) according to the results of the “Wahlbarometer”, they also correctly identified the SVP as one of the expected losers of the election according to the forecast published in the “Sonntagszeitung”. Our initial assessment, that the first poll was not perceived by the respondents, may therefore need more study.

Figure 12: Expected winners and losers of the election according to the polls



In summary, the key variables discussed in this chapter reveal considerable potential for further analyses on both the aggregate as well as the individual level. Especially in view of the latter, the panel component of the RCS and the media content analysis that was carried out parallel to the survey might be of particular interest as well. Therefore their potential will be separately discussed in the next two subchapters.

## 4.2. Pre-post comparison

As already mentioned, the RCS contained an additional post-election panel wave. Every respondent who had not yet voted at the day of the (pre-election) interview (N = 3260) was contacted again in the days after the Election Day and was asked for his or her actual vote choice. Almost 80 percent of those eligible agreed to the second interview. These 2434 cases can therefore be used as a panel, which allows for a pre-post comparison with regard to a number of variables, including the respondents' party

<sup>21</sup> A total number of 799 respondents stated that they have seen “any polls in the last few days” (the first seven days in the field were again excluded from the analysis). Remarkably, the daily share always oscillated around a value of .2 – even if there were no polls published in the days before (Lutz 2012: 59).

choice, the issues perceived as most important problems, and the parties perceived as most competent to handle those issues. Regarding possible differences between the respondents' stated intentions prior to the Election Day and their actual vote choice, the panel data reveal notable changes. As shown in Table 2, 263 respondents intended to abstain. That corresponds to 13 percent of the 2050 remaining respondents after the first seven field days were excluded from the analysis. 1179 respondents (58 percent) intended to vote for one of the seven major parties, and 194 respondents (9 percent) for one of the minor parties. 414 respondents (20 percent) didn't know yet or didn't answer to the respective question.

*Table 2: Last minute vote shifts (pre-post-election comparison)*

	Voted for major party X	Voted for major party Y	Voted for a minor party	Abstained
Intention to vote for major party X (N=1179)	779 (66)	182 (15)	49 (4)	124 (11)
Intention to vote for a minor party (N=194)	104 (54)	n.a.	59 (30)	15 (8)
Intention to abstain (N=263)	31 (12)	n.a.	2 (1)	229 (87)

N = 2050; row percentages in parentheses

If we compare these numbers with the (self-declared) actual voting behaviour of the respective respondents, we observe that 229 of the 263 respondents (87 percent) who intended to abstain actually did. 31 respondents (12 percent), however, decided to take part in the election: 29 of them cast their ballot for a major party, two of them for one of the minor parties. It is tempting to conclude that these respondents were mobilized in one way or another by the campaign. Regarding the 194 respondents who intended to vote for a minor party, we observe that 59 (30 percent) did so. 104 of them (54 percent) finally voted for a major party, and 15 of them (8 percent) abstained. The remaining 8 percent didn't answer the question. This shift from a minor to a major party might either be explained by strategic voting, especially in small constituencies, or by altered expectations with regard to the winners and losers of the elections, e.g. as a reaction to the publication of pre-election poll results.<sup>22</sup> Of the 1179 respondents who intended to vote for one of the major parties, 961 (81 percent) declared that they did so in the post-election interview. 799 of them (83 percent) voted for the party they intended to vote, 182 of them (17 percent) for another major party. 49 (4 percent) out of the 1179 respondents who intended to vote a major party finally cast their ballot for one of the minor parties, and 124 of them (11 percent) declared that they abstained. The remaining 4 percent didn't answer the question.

### **4.3. Link with media analysis**

If we want to study campaign effects on voting behaviour we need to have an idea what is going on in the campaign. Therefore, parallel to the RCS, that not only contained a wide range of questions concerning the decision making process and the

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<sup>22</sup> The latter argument might also explain shifts from major to minor parties in the case that a certain respondent feels even more obliged to support a minor party after he learned about its hypothetical failure according to the polls.

respondents' voting behaviour, but also their media consumption, an associated media content analysis was carried out. Since the budget for this analysis was very limited, we decided to focus on the campaign related in print- and online media during the same period as the RCS was in the field. This decision was motivated by the fact that media coverage in these media outlets is likely to create the highest amount of attention among a broader public. It would have been useful to also include campaign ads and posters. However, this would have been much more expensive. In addition, party campaigns mix up with personal candidates' campaigns in the final period of the elections. The candidates have the primary goal to make them known through the personal campaign and usually present only a picture of themselves together with the list number they are running on and the party affiliation. Candidates often don't even try to spread a political message. We also excluded electronic media (radio and TV), because the analysis of their content would have been very costly and is not very relevant in the Swiss context. The national radio and TV station have a very balanced reporting of party and campaign events. In addition, political advertising is not allowed in any electronic media.

Between September 10 and October 22, 2011, the Institute of Mass Communication and Media Research (IPMZ) at the University of Zurich analysed the 28 most important newspapers and online-news pages in the German- and French-speaking part of Switzerland.<sup>23</sup> All front-page articles as well as articles with a teaser on the front page were recorded, provided that they addressed issues relevant to the election. In total, the media sample contains 1922 articles, each of which has been classified on the basis of numerous variables that cover communication events, the political actors and their reputations, as well as the issues concerned. Linked with the data gathered during the RCS, for example by using the day of the interview as an anchor, this additional source of information has the potential to actually *explain* some of the changes one might observe with regard to the citizens' attitudes and intentions.<sup>24</sup>

Figure 16 gives an idea that there is substantial variation in campaign related reporting.<sup>25</sup> At the beginning of the campaign, the economic situation was a very salient topic in the media, due to the spread of the financial crisis. In the middle of the campaign, nuclear energy was a central topic, which was related to a parliamentary debate. Towards the end of the campaign immigration was more frequently covered in the media and the campaign and the parties themselves became a topic of media reports.

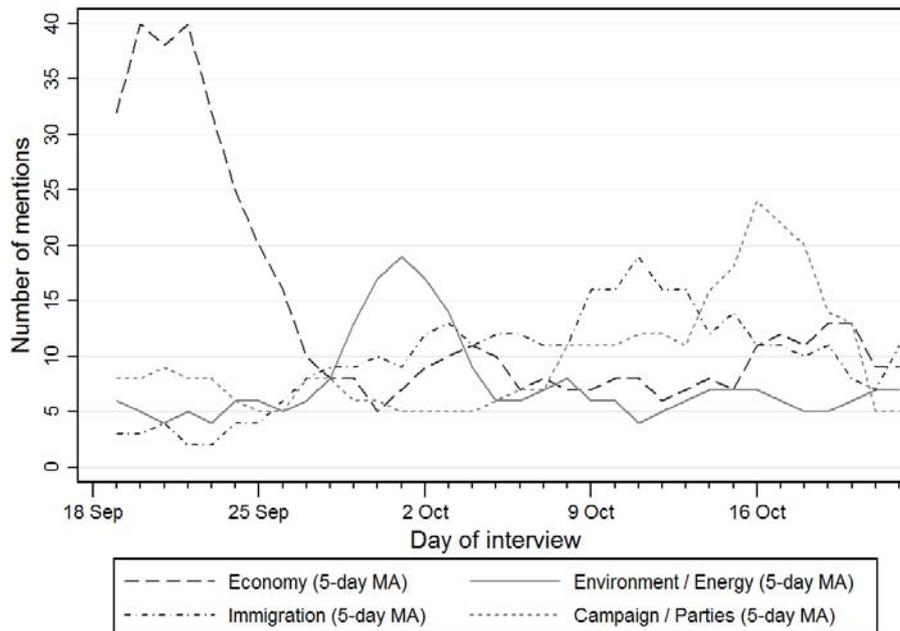
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<sup>23</sup> Italian-speaking media outlets were excluded from the sample, since the RCS study was limited to the German- and French-speaking parts of the country as well.

<sup>24</sup> A first attempt of combining RCS data with a media content analysis was made by Johnston et al. (1992) in the context of the 1988 Canadian elections. For more recent studies that focus, among other things, on the influence of the tone of TV news on the evaluation of candidates, see Dobrzynska et al. (2003) or Krewel and Partheymüller 2012. A first attempt to link the RCS data gathered in the 2011 Selects project with the associated media content analysis can be found in the master thesis of Simon Lanz (2012).

<sup>25</sup> The trendlines are based on 5-day moving averages and show in how many articles per day a specific issue has been mentioned during the campaign (no weights applied). For possibilities of a weighting of the media data, see Lanz (2012).

Figure 16: Selected issues related to the campaign mentioned in print and online-media over time



## 5. Conclusion

The RCS design is an excellent means to study the influence of campaigns and dynamics of electoral behaviour in the final period of an election campaign, since it proves to be suitable in capturing the fluctuation in voting intentions, the perception of candidates and parties, and the salience of campaign issues on a daily basis. Even more importantly, the RCS allows the capturing of unexpected campaign events, which could not have been foreseen at the beginning of a campaign. RCS studies therefore have the potential to fill a still existing gap in the knowledge of electoral behaviour: how do campaigns influence the short-term voting behaviour in elections?

The Selects 2011 RCS was the first of its kind conducted in Switzerland ever. Thus there was no previous experience with the design and although experience from other countries was well transferable regarding the general design, this was not the case for the planning of the fieldwork, as conditions affecting surveys vary greatly from country to country. Designing the study and the fieldwork had therefore be based on many assumptions, and it wasn't clear whether these assumptions would actually hold.

Some difficulties with the fieldwork were thus inevitable. The response rates were lower than expected, and we had to adjust the number of addresses to reach our target of 100 daily interviews. The target was particularly difficult to reach during weekends, and respondents showed strong resistance to Sunday interviews. In future studies, more effort needs to be put into interviewer training and detailed daily reporting from the survey agency.

Despite these issues, it was possible to gather high quality data, as shown in our initial analyses. Among other things, we could show in this paper that the socio-demographics do not vary unexpectedly during the entire campaign period and response rates are not lower than they are in the post-election survey. We also show that the RCS data has great potential to be analysed in different ways. The data can be used to show aggregated fluctuation of different variables over a given campaign period, either by using smoothing techniques or analytical tools. It can also be used to model vote intentions or other dependent variables, such as party evaluations, in combination with the media content analysis that was carried out in parallel to the RCS. And last but not least, the data can also be used as a conventional panel study, as the pre-election RCS survey was combined with a post-election panel wave in which the respondents were asked about their actual behaviour.

Different challenges, however, remain. As expected, the relatively small daily samples produced a rather large day-to-day variance that can be attributed to random sampling error. This random “noise” has to be separated from real changes due to campaign influence. The data can be smoothed or days can be clustered to achieve larger sample sizes. For modelling RCS data in a more complex way, multi-level models can be applied (for recent contributions in this direction, see e.g. Krewel and Partheymüller 2012 or Hoffmann 2012).

However, given the flexibility provided by the RCS data, especially in combination with a post-election panel component, the design has the potential to outperform other forms of pre-election surveys. Pre-election cross-section studies struggle to capture campaign dynamics, whereas panels allow only for a limited number of waves, which means that in both cases the effects of important campaign events may be missed out.

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