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**Swedish national election
studies program method report.
Super election edition**

Per Oleskog Tryggvason &
Per Hedberg

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Swedish National Election Studies Program
Department of Political Science
University of Gothenburg



Introduction

The purpose of this report is to give full account of the study design of the two national election studies conducted by SNES/SCB in 2014. We also provide a thorough analysis of response rate in different groups. These analyses are important data that will enable users of the data to independently judge the overall data quality of the SNES 2014 studies. Since there are many mode changes and dramatically falling response rates the information provided is especially important for analysis of trends in Swedish electoral behavior.

The Swedish national elections studies program (SNES) have a long and proud history of conducting large scale high quality studies of political and electoral behavior. Since 1956, 18 studies have been conducted in connection to every regular national election. Similar studies have since then been conducted in association to the referendums on pensions (ATP, 1957), nuclear power (1980), EU-membership (1994) and Euro-membership (2003) and in connection with all five European parliamentary elections since 1995.

One of the unique characteristics of the Swedish national elections study is that it's designed with two panel components. ***The long term panel:*** Since the election in 1973 half of the sample is re-interviewed in the subsequent election. This means that we have a rolling long-term panel – where it is possible to track an individual's political attitudes and electoral behavior over a period of four years. ***The short term panel:*** Half of the study's sample is interviewed during the weeks before the election and the other half is interviewed after the election. The pre-elections sample then receives a short mail-back survey just after the election. In this survey the respondents are asked a few complementary questions, among these how they actually voted. This design makes it possible to analyze the effects of short term factors such as the electoral campaign on political and electoral behavior.

In 2014 something unique occurred in Swedish political history. For the first time the European parliamentary election and the national election to the Swedish Riksdag transpired in the same year. In the light of these events the Swedish national elections studies program was faced with a handful of new challenges (primarily due to budget reasons) but mainly unprecedented opportunity to study the dynamics of how parties, voters and the media would handle having two elections in the span of 112 days. ***The long campaign panel:*** The design of 2014 years national elections study still have both the long- and short term panel, but with one addition. We have also introduce a medium-range panel, where everybody in the European parliamentary election study (n=5400) also receives a post national election questionnaire. The post national questionnaire is also more comprehensive than in previous studies (8 pages compared to 3 pages in the last couple of decades). Thanks to this we will now be able to complement our tools for understanding long- and short term political changes with a tool for understanding dynamics in in what we call *the long term campaign* (112 days). This means that we for the first time will have a large representative sample where we can study how voters' political attitudes and voting behavior change in the months before the election. This will be a unique addition to the various internet campaign panels which is conducted within SNES during the super election year 2014. It will also provide insight into how the same individuals make up their minds in first- and second-order elections. For an overview of the study design 2010-2014 and the different steps within 2014 see figures 1 and figure 2.

Figure 1 Illustration of the SNES study design 2010-2014

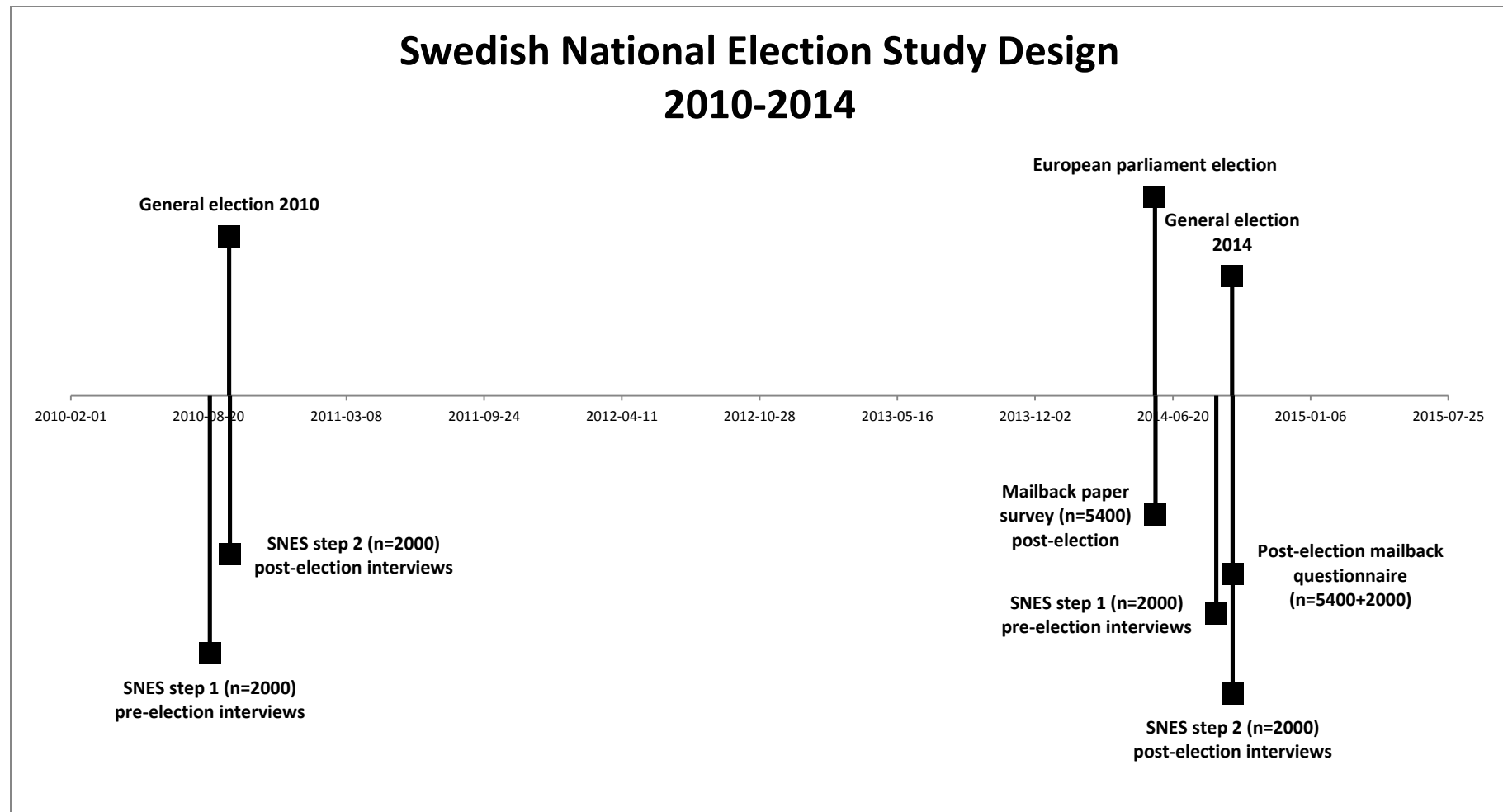
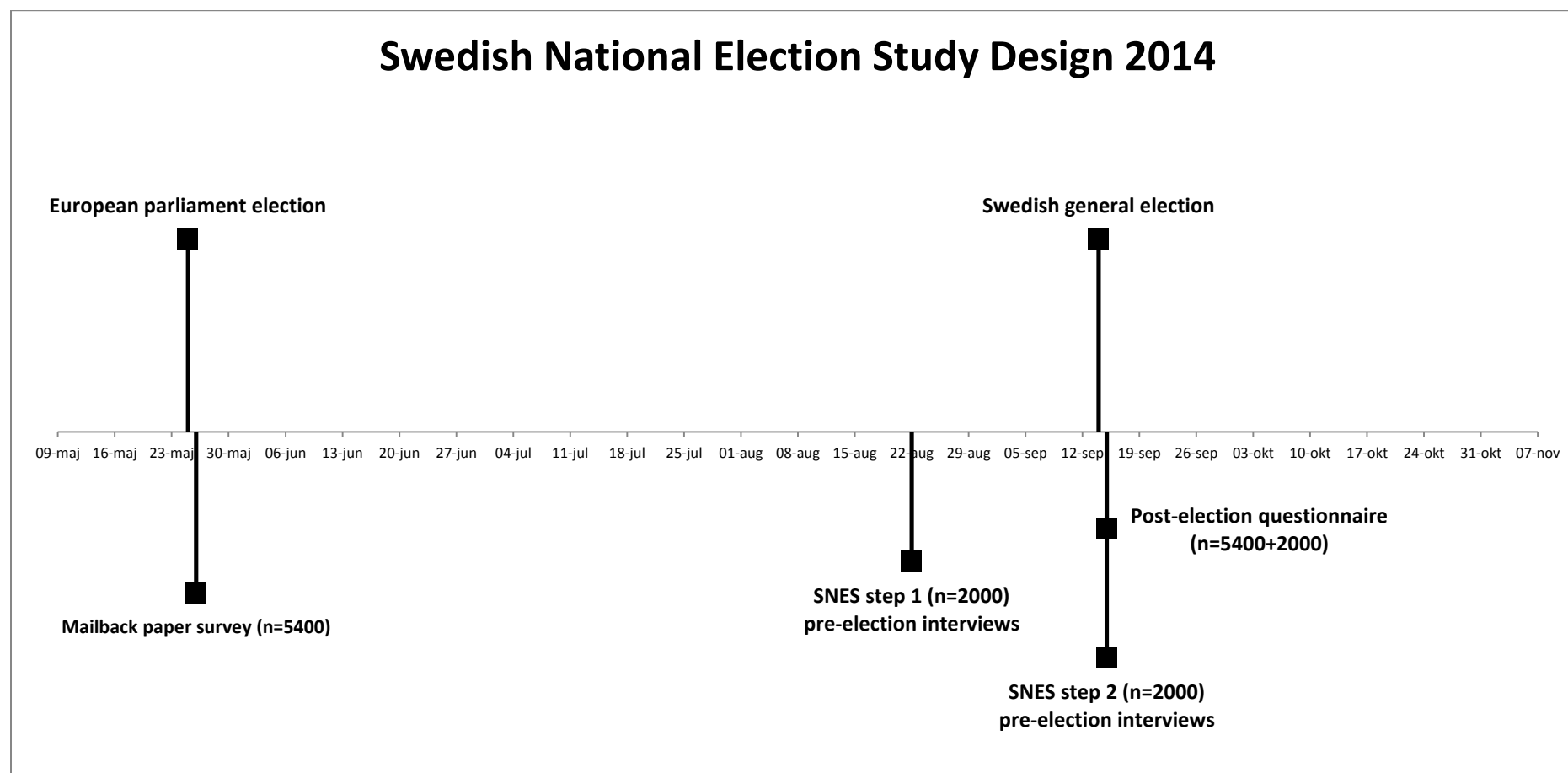


Figure 2 Illustration of the SNES study design 2014



In the subsequent part of this methods report we will present and discuss a range of methodological aspects of the European parliament election study and the Swedish national election study. For each study we will start with a brief introduction and a detailed fieldwork plan. Then we will present and discuss the response rate and mode of participation, both from an historical perspective but also with a detailed focus on missing data in the 2014 elections. Finally we will evaluate the accuracy of the studies compared to the official election results.

The European parliamentary election study

The first Swedish European parliament election study was carried out after the 1995 election. The predominant mode of the study has before 2014 been face-to-face interviews. These interviews have been performed by professional interviewers from Statistics Sweden (SCB). Respondents who for whatever reason haven't been able to sit down for an interview have instead been offered to take part in a shortened or extra-short phone interview. In the four previous studies (1995-2009) the sample size have been roughly 2700 individuals.

In 2014 the SNES team decided to change the primary mode of the study from face to face to a 24 page mail-back paper survey. One of the main reasons for the mode change was the ever increasing costs of performing face to face interviews. Another reason was to combat the trend of declining response rate and to ensure large enough (n) in the study. As a result the sample size was doubled to 5400 individuals.

Multiple strategic efforts were also made to maximize the response rates, which has been declining over time in all comparable studies (e.g. the SOM-survey). In an attempt to amplify the response rate two reminders were sent to respondents who didn't send in their surveys. Along with the reminders the respondents were given login details so they had the opportunity to fill in the survey online. In yet another effort to enhance the response rate, interviewers' from Statistics Sweden attempted to contact the respondents on known home and mobile phones. When they were able to make contact, interviewers either reminded the respondents to send in their surveys or they were offered to partake in a shortened or extra-shortened telephone interview. In the short telephone interview the respondents were asked about 70 percent of the full mail-back survey. The questions that were excluded in these interviews (compared to the full mail-back survey) were open ended questions and questions that were considered cognitively demanding when asked over phone. Hence, the selection of questions was made to enhance the quality of the collected data while making necessary reductions so that the respondents would be willing to partake in the study via phone. The extra-shortened interviews only contained nine questions with focus on party choice in European and in the national election.

The interviewers were also instructed to make an extra effort to reach young people.¹ This since the groups has been seriously underrepresented in previous and similar studies.

¹ Individuals aged 18-30 were given priority 1, those aged between 31-64 priority 2 and those over 65 were not contacted in the phone attempts.

Table 1 Detailed field plan for European parliament election study 2014

25 May 2014	European parliament election
26 May 2014	Respondents receive an information pamphlet about the study and the mail-back survey (n=5400).
4 June	First reminder is sent out. Respondents also receive log-in details with an option to fill in the survey online.
24 June	Second reminder is sent out.
26 June	Interviewers from Statistics Sweden start contacting non-responders by telephone. Reminding respondents about the paper and web-surveys and giving the option of a shortened or extra-shortened telephone interview
17 August	Telephone reminders come to an end and the collection of web and paper questionnaire is closed.
14 September	Swedish national election
15 September	A post-national questionnaire is sent out to everyone in the sample who hasn't explicitly communicated to Statistics Sweden that they don't want to be a part of the study (n=5236).
14 October	A postal reminder and new copies of the post-election questionnaire is sent out.
28 October	A second postal reminder new a copy of the post-election questionnaire is sent out.
11 November	A third postal reminder new a copy of the post-election questionnaire is sent out.

The Swedish European parliament election studies have historically been blessed with comparatively high response rates (see table 2 for an overview of sample size and response rates). This said, between 1995 and 2009 we have witnessed two clear and troublesome trends. The first trend is declining response rate.² The study's response rate has dropped from an impressive 84 percent in 1995 to 67 percent in 2009. The second trend is a decline in the proportion of the full-length interviews. In 1995, 72 percent of those who partook in the study completed the full-length interview. The same figure 2009 was just a bit more than half of the respondents (55 percent).

² This has been the case in all previous elections studies over the last decades. And the trend is the same in similar studies like the SOM-survey and many surveys conducted by Statistics Sweden. For an illustration see figure a1 in appendix.

Table 2 European parliamentary election study 1995 – 2014 mode, sample size and response rate.

Year	Mode	Sample size	Field period	Net response rate	Mode distribution among respondents			
					Full	Web	Short	Extra short
1995	Face to face interview / telephone	2676	September/ November 1995	84%	72%	N/A	20%	8%
1999	Face to face interview / telephone	2676	June/July 1999	76%	63%	N/A	11%	26%
2004	Face to face interview / telephone	2692	14/6 – 30/9 2004	78%	54%	N/A	10%	37%
2009	Face to face interview / telephone	2682	8/6-29/9 2009	67%	55%	N/A	23%	21%
2014	Mail-back questionnaire / web/ telephone	5400	26/5 – 17/8 2014	51,4%	69%	6%	2%	23%

Comment: For a detailed response and mode distribution with the sample size as the denominator see table a3 in appendix.

If we look at the figures for 2014 we can conclude that the trend is even steeper when it comes to the declining response rate. Only 51.4 percent of the sample participated in the study. This is the lowest response rate in any of the European and national election studies, though in no way surprising. The level of the decline is in line with that of similar studies such as the SOM-surveys.³ Even though the response rate reached an all-time low, the number of responders in the study is the highest ever (n=2778), thanks to the doubling of the sample size. Another positive is that the share of responders who completed the full-length survey in 2014 was 75 percent (69 percent on paper and 6 percent on the web). This is a reversal of the trend we have seen since 1995 and actually the second highest figure ever. It means that we have 2079 individuals who sent in the full survey. A figure that (at least from a numbers perspective) should be considered a good foundation to perform in-depth analysis of electoral behavior in the European parliament election 2014.

³ For an illustration of the falling response rates in similar studies see figure a1 in appendix.

Missing data analysis

Since 2014 SENS studies have register data attached to the full sample we are able to compare responders to non-responders and individuals that use different response modes in relation to multiple socio-demographic characteristics. When analyzing response rate and response mode we focus on a wide range of characteristics namely; gender, age, education, immigration background, family income, turnout in the respondents district and whether the person has voted or not. Since the register data is collected at the end of the year by various agencies some of the register data used here is from 2012. When the more recent data is collected and fully processed our ambition is to update the analysis with the new material from 2013 and 2014.

The 2014 European parliament election study is truly a mixed-mode survey. The main mode is as described in earlier section a mail-back paper questionnaire. But the respondents also have the option to fill in the survey via the web. Respondents who don't send in their questionnaires are contacted by interviewers from statistics Sweden who invites them to participate in a telephone version of the survey. If the respondent declined the offer they are asked to answer an extremely short version of the survey. In this context it is very important that we are on the lookout for mode-specific pitfalls. Hence we are not just analyzing who partakes but also how different socio-demographic groups choose to participate. One of the reasons for this detailed missing data analysis is that political behavior and attitudes to a large extent correlates with a number of social and demographical characteristics. If we are unaware of a skewed response rate we might draw (the wrong) conclusions that are driven by the social and demographical composition of the respondents.

When we look below in table 3 the response rate for the whole study in the different subgroups is presented in the column "*all respondents*". The mode distribution among responders is presented in the four greyed columns to the right; *paper*, *web*, *telephone (long)*, *telephone (short)*.

When looking at the first column (response rate) we can conclude that previous known patterns regarding survey response also is present in the European parliament survey. Older people are much more prone to partake in the survey compared to younger individuals. Education, immigration background and economic situation are also correlated with different degrees of response rate. People with lower education also have a lower participation compared to people with a higher degree of education. People who are born outside of Sweden has a lower participation rate than those born in Sweden and people who have higher family income also participate to a greater degree than those with less economical resources. The two variables that are directly associated to voting behavior – turnout in the respondents own voting district and whether the respondent him/herself voted in the election – are both correlated to response rate. People living in voting districts with low turnout also participate in the study less frequent than those living in districts with higher turnout. Individuals who themselves voted in the European parliament election has a higher response rate (63 percent) compared to individuals who didn't vote in the election (38 percent). The one group where there are relatively small differences is between men and woman. Men participate somewhat more than woman (52 compared to 50 percent response rate).

Table 3 Response rate and mode distribution in the Swedish European parliament election study (percent and frequencies).

	Response rate	Sample (n)	Among the respondents					Response (n)
			Mail back	Web	Telephone (long)	Telephone (short)	Total	
Full sample	51	5400	69	6	2	23	100	2775
Sex								
Man	52	2710	67	7	3	23	100	1422
Woman	50	2690	72	4	2	23	100	1353
Age (4)								
18-29 years	45	1086	51	10	5	35	100	486
30-49 years	48	1826	59	8	2	31	100	878
50-64 years	59	1360	70	4	2	24	100	805
65-80 years	54	1126	98	2	0	1	100	606
Age (7)								
18-21 years	48	293	51	11	5	33	100	140
22-29 years	44	793	51	10	4	35	100	346
30-39 years	47	844	54	8	2	36	100	395
40-49 years	49	982	63	8	2	26	100	483
50-59 years	57	903	65	5	3	26	100	514
60-69 years	58	906	85	2	0	12	100	522
70-80 years	55	677	99	1	0	0	100	375
Sex and age								
Man 18-29 years	45	560	46	13	7	34	100	252
Man 30-49 years	48	918	58	11	2	29	100	445
Man 50-64 year	59	688	66	4	3	27	100	408
Man 65+ years	58	542	97	3	0	1	100	317
Woman 18-29 years	44	526	56	7	2	35	100	234
Woman 30-49 years	48	908	60	6	3	32	100	433
Woman 50-64 year	59	672	74	4	1	22	100	397
Woman 65+ years	49	584	98	1	0	1	100	289
Education (3)								
Low	43	1093	68	4	2	26	100	470
Middle	48	2468	63	6	3	28	100	1183
High	62	1799	76	6	1	17	100	111
Immigration background								
Born outside of Sweden	43	621	57	10	4	29	100	269
Born in Sweden with two parents born outside of Sweden	48	163	51	9	5	35	100	79
Born in Sweden with one parent born outside of Sweden	49	353	63	5	4	27	100	172
Born in Sweden with both parents born in Sweden	53	4255	72	5	2	21	100	2254
Family income								
Lowest 1/5	42	1081	68	6	2	23	100	456
Income 2/5	50	1076	72	4	2	22	100	541
Income 3/5	53	1079	71	6	3	21	100	569
Income 4/5	54	1078	67	5	2	25	100	586
Income 5/5	58	1078	67	7	2	24	100	622
Turnout in own district: European parliament election								
Turnout 1/5	45	1081	68	6	2	24	100	485
Turnout 2/5	51	1079	66	6	3	25	100	551
Turnout 3/5	52	1079	69	6	2	22	100	565
Turnout 4/5	53	1081	70	5	2	22	100	575
Turnout 5/5	56	1077	72	6	1	21	100	599
Voted in European parliament election 2014 (May 25)								
No	38	2494	51	7	5	37	100	947
Yes	63	2903	78	5	1	15	100	1828

Comment: Data on sex, age and immigration background comes from RTB (Registrert över totalbefolkningen), Data on family income is from 2012 and comes from IoT (income and taxation register). The quantiles have been calculated from the sample distribution. Record of education comes from "Sun20002niva_olc" in Ureg. Data about turnout in own district comes from the Swedish election authorities, electoral participation at the individual level has been collected by Länsstyrelsen.

Since the Swedish European election study 2014 is a multi-mode study, is it important to also look the distribution of response-mode within the different socio-demographical groups. We know from earlier research that response-mode is associated with different socio-demographical and cognitive attributes. One example is that older people usually are more prone to respond to paper surveys while younger generations are overrepresented when it comes to web-respondents. We show the mode distribution for each demographic group in the greyed columns on the right hand side of table 3.

The characteristics that were associated with higher participation rate are also associated with the mail-back paper mode. This is expected, but also troublesome from a data quality perspective. As we can see the most visible effect comes from age. Young people are less willing to partake in the study altogether and when they do participate they are more likely to choose the extra-shortened telephone interview. If we focus on the respondents that did partake in the study we can note that 98 percent of those older than 65 years use the mail-back paper mode. The statistic for people between 18 and 29 is just 51 percent. Younger individuals (especially men) are instead more likely to respond via the web. Among respondents in younger cohorts (under 50) roughly 10 percent use the web-option, compared to older cohorts where the figure is between 5 and 1 percent. The most significant differences in answering mode between the examined characteristics are the propensity to use the short telephone option. About one third of the respondents under 40 and one fourth of those between 40-60 years used the short telephone interview, compared to 12 and 0 percent among the oldest age categories. The big differences in answering mode are partly due to interview strategies at Statistics Sweden in their extra efforts to contact hard to populations e.g. young people. Another big difference that is associated with response mode is whether the respondent themselves voted or not. Individuals who voted are much more likely to either fill in the mail-back questionnaire or respond by web (83 percent of all respondents). While non-voters are much more likely to choose the short telephone option (37 percent compared to 15 percent among voters).

It's important that researchers using the SENS are aware of the big differences in participation pattern which are associated to the demographical variables listed above. This since most advanced analysis of electoral and political behavior is done on those who answered the full length survey. The propensity for older, more educated, economically well off respondents to use one of the full length response modes (paper, web or the long telephone interview) may, as stated earlier, very well have consequences for what kind of results we get.

Deviation from the official election result

One advantage of election studies compared to other social surveys is that we actually have benchmark(s) that we know to be true that we can compare our results to. We know the exact turnout, the percentage of voters who voted for a specific candidate and first and foremost, the final electoral result for each party. In other words, we have a very good opportunity to evaluate the quality of the study seen from an accuracy perspective. In the following section we focus on the deviation from the official election result for the study as a whole and for the different modes of participation. The average deviation per party in the European parliament election for the full sample was 1,0 percentage points. In comparison with the very few commercial opinion polls that were conducted right before the election this is a very good accuracy. Especially when considering that the European parliament election study is unweighted.

If we look at the accuracy of the full sample it's easy to see that the study has two substantive deviations, an overestimation of the Green Party (+2,2 percentage points) and a large underestimation

of the Sweden Democrats (-4,4 percentage points). These deviations are also observed when we focus on examining those who answered the mail-back questionnaire, and the overall average deviation is still around 1,0 percentage point per party. If we look at the rest of response modes the number of respondents are much lower and we get much more variability in our estimations. Most of the in-depth analysis is probably going to be done on respondents who completed the full (or almost full) survey. Hence its good news from a data quality perspective that the average deviation still is acceptable (1,04) when we combine all respondents answered via paper, web or the long phone interview.

Table 4 Deviation between party vote among and the official election result in the European parliament election 2014 (percent and percentage points).

	Official election result	All respondents	Paper	Web	Telephone (long)	Telephone (short)	Full/long interview (Paper, web & long telephone)
Left Party	6,3	+0,6	-0,1	+0,5	-6,3	+5,1	-0,2
Social Democrats	24,2	-0,2	0,0	-6,0	-10,9	+1,5	-0,5
Centre Party	6,5	+1,0	+0,8	-0,8	+13,5	+2,1	0,8
Liberal Party	9,9	+0,2	+0,7	-1,9	-3,2	-1,7	0,5
Moderate Party	13,7	+0,8	+0,7	-0,1	+26,3	+0,6	0,9
Christian Democrats	5,9	-0,6	-0,5	-0,2	-5,9	-1,0	-0,5
Green Party	15,4	+2,2	+2,8	+13,0	-2,1	-4,8	3,4
Sweden Democrats	9,7	-4,4	-4,2	-7,4	-9,7	-4,4	-4,4
Pirate Party	2,2	-0,3	-0,4	+1,2	+4,5	-0,6	-0,2
Feminist Initiative	5,5	+0,7	+0,3	+2,5	-5,5	+3,1	0,3
Other party	0,7	-0,1	-0,1	-0,7	-0,7	+0,1	-0,1
Number of respondents		1665	1317	88	15	245	1420
Average absolute deviation		1,01	0,95	3,12	6,91	2,27	1,04

Comment: The information about party vote has been validated to the electoral register, which means that only people who actually voted is included in the results. The row average deviation shows the average deviation from the official election result for the six mode categories. The average deviation from previous years has been 1995: 1,0 1999: 1,1 2004: 0,9 and 2009: 0,8. The average deviation of Swedish public television's exit poll (VALU) was 1,0 weighted and 1,46 unweight. The average deviation of the commercial opinion polls that was published the last week (Novus, Ipsos and Sifo) was 1,11 .

Participation in the post national election survey

To investigate electoral volatility during the long election campaign (112 days) a post national election survey was sent out to everybody in the European parliament sample⁴ the day after the national election (Monday the 15 of September). Table 5 shows the participation pattern among the original European parliament sample divided into four categories. Around forty percent of the sample didn't respond to either the European parliament election survey or the post national election survey, while thirty-five percent choose to participate in both surveys. We also have a sizable part of the sample that responded to the European parliament election survey, but not to the post national election survey (16 percent) and vice versa (9 percent).

Table 5 Participation in the European parliament study and in the post national election survey (percent).

		European parliament survey		All
		Non responder	Responder	
Post election survey	Non responder	39,8 No participation	16,3 Participation in EUP not but National	56,1
	Responder	8,8 Participation in national but not EUP	35,1 Participation in both	43,9
All		48,6	51,4	n=5400

Much of the future analysis of electoral volatility, opinion change etc. will be performed on the 35 percent who participated in both studies. Hence it's important that we have a clear picture if these respondents differ significantly from non-respondents and respondents who just participated in one of the studies. In table 6 we show the participation pattern presented in table 5 in the earlier described demographical categories.

⁴ With an exception of those who explicitly communicated to Statistics Sweden that they didn't want anything to do with the study.

Table 6 Participation pattern in the full sample (percent)

	No participation	Participation in September but not in May	Participation in May but not in September	Participation in both studies	Total	(n)
Full sample	40	9	16	35	100	5400
Sex						
Man	40	8	18	34	100	2710
Woman	40	10	14	36	100	2690
Age (4 categories)						
18-29 years	46	9	25	20	100	1086
30-49 years	43	9	18	30	100	1826
50-64 years	33	8	15	44	100	1360
65-80 years	36	10	6	48	100	1126
Age (7 categories)						
18-21 years	43	9	28	20	100	293
22-29 years	48	8	24	20	100	793
30-39 years	45	8	21	26	100	844
40-49 years	42	9	16	33	100	982
50-59 years	34	9	16	41	100	903
60-69 years	35	7	10	48	100	906
70-80 years	33	11	6	50	100	677
Sex and age						
Man 18-29 years	48	7	27	18	100	560
Man 30-49 years	43	8	21	28	100	918
Man 50-64 year	34	7	17	42	100	688
Man 65+ years	32	9	7	52	100	542
Woman 18-29 years	46	10	22	22	100	526
Woman 30-49 years	43	10	16	31	100	908
Woman 50-64 year	32	9	13	46	100	672
Woman 65+ years	40	10	5	45	100	584
Education						
Low	47	10	16	27	100	1093
Medium	44	9	17	30	100	2468
High	30	8	15	47	100	1799
Immigration background						
Born outside of Sweden	48	9	18	25	100	621
Born in Sweden with two parents born outside of Sweden	43	8	21	28	100	163
Born in Sweden with one parent born outside of Sweden	42	9	20	29	100	353
Born in Sweden with both parents born in Sweden	38	9	16	37	100	4255
Family income						
Income 1/5	49	9	16	26	100	1081
Income 2/5	41	9	16	34	100	1076
Income 3/5	39	8	16	37	100	1079
Income 4/5	36	10	16	38	100	1078
Income 5/5	34	9	18	39	100	1078
Electoral participation in own district						
1/5 lowest	46	10	16	28	100	1081
2/5 lowest	41	8	16	35	100	1079
3/5 lowest	39	8	17	36	100	1079
4/5 lowest	38	9	17	36	100	1081
5/5 lowest	36	8	16	40	100	1077
Voted in European parliament election 2014 (May 25)						
No	53	9	19	19	100	2494
Yes	28	9	14	49	100	2903

Comment: See table 3 for details about register data.

When we look at the bivariate statistics of participation pattern in table 6 it's clear that the demographical variables that were associated with response rate and mode of participation (table 3) also are important factors here. The participation pattern seems to be similar among men and women. But in all other categories there are major differences. Younger people are less likely to participate in both studies compared to older people (about 20 percent in the youngest cohorts and almost 50 percent among the oldest.). The same pattern is present if we compare people with low levels of education to those with higher levels (27 percent among low educated and 47 percent among those with high education) and among different immigration background (25 percent among those born abroad compared to 37 percent among those with two parents born in Sweden). There are also differences in participation patterns when we focus on the contextual level. Twenty-eight percent of those who live in a voting district with the 1/5 lowest electoral turnout participate in both studies, compared to more than 35 percent in all other districts.

It's notable that there almost no differences in the second column, those who participated in September but not in May. This category is constituted of about 10 percent of the sample, independent of demographics. There are somewhat bigger differences in the third column, those who participated in May but not in September. Here we have an overrepresentation of young individuals, probably due to Statistics Sweden attempts to reach younger respondents by phone during the European parliament election study. Once again, the observed systematic differences of who participates could have consequences for what kind of conclusions will deduce from volatility (and other panel) analysis.

The 2014 Swedish National Election Study

The 2014 Swedish National Election Study is the eighteen's study since 1956, which makes it the world's second longest running national elections time-series. Since 1973 the study design is a rolling two-wave panel where half the sample is re-interviewed in the next election. In the first editions of the study the mode was exclusively face to face interviews. But since 1976 respondents were also offered to participate in the study via phone. In 1973 the shortened interviews were introduced as a way to combat declining participation rates. The study design in 2014 was overall the same as in previous years. Half of the sample (n=2000) was interviewed before the election and the other half was interviewed after the election.⁵ All the respondents who participated in the pre-election interview also received a post-election questionnaire (identical to the one the European parliament election study sample) with questions about the campaign, actual vote choice etcetera.

Table 7 Detailed field plan for Swedish National Election Study

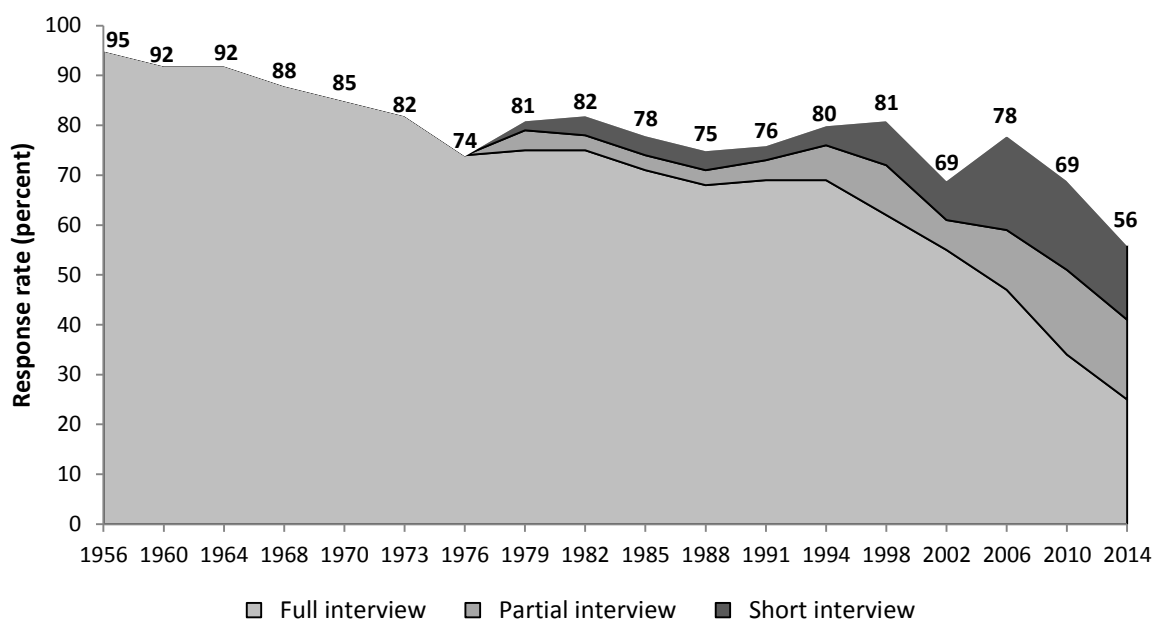
18 August – 13 September	Fieldwork for <u>pre-election sample</u> . Interviewers from Statistics Sweden reaches out to perform face to face or telephone interviews with the respondents (n=2000).
14 Sep 2014	Swedish National Election 2014
15 September	All participants from the pre-election sample receive a follow-up questionnaire (8 pages) with questions about actual vote and other campaign related questions (n=958).
15 September - 27 November	Fieldwork for <u>post-election sample</u> . Interviewers from Statistics Sweden reaches out to perform face to face or telephone interviews with the respondents (n=2000).
14 October	First postal reminder for the post-election questionnaire.
28 October	Second postal reminder for the post-election questionnaire.
11 November	Third postal reminder for the post-election questionnaire.

In the following part of this method report we will look at the response rate and length of participation (if the respondent participated in a full, short or extra short version of the survey) in a number of key demographics. We will also evaluate the accuracy of the survey when it comes to the main dependent variable, vote choice.

⁵ 112 individuals who for various reasons couldn't partake in the pre-election interview were instead interviewed after the election, using the post-election interview.

When we look at the development of the response rate and the participation pattern (see figure 3) in the Swedish national election study it's no bold statement to say that things have changed dramatically over the last half century. The first study in 1956 had an amazing 95 percent response rate. In the light of the declining willingness to participate during the 1970s a short and very short option was introduced in 1979. This kept the overall response rates at around 80 percent until the late nineties. Since then the overall response rate have declined even steeper and the proportion of full length interviews has together with it. In 2014, 25 percent of the sample chose to participate in the full interview, 16 percent in the partial and 15 in the short version.⁶ This gives us a response rate of 56 percent, which is a dramatic decline of 13 percentage points since the last election in 2010.

Figure 3 Response rate in the Swedish national election study, total and by length of interview (percent)



Comment: For a complete overview see table a6 in appendix.

In table 8 we show the response rate and the length of participation among respondents in the same socio-demographic groups as we did for the European parliament election study. Note that the distributions of full, partial and short interviews are among respondents and not a proportion of the sample, as in figure 3.

⁶ For a full overview of the historical distribution see table a6 in appendix.

Table 8 Response rate and participation length in the Swedish national election study 2014 (percent and frequencies).

	Response rate	(n)	Among the respondents				(n)
			Full interview	Partial interview	Short interview	Total	
Full sample	56	3998	45	29	26	100	2230
Sex							
Man	56	2008	46	29	25	100	1129
Woman	55	1990	45	28	27	100	1101
Age (4)							
18-29 years	49	814	36	30	35	101	399
30-49 years	56	1311	42	29	30	101	735
50-64 years	56	984	50	32	19	101	555
65-80 years	61	888	53	25	22	100	541
Age (7)							
18-21 years	52	252	36	35	28	99	130
22-29 years	48	562	35	27	38	100	269
30-39 years	58	611	38	25	37	100	353
40-49 years	55	700	45	32	23	100	382
50-59 years	56	664	49	31	20	100	371
60-69 years	63	682	52	28	21	101	428
70-80 years	56	526	54	25	21	100	297
Sex and age							
Man 18-29 years	51	419	33	31	36	100	214
Man 30-49 years	57	654	42	29	29	100	372
Man 50-64 year	55	501	49	32	19	100	277
Man 65+ years	61	434	58	24	18	100	266
Woman 18-29 years	47	395	38	28	34	100	185
Woman 30-49 years	55	657	41	28	31	100	363
Woman 50-64 year	58	483	51	31	18	100	278
Woman 65+ years	61	453	49	25	26	100	275
Education (3)							
Low	46	818	36	33	31	100	380
Middle	52	1833	43	28	28	99	949
High	68	1321	52	27	21	100	892
Immigration background							
Born outside of Sweden	45	493	37	30	33	100	221
Born in Sweden with two parents born outside of Sweden	48	123	34	36	31	101	59
Born in Sweden with one parent born outside of Sweden	50	256	43	31	26	100	127
Born in Sweden with both parents born in Sweden	58	3123	47	28	25	100	1821
Family income							
Income 1/5	48	799	43	30	27	100	385
Income 2/5	52	799	42	28	29	99	412
Income 3/5	57	799	48	26	26	100	455
Income 4/5	59	799	45	32	23	100	475
Income 5/5	63	799	48	27	25	100	501
Turnout in own district: European parliament election							
Electoral turnout in district (1/5)	46	803	41	32	27	100	373
Electoral turnout in district (2/5)	53	795	46	29	25	100	419
Electoral turnout in district (3/5)	61	818	47	27	27	101	495
Electoral turnout in district (4/5)	59	792	43	29	28	100	469
Electoral turnout in district (5/5)	61	780	49	27	24	100	474
Voted in national election 2014							
No	32	415	22	31	47	100	133
Yes	59	3567	47	28	25	100	2094

Comment: See table 3 for details about register data.

When focusing on the response rate in different socio-demographical groups it's evident that we can observe similar patterns as we could in the European parliament study. There are almost no differences between men and woman (56 compared to 55 percent), but notable differences when it comes to age, education, immigration background, family income, electoral turnout at the district level and whether the respondent voted or not. The direction of the differences is also the same as in the European parliament survey. Younger individuals participate to a lower degree than older, those with low education participate less than those with higher, and those with lower family income participate less than those with higher etcetera.

In the next step (the greyed columns in table 8) we examine the the degree of participation – that is if the respondent opted for a full (face to face or telephone⁷), a partial or a short interview. It's evident that there are big differences in who participates in the long and in the shortened interviews, even though the differences are smaller than in the European parliament election study. One example is that people under forty are much more prone to choose the partial or shortened interview while those who are older opt for the full interview to a higher degree. Education is another big predictor. Among those with the lowest levels of education 36 percent participate in the full interview compared to 52 percent among those with the highest education.

The word of caution that was stated in previous sections is worth to repeat. It's important that scholars who analyze the Swedish national election study (and other similar studies for that manner) are aware of these systematical participation biases. Social attributes have a big influence not only who participates, but also on who participates to what degree.

Post-election questionnaire

The design of the Swedish national election study is as stated above divided in one pre- and one post-election sample. Half of the sample (n=2000) is interviewed before the election and the other half is intervened after the election.⁸ Those who are interviewed before the election also receives a short post-election questionnaire with questions about final vote choice, campaign activates etc. The response rate for this questionnaire has traditionally been very high and even if the figure is the lowest ever in 2014 it's still relatively high. The number of interviews performed before the election in 2014 was 958. Out of these 75 percent answered the post-election survey. When we break down the response rate in our key demographics it's evident that the previous patterns are present here as well. Only fifty percent of those 18-29 years answer the post-election questionnaire, though they participated in the study just a few weeks earlier. This can be compared to those older then 65, where nine out of ten answer.

⁷ For an overview of the distribution of face to face interviews compared to telephone interviews see table a5 in the appendix.

⁸ For pragmatic reasons some of the respondents from the pre-election sample is moved to the post-election interview if the respondent for practical reasons aren't able to participate in the interview before the election (n=112 in 2014).

Table 9 Response to post-election questionnaire (among pre-election participants)

	Non-responder	Responder	Total	(n)
Full sample	25	75	100	958
Sex				
Man	27	73	100	489
Woman	22	78	100	469
Age (4)				
18-29 years	50	50	100	155
30-49 years	30	70	100	322
50-64 years	16	84	100	250
65-80 years	11	89	100	231
Age (7)				
18-21 years	53	47	100	53
22-29 years	48	52	100	102
30-39 years	36	64	100	141
40-49 years	24	76	100	181
50-59 years	16	84	100	171
60-69 years	11	89	100	184
70-80 years	13	87	100	126
Sex and age				
Man 18-29 years	53	47	100	89
Man 30-49 years	33	67	100	165
Man 50-64 year	18	82	100	120
Man 65+ years	9	91	100	115
Woman 18-29 years	45	55	100	66
Woman 30-49 years	26	74	100	157
Woman 50-64 year	13	87	100	130
Woman 65+ years	14	86	100	116
Education				
Low	33	67	100	152
Middle	27	73	100	402
High	19	81	100	398
Immigration background				
Born outside of Sweden	34	66	100	83
Born in Sweden with two parents born outside of Sweden	28	72	100	25
Born in Sweden with one parent born outside of Sweden	39	61	100	61
Born in Sweden with both parents born in Sweden	22	78	100	787
Family income				
Income 1/5	31	69	100	153
Income 2/5	23	77	100	180
Income 3/5	25	75	100	197
Income 4/5	21	79	100	193
Income 5/5	24	76	100	233
Turnout in own district: National election				
Electoral turnout in district (1/5)	32	68	100	144
Electoral turnout in district (2/5)	23	77	100	206
Electoral turnout in district (3/5)	28	72	100	213
Electoral turnout in district (4/5)	22	78	100	187
Electoral turnout in district (5/5)	21	79	100	208
Voted in national election 2014				
No	51	49	100	43
Yes	24	76	100	914

Comment: See table 3 for details about register data.

Deviation from the official election result

The historical accuracy of the Swedish national election study has always been very good. The average, average deviation per party in all 18 studies is 1,0 percentage points. If we look at the accuracy since 1979 the deviation is even lower, 0,6 percentage points per party. In the second column in table 10 we can see the deviation for each party among all respondents. Overall the absolute average deviation (bottom row in the second column) is 0,92. Compared to the study's historical record this should be seen as an acceptable figure. If we look at it in a contemporary perspective it outperforms the average of the commercial polling firms 1,07⁹. (Remember, this is un-weighted data!).

Among all respondents (full, partial and short interviews) the most significant deviations are overestimations of the Green Party (+1,9), the Left Party (+1,2) and most noticeably an underestimation of the Sweden Democrats (-3,7).¹⁰ If we compare those who participated in the full interview (the part of the dataset that will be most used when computing more complex models of voting behavior) the average absolute deviation per party is considerably larger than the full sample (1,52). Here the overestimation of the Greens and the Left Party is even bigger. Other notable overestimations are the Liberal Party (+1,1) and Feminist Initiative (+1,3). The underestimation of Sweden Democrats is even larger (-5,0) and the Conservative party is also somewhat underestimated (-1,4).

Table 10 The table shows the difference between the respondent's party vote and the official election result in the Swedish national election 2014 (percentage and percentage points).

	Official election result	All respondents	Full interview	Partial interview	Short interview
Left Party	5,7	+1,2	+1,8	+2,1	-1,3
Social Democrats	31,0	-0,1	-0,6	0,0	+1,2
Centre Party	6,1	+0,4	0,0	+2,4	-1,5
Liberal Party	5,4	+0,4	+1,1	+0,8	-1,4
Moderate Party	23,3	-0,4	-1,4	-3,0	+4,7
Christian Democrats	4,6	+0,2	+0,5	+0,5	-0,9
Green Party	6,9	+1,9	+2,9	+1,3	+0,8
Sweden Democrats	12,9	-3,7	-5,0	-3,3	-1,2
Feminist Initiative	3,1	+0,5	+1,3	-0,4	-0,2
Other party	1,0	-0,4	-0,6	-0,3	-0,1
(n)		1968	962	552	454
Average absolute deviation		0,92	1,52	1,41	1,33

Comment: The table shows each party's deviation from the official election result within each participation group. The last row, average absolute deviation is calculated as the average absolute deviation from the election result (10 categories).

⁹ The average is calculated using average deviation per party for the last published poll before the election. The opinion institutes that are included in the calculation are Demoskop, Ipsos, Novus, United Minds, Skop and YouGove.

¹⁰ The overestimation of the Green Party and the underestimation of the Sweden Democrats were also present in all private opinion polls made before the election.

Appendix

Table a1 Distribution of votes in the European parliament election and the distribution of votes in the different modes of the European parliament election study (percent).

	Election result	All respondents	Paper	Web	Telephone (long)	Telephone (short)	Full/long interview (Paper, web & long telephone)
Left Party	6,3	6,9	6,2	6,8	0,0	11,4	6,1
Social Democrats	24,2	24,0	24,2	18,2	13,3	25,7	23,7
Centre Party	6,5	7,5	7,3	5,7	20,0	8,6	7,3
Liberal Party	9,9	10,1	10,6	8,0	6,7	8,2	10,4
Moderate Party	13,7	14,5	14,4	13,6	40,0	14,3	14,6
Christian Democrats	5,9	5,3	5,4	5,7	0,0	4,9	5,4
Green Party	15,4	17,6	18,2	28,4	13,3	10,6	18,8
Sweden Democrats	9,7	5,3	5,5	2,3	0,0	5,3	5,3
Pirate Party	2,2	1,9	1,8	3,4	6,7	1,6	2,0
Feminist Initiative	5,5	6,2	5,8	8,0	0,0	8,6	5,8
Other party	0,7	0,6	0,6	0,0	0,0	0,8	0,6
(n)		1665	1317	88	15	245	1420

Comment: The table shows the vote distribution among the respondents who reported a cast vote in the European parliament election. Vote choice has been validated with electoral participation in the European parliament election. Data about electoral participation comes from Swedish election authority.

Table a2 Distribution of votes in the Swedish national election and the distribution of votes in the different modes of the European parliament election study (percent).

	Election result	All respondents	Full interview	Partial interview	Short interview
Left Party	5,7	6,9	7,5	7,8	4,4
Social Democrats	31,0	30,9	30,4	31	32,2
Centre Party	6,1	6,5	6,1	8,5	4,6
Liberal Party	5,4	5,8	6,5	6,2	4
Moderate Party	23,3	22,9	21,9	20,3	28
Christian Democrats	4,6	4,8	5,1	5,1	3,7
Green Party	6,9	8,8	9,8	8,2	7,7
Sweden Democrats	12,9	9,2	7,9	9,6	11,7
Feminist Initiative	3,1	3,6	4,4	2,7	2,9
Other party	1,0	0,6	0,4	0,7	0,9
(n)		1968	962	552	454

Comment: The table shows the distribution of votes in the full sample and among the different degrees of participation. For an overview of the deviation from the official election result within each category see table x below.

Table a3 Response rate and mode of answer in the Swedish European parliament election study (percent).

	Non-responders	Paper mailback	Web	Telephone (long)	Telephone (short)	Total	(n)
Full sample	49	35	3	1	12	100	5400
Sex							
Man	48	35	4	1	12	100	2710
Woman	50	36	2	1	11	100	2690
Age (4)							
18-29 years	55	23	5	2	15	100	1086
30-49 years	52	28	4	1	15	100	1826
50-64 years	41	41	2	1	14	99	1360
65-80 years	46	53	1	0	0	100	1126
Age (7)							
18-21 years	52	25	5	2	16	100	293
22-29 years	56	22	4	2	15	99	793
30-39 years	53	25	4	1	17	100	844
40-49 years	51	31	4	1	13	100	982
50-59 years	43	37	3	2	15	100	903
60-69 years	42	49	1	0	7	99	906
70-80 years	45	55	1	0	0	101	677
Sex and age							
Man 18-29 years	55	21	6	3	15	100	560
Man 30-49 years	52	28	5	1	14	100	918
Man 50-64 year	41	39	3	2	16	101	688
Man 65+ years	42	57	1	0	0	100	542
Woman 18-29 years	56	25	3	1	16	101	526
Woman 30-49 years	52	29	3	1	15	100	908
Woman 50-64 year	41	43	2	1	13	100	672
Woman 65+ years	51	49	0	0	0	100	584
Education							
Low	57	29	2	1	11	100	1093
Middle	52	30	3	1	13	99	2468
High	38	47	4	1	10	100	1799
Immigration background							
Born outside of Sweden	57	25	4	2	13	101	621
Born in Sweden with two parents born outside of Sweden	52	25	4	2	17	100	163
Born in Sweden with one parent born outside of Sweden	51	31	3	2	13	100	353
Born in Sweden with both parents born in Sweden	47	38	3	1	11	100	4255
Family income							
Income 1/5	58	29	3	1	10	101	1081
Income 2/5	50	36	2	1	11	100	1076
Income 3/5	47	37	3	1	11	99	1079
Income 4/5	46	37	3	1	14	101	1078
Income 5/5	42	39	4	1	14	100	1078
Turnout in own district: European parliament election							
Electoral turnout in district (1/5)	55	30	2	1	11	99	1081
Electoral turnout in district (2/5)	49	34	3	1	13	100	1079
Electoral turnout in district (3/5)	48	36	3	1	12	100	1079
Electoral turnout in district (4/5)	47	37	3	1	12	100	1081
Electoral turnout in district (5/5)	44	40	3	1	11	99	1077
Voted in European parliament election 2014							
No	62	20	2	2	14	100	2494
Yes	37	49	3	1	10	100	2903

Comment: See table 3 for details about register data.

Table a4 Response type in the national election study 2014

	Non-responders	Full interview	Partial interview	Short interview	Total
Full sample	44	25	16	15	100
Age (4)					
18-29 years	51	17	14	17	99
30-49 years	44	23	16	17	100
50-64 years	44	28	18	10	100
65-80 years	39	32	15	14	100
Age (7)					
18-21 years	48	19	18	15	100
22-29 years	52	17	13	18	100
30-39 years	42	22	14	21	99
40-49 years	45	25	18	12	100
50-59 years	44	27	17	11	99
60-69 years	37	32	17	13	99
70-80 years	44	31	14	12	101
Education (3)					
Low	54	17	15	14	100
Middle	48	22	15	15	100
High	32	35	18	14	99
Immigration background					
Born outside of Sweden	55	16	13	15	99
Born in Sweden with two parents born outside of Sweden	52	16	17	15	100
Born in Sweden with one parent born outside of Sweden	50	21	15	13	99
Born in Sweden with both parents born in Sweden	42	27	16	15	100
Family income					
Income 1/5	52	21	14	13	100
Income 2/5	48	22	15	15	100
Income 3/5	43	27	15	15	100
Income 4/5	41	27	19	13	100
Income 5/5	37	30	17	16	100
Turnout in own district: National election					
Electoral turnout in district (1/5)	54	19	15	13	101
Electoral turnout in district (2/5)	47	24	15	13	99
Electoral turnout in district (3/5)	39	28	16	16	99
Electoral turnout in district (4/5)	41	26	17	16	100
Electoral turnout in district (5/5)	39	30	17	14	100
Voted in European parliament election 2014					
No	68	7	10	15	100
Yes	41	28	17	14	100

Comment: See table 3 for details about register data.

Table a5 Response mode among respondents (percent)

	Face to face	Telephone	Total	(n)
Full sample	44	56	100	2230
Sex				
Man	45	55	100	1129
Woman	43	57	100	1101
Age (4)				
18-29 years	32	68	100	399
30-49 years	41	59	100	735
50-64 years	48	52	100	555
65-80 years	53	47	100	541
Age (7)				
18-21 years	34	66	100	130
22-29 years	31	69	100	269
30-39 years	39	61	100	353
40-49 years	43	57	100	382
50-59 years	47	53	100	371
60-69 years	50	50	100	428
70-80 years	54	46	100	297
Sex and age				
Man 18-29 years	29	71	100	214
Man 30-49 years	41	59	100	372
Man 50-64 year	48	52	100	277
Man 65+ years	59	41	100	266
Woman 18-29 years	36	64	100	185
Woman 30-49 years	41	59	100	363
Woman 50-64 year	48	52	100	278
Woman 65+ years	47	53	100	275
Education (3)				
Low	38	62	100	380
Middle	41	59	100	949
High	50	50	100	892
Immigration background				
Born outside of Sweden	35	65	100	221
Born in Sweden with two parents born outside of Sweden	32	68	100	59
Born in Sweden with one parent born outside of Sweden	43	57	100	127
Born in Sweden with both parents born in Sweden	46	54	100	1821
Family income				
Income 1/5	42	58	100	385
Income 2/5	42	58	100	412
Income 3/5	46	54	100	455
Income 4/5	44	56	100	475
Income 5/5	46	54	100	501
Turnout in own district: National election				
Electoral turnout in district (1/5)	41	59	100	373
Electoral turnout in district (2/5)	44	56	100	419
Electoral turnout in district (3/5)	45	55	100	495
Electoral turnout in district (4/5)	43	57	100	469
Electoral turnout in district (5/5)	46	54	100	474
Voted in European parliament election 2014				
No	23	77	100	133
Yes	45	55	100	2094

Comment: See table 3 for details about register data.

Table a6 Response rate in the Swedish national election study's 1956-2014. Proportion full-, partial- and short interviews 1979-2006, average time of interviews and accuracy in relation to the official election result (percent, number of minutes, average deviation per party in percent).

	1956	1960	1964	1968	1970	1973	1976	1979	1982	1985	1988	1991	1994	1998	2002	2006	2010	2014
Response rate	95	92	92	88	85	82	74	81	82	78	75	76	80	81	69	78	69	56
Length of interview																		
Full interview	-	-	-	-	-	-	-	75	75	71	68	69	69	62	55	47	34	25
Partial interview	-	-	-	-	-	-	-	4	3	3	3	4	7	10	6	12	17	16
Short interview	-	-	-	-	-	-	-	2	4	4	4	3	4	9	8	19	18	15
None-response	5	8	8	12	15	18	26	19	18	22	25	24	20	19	31	22	31	44
Total percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Number of individuals in sample (net sample)	1 146	1 603	3 109	3 356	1 602	3 179	3 580	3 498	3 597	3 704	3 694	3 558	3 340	2 901	3 788	3 976	3 963	3 971
Interview time (minutes)																		
Full interview (pre-election)								-	75	79	74	80	-	-	70	65	71	56
Full interview (post-election)								-	72	77	70	79	-	-	69	62	67	56
Partial interview								-	26	22	15	-	-	-	24	24	22	24
Short interview								-	6	6	6	7	-	-	5	5	3	4
Accuracy:																		
Average deviation per party	2,1	1,9	1,7	1,8	1,8	1,2	1,0	0,7	0,4	0,8	0,7	0,3	0,6	0,4	1,2	0,4	0,6	0,9

Comment: The table is an updated version of table A2 in Henrik Oscarsson and Sören Holmbergs book *Ättapartivalet* (2011).

Figure a1 Response rate in the Swedish National Election Study, the European Parliament Election Study, the SOM-survey and the Party Sympathy Survey 1956-2014 (percent).

