Appendix to "Electoral Overoptimism among Political Elites: Evidence from a PR System"

For Online Publication

A1 Details about survey and variables

A1.1 Data collection

The survey data gathered for this study were collected through a confidential web-based survey, approved by the Swedish Ethical Review Agency, which was managed using REDCap electronic data capture tools (Harris et al. 2019, 2009). The survey was distributed to all elected members of the local councils in the 290 municipalities for which an e-mail address could be retrieved either from the municipality's web page or through correspondence with a municipal administrator.

A total of 12,257 local council members were invited, corresponding to 96.7 percent of the population as defined by the Swedish Election Authority. The invitees were randomly divided into 16 groups, each of which received the first invitation on a subsequent day. Two rounds of reminders were thereafter step-wise rolled out with new 16-day intervals. The data collection period ranged from November 10, 2020 to February 1, 2021. By that time, 3,925 individuals from 270 municipalities had participated in the survey, resulting in a response rate of 32 percent. 97 percent of the responses occurred before the turn of the year, which is why we typically refer to the survey as having been carried out in 2020. 8 individuals participated twice, and in those cases we kept the occasion with the largest number of answered questions. No compensation was provided to the participants.

For data availability reasons, the analysis is limited to politicians belonging to any of the eight major parties in Swedish politics (who are the ones reported in Statistics Sweden's party preference survey PSU): the Left Party, the Social Democratic Party, the Green Party, the Center Party, the Liberal Party, the Moderate Party, the Christian Democrats, and the Sweden Democrats.

A1.2 Ethical considerations

We confirm that the survey as well as the present study as a whole complies with APSA's *Principles and Guidance for Human Subjects Research.* In our application to the Swedish Ethical Review Agency [case number redacted for anonymity], we discussed a number of potential ethical issues regarding this type of survey, including the risk that participants may perceive survey items as too politically sensitive or too demanding of them, or that their privacy will somehow be violated. However, we deemed these concerns to be of minor weight in the present case, considering the mostly impersonal nature and limited number of questions included in the survey (taking approximately 10 minutes to complete), and the fact that the target group consisted of elected public officials who are already open with their political affiliation and who could choose freely which items (if any) to respond to.

We informed participants about the survey and obtained their consent before the first survey item was presented. We furthermore testified that no personal data will be presented and that, if any data material is published, it will first be processed to prevent any form of reverse identification. For this reason, the number of variables from this survey that are uploaded in the replication files are kept to a minimum.

A1.3 Variable definitions and descriptive statistics

The following variables were constructed based on the survey, or on data from the Swedish Election Authority (see Table A1 for descriptives):

- *Assessed probability of own party's inclusion in the governing coalition (SGP in Equation 1)*: Based on the question: "How do you today assess the probability that your party will be part of the governing coalition after the local elections in 2022? Enter a probability between 0 and 100 percent." Rated using a 0–100 slider.
- *Optimism bias (OB in Equation 1)*: Defined as the respondent's assessed probability of own party's inclusion in the governing coalition (SGP) less the 'objective' governing probability estimate (GDP) generated for the respondent's local party by the Cronert and Nyman (2021) approach taking into consideration vote intention polls up until before the survey.
- *Leadership position*: Dummy variable indicating respondents who report being the chair of the local party, or the chair or party group leader in the local council or one of its committees. Substantiating the assumption that leaders have a higher level of self-efficacy, it is worth noting that when asked to rate how large influence a variety of actors have over policy-making in the municipality, the average rating of *their own* influence among these leaders is 3.20 on a five-step Likert item, compared to 2.71 for non-leaders.
- *Elected with preference votes*: Dummy variable indicating politicians for whom at least five percent of the party's voters in the constituency marked their name on the ballot.
- *Female*: Dummy variable indicating biological sex as listed at the Swedish Election Authority. 0 represents Male.
- *Tertiary education*: "What school education do you have? Mark the alternative that fits you the best. If you have not yet completed your education, please indicate the one in which you are currently enrolled." Four-level ordinal scale: *Primary education*, *secondary/post-secondary education*, *college/university education*, and *PhD education*. *Tertiary education* refers to the two last categories.
- *Age (10s of years)*: Age in 2020, computed based on official data on birth year from the Swedish Election Authority (divided by 10).
- *Experience in local politics (10s of years)*: Based on the question "In what year did you take up your first elected office in municipal politics?" Computed as the difference between the year of the survey and the year answered (divided by 10).
- *Governing coalition politician*: Dummy variable indicating politicians who answered "Yes" when asked whether they were part of the local governing coalition at the time of the survey (late 2020). Those who answered "No", "Difficult to answer" or "Do not know" are classified as opposition politicians. For the prediction accuracy evaluation exercise, data on the local governing coalitions' party composition after the 2022 election are instead retrieved from SKR (2023).

Variable	Mean	Std. Dev.	Min.	Max.	N
Assessed probability (SGP)	0.689	0.242	0	1	3407
Cronert and Nyman (2021) probability (OGP)	0.560	0.275	0.003	0.997	3753
Optimism bias (OB = SGP - OGP)	0.127	0.284	-0.93	0.989	3407
Leadership position	0.593	0.491	0	1	3753
Elected with preference votes	0.199	0.399	0	1	3753
Female	0.414	0.493	0	1	3753
Tertiary education	0.604	0.489	0	1	3735
Age (10s of years)	5.646	1.321	2	8.6	3753
Experience in local politics (10s of years)	1.705	1.295	0.1	6.100	3716
Governing coalition member (2020)	0.562	0.496	0	1	3423
Governing coalition member (2022)	0.54	0.498	0	1	3753
Positive trend in latest PSU poll	0.537	0.499	0	1	3265
Weeks since Dec 2 2020 PSU poll	-0.706	1.991	-3	4	3265

Refers to the eight major parties in the survey. The smaller number of observations in the regression analyses is due to the removal of municipality-parties with only one respondent, due to the inclusion of municipality $\times$ party fixed effects.

Table A1: Descriptive statistics

A2 Supporting data about poll quasi-experiment

A2.1 Balance tests regarding timing and content of exposure

To investigate the similarity of the groups that were quasi-experimentally exposed to different polls, Table A2 shows variable averages for the two sub-samples that were exposed to different editions of Statistics Sweden's party preference survey PSU, as a consequence of a new poll being published on 2 December 2020. Next, Table A3 shows variable averages for the two sub-samples that were exposed to gains or losses in the latest PSU, as a consequence of the new poll release. When assessing the balance, only variation within municipality-parties was considered, since this is the variation that is exploited in the analysis. Overall, there are fairly small within-party differences across the relevant groups, especially so with regards to the most relevant variables; i.e., those that indicate party elites.

	Before 2 Dec			On or after 2 Dec			
	n	mean	sd	n	mean	sd	Diff
Leadership position	1561	0.60	0.49	1112	0.59	0.49	-0.015
Elected with preference votes	1561	0.19	0.39	1112	0.18	0.39	-0.002
Female	1561	0.41	0.49	1112	0.42	0.49	0.014
Tertiary education	1561	0.63	0.48	1112	0.57	0.50	-0.055***
Age (10s of years)	1561	5.68	1.34	1112	5.62	1.30	-0.055
Experience in local politics (10s of years)	1561	1.80	1.32	1112	1.68	1.27	-0.122**

The Diff column is the coefficient of a simple regression of whether the respondent answered before or after 2 December on the variable, with municipality × party fixed effects and clustered standard errors at the municipality. Stars indicate whether this difference is significant. * $p > 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A2: Balance table with regards to the timing of the poll release

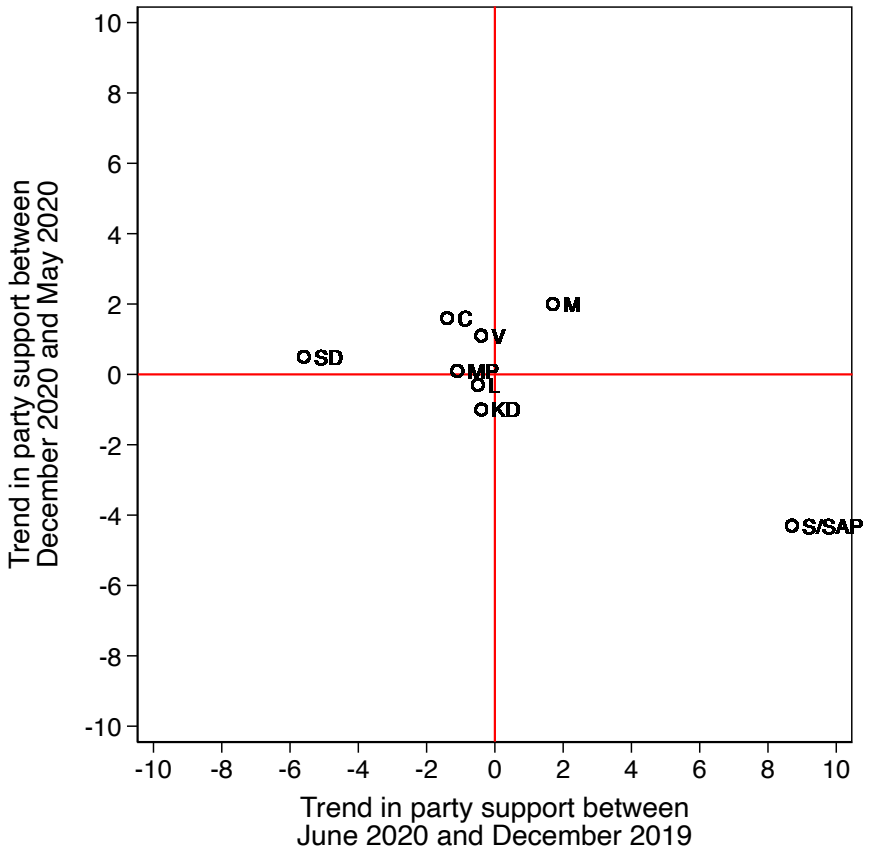
	Losses			Gains			
	n	mean	sd	n	mean	sd	Diff
Leadership position	1141	0.60	0.49	1532	0.59	0.49	0.001
Elected with preference votes	1141	0.21	0.40	1532	0.17	0.38	0.021
Female	1141	0.44	0.50	1532	0.40	0.49	-0.029
Tertiary education	1141	0.61	0.49	1532	0.60	0.49	-0.005
Age (10s of years)	1141	5.58	1.29	1532	5.71	1.35	0.087
Experience in local politics (10s of years)	1141	1.67	1.29	1532	1.81	1.30	0.124*

The Diff column is the coefficient of a simple regression of whether the respondent was exposed to gains or losses for his or her party in the latest PSU poll, with municipality × party fixed effects and clustered standard errors at the municipality. Stars indicate whether this difference is significant. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A3: Balance table with regards to own party's trend in latest PSU poll

A2.2 Exploited trends in recent vote intentions polls

Figure A1 reports trends in Statistics Sweden's biannual party preference survey PSU for the eight major parties in Swedish Politics: the Left Party (V), the Social Democratic Party (S/SAP), the Green Party (MP), the Center Party (C), the Liberal Party (L), the Moderate Party (M), the Christian Democrats (KD), and the Sweden Democrats (SD). In the analyses in the study, recent gains (losses) are defined as a positive (negative) change between the most recent poll and the one before that, where the cut-off date is December 2, 2020 when a new edition of the PSU was published in mass media.



Source: Statistics Sweden (2023).

Figure A1: Most recent changes in national-level vote intentions (PSU) before and after December 2, 2020.

A2.3 Mass media dominance of Statistics Sweden's PSU poll

In Figure A2, the red line reports the frequency of news articles about vote intention polls in national and local Swedish mass media, weekly from 1 January 2020 to the election on 11 September 2022. 852 local, 312 regional, and 137 national media outlets are included, representing print and online newspapers, TV, and radio. News articles are identified by searching for the two terms typically used for the polls by Stastics Sweden and by the major pollsters Demoskop, Inizio, Novus, Sifo and SKOP (*partisympatiundersökning* or *väljarbarometer*)[3]. The major spikes coincide perfectly with the releases of Statistics Sweden's biannual party preference survey PSU, with the dark gray line denoting the 2 December 2020 release exploited in the study. Data are retrieved from Retriever Research.

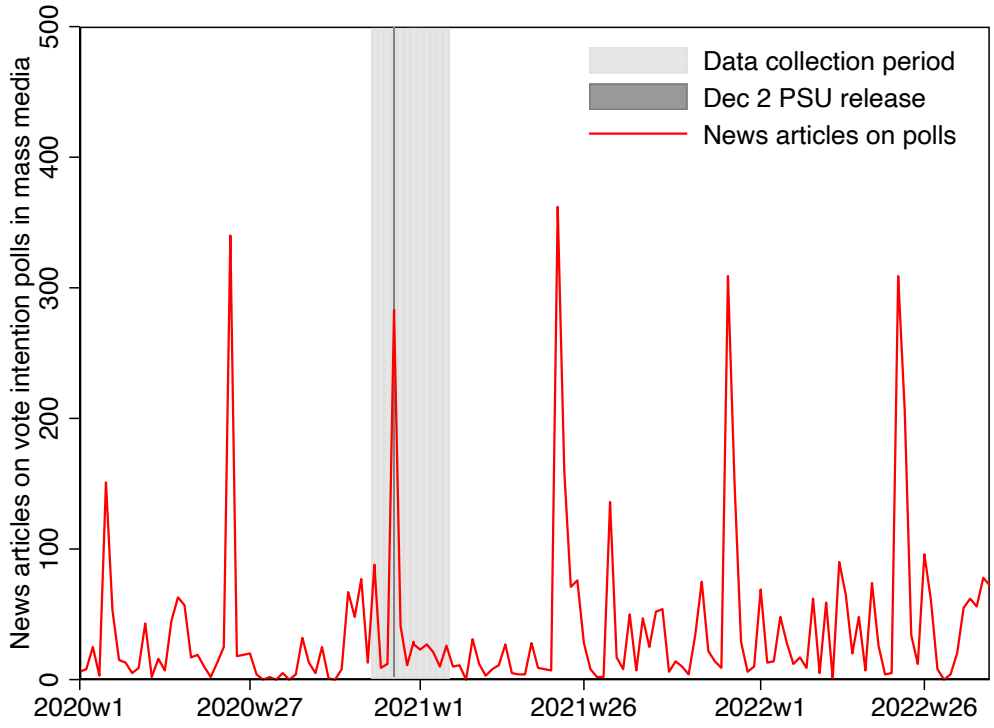


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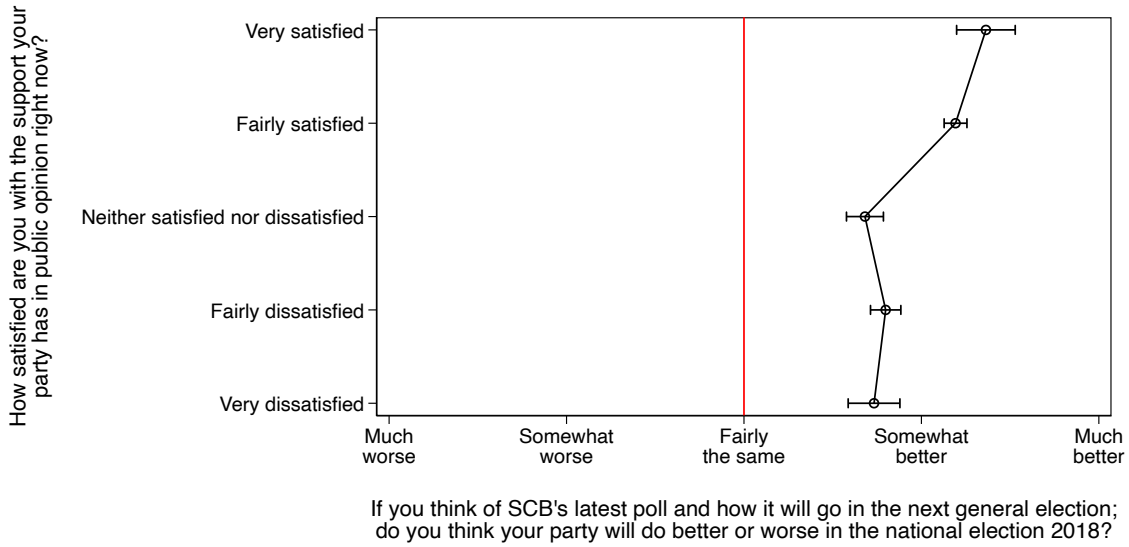
Figure A2: News articles about vote intention polls in Swedish mass media, weekly 2020–2022

[3] The exact search term used was "*äljarbarometer* OR *artisympatiundersökning*".

A3 Asymmetry between poll satisfaction and election optimism

Figure A3 reports the predicted level of optimism about how the own party will fare in the national election in 2018, by the respondent's satisfaction with the party's most recent standing in the national polls at the time of the survey (June, 2016). Predictions are retrieved from an OLS regression of election prospects on a set of dummies representing each satisfaction category, carried out by the author using replication data from Schumacher and Öhberg (2020). Very similar results emerge if variables indicating sex, age, party, and level of education are added to the regression model.



The figure Spikes indicate 95 percent confidence intervals, based on robust standard errors. All data are retrieved from Schumacher and Öhberg (2020).

Figure A3: Asymmetry between interpretation of current vote intention polls and own party's prospects at the next election

A4 Regression output

	(1)	(2)
Leadership position	0.029^{***}	0.033^{***}
	(0.009)	(0.009)
Elected with preference votes	0.026^{**}	0.033^{***}
	(0.010)	(0.010)
Female		0.006
		(0.008)
Tertiary education		-0.002
		(0.009)
Age (10s of years)		0.010^{**}
		(0.004)
Experience in local politics (10s of years)		-0.010^{**}
		(0.004)
Constant	0.096^{***}	0.054^{**}
	(0.005)	(0.024)
Observations	2,838	2,838
Adj. R^2	0.555	0.556
Municipality $\times$ party FE	Yes	Yes

Samples are restricted to ensure that the same observations are analyzed in all three models. Robust standard errors in parentheses, clustered by municipality. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A4: Regression output from the models in Figure 2

References

Cronert, Axel and Pär Nyman (2021). "A General Approach to Measuring Electoral Competitiveness for Parties and Governments". *Political Analysis* 29.3, 337–355.

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Statistics Sweden (2023). *Party Preference Survey (PSU)*. Online Database.