Supporting Information for:

The causal effect of polls on turnout intention: A local randomization regression discontinuity approach

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Contents

1 Information about the context of $Poll_1$ release

In this section, we discuss potential threats to our identification strategy (Eggers et al. 2015). In particular, we report whether other polls were released during the five days of our study, what kind of news were published and were salient during the control and treatment periods and what did political leaders do during that time. Table A1 provides this information for the five days between 7 April at 9 a.m. and 11 April at 9 p.m. using three sources of information: (1) Twitter hourly trending topics (`https://getdaytrends.com/es/spain/`); (2) front pages of the online versions of the two most read newspapers in Spain (`https://elpais.com/archivo/`, `https://www.elmundo.es/elmundo/hemeroteca/2019/`); (3) TV appearances of the main candidates (`https://www.barloventocomunicacion.es`). In the left column of Table A1 we report all political hashtags and mentions in Twitter that were among the top ten trending topics the five days of our study. All of them refer to either political leaders or pre-campaign events, except for the mentions to the CIS on 9 April. In the middle column, we show the main news reported in the front page of *El Pais* and *El Mundo*. Again, most of them are about political leaders. Finally, we report in the right column whether a political leader was on TV, the number of millions of people watching that program and its share of the audience. All this information is public and easily accessible. In general, and rather surprisingly, this was a period of low political activity and even the candidate of the incumbent party was accused of hiding and not participating enough in the public debate (see the hashtag #SanchezSeEsconde in the Twitter column).

No other major poll was released in the period analysed. During the pre-campaign period, tracking polls were released on a daily basis, but all these polls were conducted online with small samples (about 1000 respondents) and received little attention by the public. One measure of this little impact is that none of them was trending topic in Twitter and they never appeared on the front page of the traditional newspapers. In contrasts, all these elements characterized the public impact of the CIS's $Poll_1$. First, the combination of the audience reached in Twitter by three references to this poll release ("El CIS", #MasterCISARV and "Tezanos") makes it the most important discussion in Twitter during the pre-campaign period in Spain. Second, all main Spanish newspapers opened their online editions with the CIS's forecast (see the case of El País and El Mundo in the table). This forecast also opened all main TV networks news programs at 2 p.m. and 3 p.m. on 9 April. That day, approximately fifteen million people watched one news program and, for each time slot, about half of the people watching TV in Spain were following one of these news shows. One of the night news programs (Informativos Telecinco 9pm) described $Poll_1$ release as "having provoked a high-intensity earthquake".[1]

Table A1: Most prominent news during the estimation window

Date and time	**Twitter**	**Newspapers**	**Leaders and CIS on TV**
7 Morning	#VamosCiudadanos (10am-4pm) (24K)	Electoral campaign (El País) Catalonia (El Mundo)	
7 Afternoon	#VamosCiudadanos (10am-4pm) (24K)	State corruption (El País) Albert Rivera (El Mundo)	
7 Evening	#ObjetivoRivera (9pm-2am) (18K) #ColauValls (8pm-11pm) (22K)	Pedro Sánchez (El País) Albert Rivera (El Mundo)	Albert Rivera (1.3M, 7% share)
8 Morning	Iglesias y Montero (7am-2pm) (20K) #CaféAbascal (8am-10am) (10K) #SánchezSeEsconde (11am) (<10K)	Pablo Iglesias (El País) Albert Rivera (El Mundo)	
8 Afternoon	Iglesias y Montero (7am-2pm) (20K)	Pablo Casado (El País, El Mundo)	
8 Evening	#CasadoA3N (8pm-9pm) (<10K)	Pablo Casado (El País, El Mundo)	Pablo Casado (2M, 14% share)
9 Morning	#ErrejonAR (8am-9am) (<10K) El CIS (7am-5pm) (24K) #MasterCISARV (1pm-6pm) (30K) Tezanos (11am-6pm) (21K)	Pedro Sánchez (El País) Catalonia (El Mundo)	Íñigo Errejón (<1M)
9 Afternoon	El CIS (7am-5pm) (24K) #MasterCISARV (1pm-6pm) (30K) Tezanos (11am-6pm) (21K)	CIS Poll1 release (El País, El Mundo)	CIS (7.5M, 45% share)
9 Evening	#PodemosLimpiarLasCloacas (6pm-9pm) (32K)	CIS Poll1 release (El País, El Mundo)	CIS (7.8M, 42% share)
10 Morning	#LaCafeteraIndeCISos (7am-9am) (<10K) Vox Ivan Espinosa (7am-9m) (<10K) Monteros (7am-10am) (13K) #EPDesayunoAyuso (8am-10am) (<10K) Ayuso (10am-2pm) (<10K) #MásPPMenosImpuestos (11am-2pm) (<10K)	CIS Poll1 release (El País, El Mundo)	
10 Afternoon	Ayuso (8am-2pm) (<10K) #MásPPMenosImpuestos (11am-2pm) (<10K) #ElDebateDeVerdad (3pm-7pm) (24K) Toni Cantó (4pm-7pm) (<10K)	Pablo Casado (El País) Catalonia (El Mundo)	
10 Evening	#ElDebateDeVerdad (3pm-7pm) (24K) Toni Cantó (4pm-7pm) (<10K)	OECD report (El País) Brexit (El Mundo)	
11 Morning	#CampañaElectoral (10am) #SánchezSeEsconde (12pm) (<10K)	Brexit (El País) Electoral debate (El Mundo)	
11 Afternoon	Cayetana Alvarez de Toledo (2pm-8pm) (36K) #CasadoConEspaña (3pm-6pm) (<10K)	Assange (El País) Catalonia (El Mundo)	
11 Evening	#IglesiasA3N (8pm) (<10K) #UnidasPodemos28A (9pm-11pm) (12K) #VotaPSOE (11pm) (<10K)	Electoral campaign (El País) Pedro Sánchez (El Mundo)	Pablo Iglesias (2M, 14% share)

1. See `https://www.telecinco.es/informativos/informativo_21_h/Informativo-Noche-pedro-piqueras_2_2735805217.html`.

2 CIS methodology

CIS fieldwork methodology, as well as its use for a similar empirical analysis, has been recently described by Balcells and Torrats-Espinosa (2018). Moreover, a summary of results, raw data, and some methodological notes in Spanish can be found here: `http://www.cis.es/cis/opencm/ES/1_encuestas/estudios/listaMuestras.jsp?estudio=14449`. In the following, we will focus on two features more directly related to our identification strategy: (1) definition of the main variables and (2) timing of the poll.

In $Poll_2$ respondents were asked: "Are you going to vote in these elections?" They were offered a four-point scale from "No, surely" to "Yes, surely". We create a dummy variable where 1 includes people who say they would vote "surely" or "most likely" and 0 those who say they would "surely" or "most likely" not vote . We work with a random sample that is representative of the Spanish population and was generated through randomly-chosen sampling points (random routes) and gender, age, and town size quotas. We use these three predetermined covariates as the basis for our falsification tests. Gender is a binary variable, age has been recoded into six dummies and town size in three categories corresponding to "rural" (<10,000), "small urban" (10,000-400,000) and "large urban" (>400.000).

A potential threat to our identification strategy is that $Poll_1$ release might have been strategically timed to increase the support of the government party. This might make the timing of the release endogenous to the dependent variable. However, this was not the case. In Spain, polls cannot be released the five days before the election and the CIS always releases its main forecast the last week of the pre-campaign, that is, the week before the campaign starts. $Poll_1$ was not an exception. Also, all other CIS polls are always released around noon and this time was not an exception either. Since the date and time of the release was the same of previous polls, there is no reason to believe that they were selected strategically this time.

3 Robustness checks

We have tested the robustness of our main result by falsification tests of the predetermined covariates. In this section, we provide four further robustness checks. First, we assess the sensitivity of the result to window choice. This check is provided in Table A2, where we report how the estimated effect on turnout intention varies across each of the windows between $Poll_1$'s publication and the beginning of the electoral campaign. The result is quite robust to window selection. The ATE in the 13 windows ranges from 3.4% to 5.1%.[2]

Table A2: Results by window size

	Turnout intention					
W	Mean of C	Mean of T	Diff-in -Means	F p-value	N Left of c	N Right of c
0.2	0.817	0.858	0.042	0.338	169	127
0.4	0.858	0.897	0.040	0.191	274	273
0.6	0.849	0.898	0.049	0.035	410	402
0.8	0.844	0.895	0.051	0.009	551	545
1	0.847	0.889	0.042	0.023	765	702
1.2	0.847	0.893	0.046	0.003	921	810
1.4	0.846	0.887	0.041	0.007	930	941
1.6	0.848	0.889	0.041	0.007	946	1055
1.8	0.848	0.892	0.044	0.004	981	1213
2	0.851	0.893	0.041	0.005	1055	1425
2.2	0.854	0.893	0.038	0.003	1106	1547
2.4	0.855	0.892	0.037	0.005	1168	1688
2.6	0.855	0.889	0.034	0.004	1244	1803

Second, we report three estimations using placebo cutoffs. In particular, we perform two falsification tests in the two weeks before the release's week. In these two weeks before $Poll_1$'s publication, for which data are available, the new cutoffs are Tuesday 26 March, and Tuesday 2 April. In each week, the pseoudo-treatment occurs in the 12:05 p.m.–2 p.m. interval. We also perfom a last placebo test using units interviewed between $Poll_1$'s publication and the beginning of the electoral campaign. This last placebo test uses the treatment sample and exposes units to a pseudo-treatment occurring at the middle of that interval. The new cutoff is Wednesday 10 at 6 p.m. As reported in Table A3, Table A4, and Table A5, there is little evidence of RD effects for any of the possible windows for any of the three placebos. The effect of the placebo on the outcome variable is not significant for any window and its magnitude is small and not even always

2. When performing this and placebo estimations we use the Benjamini and Hochberg (1995) false discovery rate procedure to correct for multiple comparisons. More specifically, we use a conservative 0.1 false discovery rate and find that all the p-values, except for window 1.2, remain significant.

in the same direction of the main effect.

Table A3: Placebo test: 1st placebo week before $Poll_1$'s publication

W	Turnout intention					
	Mean of C	Mean of T	Diff-in -Means	F p-value	N Left of c	N Right of c
0.2	0.894	0.931	0.037	0.297	180	391
0.4	0.898	0.906	0.008	0.786	314	547
0.6	0.890	0.892	0.002	1.000	444	676
0.8	0.893	0.900	0.007	0.678	596	869
1	0.898	0.897	-0.001	1.000	825	1105
1.2	0.891	0.892	0.000	1.000	958	1268
1.4	0.891	0.890	-0.001	0.946	984	1433
1.6	0.889	0.885	-0.004	0.804	1012	1602
1.8	0.886	0.883	-0.003	0.800	1045	1820
2	0.887	0.874	-0.012	0.349	1102	2114
2.2	0.884	0.873	-0.011	0.353	1150	2267
2.4	0.884	0.874	-0.010	0.403	1197	2454
2.6	0.883	0.871	-0.012	0.310	1270	2624

Table A4: Placebo test: 2nd placebo week before $Poll_1$'s publication

W	Turnout intention					
	Mean of C	Mean of T	Diff-in -Means	F p-value	N Left of c	N Right of c
0.2	0.843	0.834	-0.008	0.885	254	446
0.4	0.847	0.864	0.017	0.513	458	689
0.6	0.857	0.856	-0.001	1.000	636	931
0.8	0.864	0.861	-0.003	0.898	774	1185
1	0.866	0.868	0.002	0.951	1040	1482
1.2	0.868	0.864	-0.004	0.793	1266	1652
1.4	0.871	0.865	-0.006	0.665	1296	1873
1.6	0.872	0.864	-0.008	0.508	1339	2087
1.8	0.874	0.859	-0.014	0.251	1393	2317
2	0.875	0.859	-0.016	0.163	1507	2574
2.2	0.874	0.857	-0.016	0.150	1582	2707
2.4	0.872	0.861	-0.012	0.292	1636	2852
2.6	0.870	0.865	-0.005	0.639	1710	3019

Table A5: Placebo test: 3rd placebo week after $Poll_1$'s publication

W	Turnout intention					
	Mean of C	Mean of T	Diff-in -Means	F p-value	N Left of c	N Right of c
0.2	0.917	0.904	-0.013	0.824	108	114
0.4	0.887	0.908	0.021	0.464	265	272
0.6	0.887	0.903	0.016	0.520	408	484
0.8	0.890	0.901	0.011	0.560	537	606
1	0.899	0.898	-0.001	1.000	683	747
1.2	0.893	0.890	-0.003	0.880	810	862

Third, we analyze the density of the running variable in our selected window W0 = [-0.8; 0.8]. Following Cattaneo et al. (2020), we test whether within the window W0 where the treatment is assumed to be randomly assigned, the number of treated and control observations is consistent with a Bernoulli trial. There are 559 control observations and 553 treated observations in the specified window. There is no evidence of sorting around the cutoff (p-value =0.881). The difference in the number of treated and control observations in this window is entirely consistent with what would be expected if individuals were exposed or not exposed to the forecast of the national elections ($Poll_1$). This is expected, as the observed share of treated observations in the randomization window is indeed equal to 0.5 (553/(553+559)=0.5).

Finally, we report our last falsification test. In Table A6, we replicate the analysis excluding all the respondents the day of the release. Results hold under this more conservative estimation strategy. The estimated RD effects are quite similar to the ones reported in A2.

Table A6: Conservative estimation

		Turnout intention					
W	W'	Mean of C	Mean of T	Diff-in -Means	F p-value	Number of Obs. C	Number of Obs. T
0.2		-	-	-	-		
0.4		-	-	-	-		
0.6		-	-	-	-		
0.8		-	-	-	-		
1	0.2	0.924	0.888	-0.036	0.400	105	143
1.2	0.4	0.871	0.877	0.005	0.885	241	300
1.4	0.6	0.856	0.887	0.031	0.200	382	408
1.6	0.8	0.856	0.879	0.024	0.265	596	539
1.8	1	0.854	0.884	0.030	0.123	752	653
2	1.2	0.853	0.889	0.036	0.041	761	811
2.2	1.4	0.855	0.891	0.036	0.016	777	1023
2.4	1.6	0.855	0.891	0.036	0.020	812	1145
2.6	1.8	0.858	0.890	0.033	0.022	886	1286

4 External validity

In this section, we analyze the external validity of our estimated effect. To that purpose, we provide in Table A7 information about the representativeness of the sample used to estimate the effect, comparing this sample with the total sample of the poll in terms of the pre-determined covariates (gender, age, and town size). This test is performed for both the employed randomization window and the largest possible window that can be built without interfering with the beginning of the electoral campaign—the [-0.8, 0.8] and the [-2.6, 2.6] windows, respectively. Both samples are quite homogeneous in their gender and age compositions. In terms of town size, however, we find that the restricted sample has a relatively higher proportion of individuals from larger cities.

Table A7: Representativeness of the sample: comparing the sample we use with the total sample

Panel A: 0.8 window

Covariate	Mean of total sample	Mean of restricted sample	Diff-in-Means Statistic	p-value	Number of Obs. total	Number of Obs. restricted
Female	0.515	0.516	-0.002	0.908	33532	1096
Age: <30	0.135	0.135	0.000	0.968	33532	1096
Age: 30-39	0.155	0.178	-0.023	0.036	33532	1096
Age: 40-49	0.192	0.179	0.013	0.280	33532	1096
Age: 50-59	0.181	0.179	0.002	0.837	33532	1096
Age: 60-69	0.156	0.169	-0.013	0.262	33532	1096
Age: >70	0.181	0.161	0.020	0.090	33532	1096
Rural	0.256	0.168	0.088	0.000	33532	1096
Small urban	0.588	0.625	-0.037	0.015	33532	1096
Large urban	0.155	0.207	-0.052	0.000	33532	1096

Panel B: 2.6 window

Covariate	Mean of total sample	Mean of restricted sample	Diff-in-Means Statistic	p-value	Number of Obs. total	Number of Obs. restricted
Female	0.515	0.518	-0.003	0.732	33532	3047
Age: <30	0.135	0.136	-0.001	0.948	33532	3047
Age: 30-39	0.155	0.159	-0.004	0.535	33532	3047
Age: 40-49	0.192	0.190	0.002	0.838	33532	3047
Age: 50-59	0.181	0.173	0.002	0.273	33532	3047
Age: 60-69	0.156	0.167	-0.011	0.129	33532	3047
Age: >70	0.181	0.175	0.006	0.440	33532	3047
Rural	0.256	0.218	0.038	0.000	33532	3047
Small urban	0.588	0.570	-0.018	0.051	33532	3047
Large urban	0.155	0.212	-0.056	0.000	33532	3047

5 Vote choice

In Table A8, we report the effect of $Poll_1$'s publication on vote choice across the main Spanish political parties. The effect across parties is estimated using the optimal window [-0.8, 0.8]. We find no effect of polls on vote choice, consistent with the results reported by Balcells and Torrats-Espinosa (2018).

Table A8: The effect of $Poll_1$' on vote choice: 0.8 days window

Outcome	Mean of Controls	Mean of Treated	Diff-in-Means Statistic	Fisherian p-value	Number of Obs.C	Number of Obs.T
PSOE	0.219	0.238	0.019	0.517	442	458
PP	0.084	0.109	0.025	0.217	442	458
Cs	0.066	0.081	0.015	0.417	442	458
Podemos	0.081	0.074	-0.007	0.720	442	458
Vox	0.054	0.044	-0.011	0.566	442	458

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