# Online Appendices for:

# Varieties of Anxieties: Disaggregating Emotion and Voting Behavior in the COVID-19 Era

Ranjit Lall<sup>\*</sup> David Vilalta<sup>†</sup>

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<sup>&</sup>lt;sup>\*</sup>Department of Politics and International Relations, University of Oxford, Oxford, United Kingdom. Email: ranjit.lall@sjc.ox.ac.uk.

<sup>&</sup>lt;sup>†</sup>Department of Political Science, Columbia University, New York, United States of America. Email: david.vilalta@columbia.edu.

# A Evolution of Spain's Pandemic and Policy Response



FIGURE A1. Evolution of COVID-19 Cases and Lockdown Restrictions in Spain

*Notes*: In panel A, lockdown stringency is measured with an index from the Oxford COVID-19 Government Response Tracker (Hale et al. 2021). In panel B, COVID-19 incidence is measured using data from Spain's National Epidemiological Center (El Centro Nacional de Epidemiología 2022). Dotted vertical lines denote parliamentary votes on whether to declare a national state of alarm.

Party	25 Mar	9 Apr	22 Apr	6 May	20 May	3 Jun	29 Oct
РР	1	1	1	Abs.	X	X	Abs.
PSOE	$\checkmark$	$\checkmark$	1	1	$\checkmark$	$\checkmark$	1
Ciudadanos	$\checkmark$	$\checkmark$	1	1	$\checkmark$	1	1
Podemos	$\checkmark$	$\checkmark$	1	1	$\checkmark$	1	1
Vox	$\checkmark$	×	×	X	×	×	×
Más País	$\checkmark$	1	1	1	$\checkmark$	1	$\checkmark$
End of Extension:	12 Apr	26 Apr	10 <b>M</b> ay	24 May	7 Jun	21 Jun	9 May
	2020	2020	2020	2020	2020	2020	2021

TABLE A1. Parliamentary Votes on COVID-19 State of Alarm, April 2020-May 2021

*Notes*: This table records how Spain's five major national parties voted on the six extensions of the state of alarm imposed by the Congress of Deputies (parliament) on March 14, 2020 in response to the COVID-19 pandemic. Check marks denote votes in favor; crosses denote votes against; "Abs." denotes abstention. Data are from congressional voting records accessed at https://www.congreso.es/opendata/votaciones. We additionally include Más País, a regional party centered on Madrid, which features in our case study of the region's 2021 election.

Party	Representative	Party Position	Date	Statement (Translated)	Source
РР	Pablo Casado	President	May 6, 2020	"The exceptional situation does not allow for a constitutional dictatorshipWe do not support this overstepping of legal boundaries that has turned into a covert state of exception."	Legislative record <sup>a</sup>
Vox	Santiago Abascal	President	May 6, 2020	<ul> <li>ay 6, "You, Mr Sánchez, are trying to blackmail</li> <li>this chamberinto renewing a power</li> <li>that you have abused. Maintaining the</li> <li>state of alarm [] saves neither lives nor</li> <li>jobs. What would save lives and jobs</li> <li>would be a change of government."</li> <li>ay 6, "The state of alarm can not be an eternal</li> </ul>	
Ciudadanos	Inés Arrimadas	President	May 6, 2020	"The state of alarm can not be an eternal mechanism, we must think of a plan B and untie the aid to families, self-employed or SMEs of this exceptional period."	Press release <sup>b</sup>
PSOE	Pedro Sánchez	Secretary- General (and President of Spain)	May 6, 2020	"There are no absolutely correct decisionsbut lifting the state of alarm now would be an absolute mistake"	Legislative record <sup>a</sup>
Podemos	Pablo Echenique	Spokesman in Congress	May 4, 2020	"The state of alarm is indispensable for the confinement measures, and it is these measures that have made it possible to subdue the epidemic."	ESdiario newspaper <sup>c</sup>

TABLE A2:	Party Statements on Lockdown Restrictions
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<sup>a</sup> https://www.congreso.es/public\_oficiales/L14/CONG/DS/PL/DSCD-14-PL-21.PDF.

<sup>b</sup> https://www.ciudadanos-cs.org/prensa/prensa/12168?lg=va.

c https://www.esdiario.com/espana/563129816/Echenique-acusa-a-Casado-de-provocar-miles-de-muertos-si-no-traga -con-Sanchez.html.

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# **B** CIS Survey Analysis

# **B.1** Survey Questions

Question in Spanish (Original)	Question in English (Translation)	Waves (MM/YY)	Response Options	Coding (New = Old)
Me gustaría hacerle algunas	I would like to ask you some	04/20 - 05/21	1: A lot	1 = 5
preguntas sobre la crisis del	questions about the coronavirus		2: Quite a bit	2 = 3
coronavirus. Pensando en todos los	crisis. Thinking about all the		3: Not much	3 = 4
efectos de esta pandemia, ¿diría	effects of this pandemic, would you		4: Average	4 = 2
Ud. que la crisis del coronavirus le preocupa mucho, bastante, poco o nada?	say that the coronavirus crisis worries you a lot, quite a bit, a little, or not at all?		5: None	5 = 1
En estos momentos, ¿qué le	At this time, what are you more	05/20 - 07/20	1: The effect on health	0 = 2
preocupa a Ud. más, los efectos de	concerned about, the effects of this		2: The effect on the economy and	0.5 = 3
esta crisis sobre la salud, o los	crisis on health, or the effects of the		employment	1 = 1
efectos de la crisis sobre la	crisis on the economy and		3: Both equally	(for
economía y el empleo?	employment?		4: Neither	Health-Weighted Anxiety)
¿Cuántos años cumplió Ud. en su	How old were you on your last	All (04/20 -	Continuous	1 = < 25
último cumpleaños?	birthday?	05/21)		2 = 25 - 34
-				3 = 35 - 44
				4 = 45 - 54
				5 = 55 - 64
				6 = > 64

### TABLE A3: CIS Survey Questions and Response Options

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Question in Spanish (Original)	Question in English (Translation)	Waves Response Options (MM/YY)		Coding (New = Old)
¿Cuáles son los estudios de más alto nivel oficial que Ud. ha cursado (con independencia de que los haya terminado o no)?	What is the highest level of formal education you have completed (whether you have finished it or not)?	<i>you have completed</i> 05/21) 2: Primary education		1 = 1 2 = 2 3 = 3, 4 4 = 5 5 = 6
¿A qué clase social diría Ud. que pertenece?	What social class would you say you belong to?	All (04/20 - 05/21)	1: Upper class 2: Upper middle class 3: Middle class 4: Lower middle class 5: Working class 6: Poor class 7: Underclass 8: Proletariat 9: The ones below 10: Excluded 11: Common people 12: Lower class	1 = 6, 7, 8 2 = 5, 12 3 = 4 4 = 3 5 = 2 6 = 1

TABLE A3: CIS Survey Questions and Response Options (Continued)

Continued on next page

Question in Spanish (Original)	Question in English (Translation)	Waves (MM/YY)	Response Options	Coding (New = Old)	
¿En qué situación laboral se encuentra Ud. actualmente?	What is your current employment situation?	All (04/20 – 05/21)	<ol> <li>Works</li> <li>Retired or pensioner (previously worked)</li> <li>Pensioner (not previously employed)</li> <li>Unemployed and has worked before</li> <li>Unemployed and looking for his first job</li> <li>Student</li> <li>Unpaid domestic work</li> </ol>	0 = 2, 3, 4, 5 1 = 1	
¿Me puede decir cuál es su ocupación actual?	What is your current occupation?	All (04/20 - 05/21)	<ol> <li>Directors and managers</li> <li>Scientists and intellectuals</li> <li>Technicians and mid-level professionals</li> <li>Administrative staff</li> <li>Service workers and vendors</li> <li>Farmers and skilled agricultural, forestry and fishery workers</li> <li>Office workers, operators and craftsmen</li> <li>Plant and machine operators</li> <li>Elementary occupations</li> <li>Military and police</li> </ol>	1 = 1 2 = 2 3 = 3 4 = 4 5 = 5 6 = 6 7 = 7 8 = 8 9 = 9 10 = 10	
¿Cual es su sexo?	What is your sex?	All (04/20 - 05/21)	1: Man 2: Woman	0 = 2 1 = 1	

# TABLE A3: CIS Survey Questions and Response Options (Continued)

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Question in Spanish (Original)	Question in English (Translation)	Waves (MM/YY)	Response Options	Coding (New = Old)
¿Y cómo evolucionó su enfermedad?	And how did your illness evolve? [for those who report testing positive for COVID-19]	05/20 - 05/21	<ol> <li>I had mild symptoms and spent the period at home</li> <li>I had important symptoms, but I spent the period at home</li> <li>I was admitted to hospital</li> </ol>	1 = 1 2 = 2 3 = 3
Suponiendo que mañana se celebrasen nuevamente elecciones generales, es decir, al Parlamento español, ¿a qué partido votaría Ud.?	Supposing that tomorrow general elections were held again, that is, for the Spanish Parliament, which party would you vote for?	All (04/20 – 05/21)	Every party ( <i>p</i> ) with parliamentary representation	0 = would not vote for party $p$ $1 = would vote$ for party $p$
Situándonos en una escala de 10 casillas, como un termómetro, que van del 1 al 10, en la que 1 significa "lo más a la izquierda" y 10 "lo más a la derecha," ¿en qué casilla se colocaría Ud.?	On a scale of 10 boxes, like a thermometer that ranges from 1 to 10, where 1 means "furthest to the left" and 10 means "furthest to the right," in which box would you place yourself?	All (04/20 - 05/21)	Continuous: 1 (furthest left) to 10 (furthest right)	1 (furthest left) to 10 (furthest right)
¿Y podría decirme a qué partido o coalición votó en las últimas elecciones generales?	And could you tell me which party or coalition you voted for in the last general elections?	All (04/20 - 05/21)	Every party (p) running in the election	0 = did not vote for party $p$ 1 = voted for party $p$

TABLE A3: CIS Survey Questions and Response Options (Continued)

## **B.2** Summary Statistics

	Ν	Mean	Std. Dev.	Min.	25%	50%	75%	Max.
COVID Anxiety	46,523	4.42	0.78	1	4	5	5	5
Health-Weighted Anxiety	11,006	0.59	0.42	0	0	0.50	1	1
COVID-19 Symptoms	1,574	1.43	0.70	1	1	1	2	3
Age Group	46,523	4.04	1.57	1	3	4	6	6
Gender: Female	46,523	0.52	0.50	0	0	1	1	1
Social Class	43,050	3.48	0.93	1	3	4	4	5
Job Type	46,523	5.07	2.29	1	2	7	7	7
Labor Situation	46,433	1.82	1.11	1	1	1	2	6
Level of Studies	46,296	3.26	0.73	1	3	3	4	4
Left-Right Scale	42,310	4.61	2.08	1	3	5	6	10
Log CŐVID CPC	46,523	1.34	0.76	0.059	0.61	1.55	2.03	2.56
Previous Vote: Vox	42,002	0.063	0.24	0	0	0	0	1
Previous Vote: PP	42,002	0.13	0.34	0	0	0	0	1
Previous Vote: Ciudadanos	42,002	0.083	0.28	0	0	0	0	1
Previous Vote: PSOE	42,002	0.28	0.45	0	0	0	1	1
Previous Vote: Podemos	42,002	0.12	0.32	0	0	0	0	1
Party Sympathy: PP	46,523	0.024	0.15	0	0	0	0	1
Party Sympathy: PSOE	46,523	0.052	0.22	0	0	0	0	1
Party Sympathy: Ciudadanos	46,523	0.019	0.14	0	0	0	0	1
Party Sympathy: Podemos	46,523	0.008	0.086	0	0	0	0	1
Party Sympathy: Vox	46,523	0.006	0.076	0	0	0	0	1

TABLE A4. Summary Statistics for CIS Survey Dataset

*Notes*: The dataset pools available monthly survey waves conducted between April 2020 and July 2021. All waves are accessed from: https://www.cis.es/cis/opencm/ES/11\_barometros/index.jsp.

FIGURE A2. Distribution of General COVID-19 Anxiety



*Notes*: This figures shows the distribution of responses to the following CIS survey question between April 2020 and May 2021: "Thinking about all the effects of this pandemic, would you say that the coronavirus crisis worries you a lot, quite a bit, a little, or not at all?"

## **B.3** Additional Regression Results

FIGURE A3. COVID-Related Anxieties and Voting Intentions: OLS Results



*Notes*: OLS estimates with confidence intervals of varying levels based on robust standard errors clustered by NUTS-3 region. All models include NUTS-3 and survey wave fixed effects and control for gender, age, education level, social class, labor situation, job type, previous vote choice, and NUTS-3-level COVID-19 incidence.

FIGURE A4. General COVID-19 Anxiety and Voting Intentions: May-July 2020



*Notes*: This table shows that the results of the first variant of Equation 5 are similar when the sample is restricted to survey waves when *Health-Weighted Anxiety*<sub>it</sub> is measured. Odds ratios with confidence intervals of varying levels based on robust standard errors clustered by NUTS-3 region. All models include NUTS-3 and survey wave fixed effects and control for gender, age, education level, social class, labor situation, job type, previous vote choice, and NUTS-3-level COVID-19 incidence.

DV = Intention to Vote for:		Pro-Lockdown Party					Anti-Lockdown Party					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)		
Health-Weighted Anxiety	1.702***	1.703***	1.704***	1.752***	1.692***	0.512***	0.491***	0.492***	0.470***	0.490***		
	(0.0884)	(0.0925)	(0.0922)	(0.128)	(0.0915)	(0.0281)	(0.0230)	(0.0230)	(0.0225)	(0.0229)		
N	11021	10231	10231	7447	10231	11021	10231	10231	10151	10231		
NUTS-3 FEs	×	1	1	1	<ul> <li>I</li> </ul>	×	1	1	1	1		
Survey Wave FEs	X	1	1	1		×	1	1	1	1		
Socio-Demographic Controls	X	1	1	1		×	1	1	1	1		
COVID Incidence Control	X	×	1	1	<ul> <li>I</li> </ul>	×	X	1	1	1		
Ideology Control	×	×	X	1	X	×	×	×	1	×		
Party Sympathy Control	×	×	×	×	<ul> <li>I</li> </ul>	×	×	×	X	1		

TABLE A5. Robustness Checks: Relationship between Health-Weighted COVID-19 Anxiety and Voting Intentions

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*Notes*: This table shows that the results of the second variant of Equation 5 are robust to alternative configurations of control variables and measures of partisanship. Odds ratios from logistic regressions with robust standard errors, clustered by NUTS-3 region, in parentheses. Socio-demographic controls: age, gender, social class, education level, labor situation, job category, NUTS-3-level COVID-19 incidence. \*p < 0.1; \*\*p < 0.05; \*\*\*p < 0.01.

Dependent	Explanatory	Model $R^2$	Model $\beta_1$	Oster Test	Oste	r Test Re	esults wi	th $R_{\max}$	of
Variable (Eq. 5)	Variable (Eq. 5)	(Eq. 5)	(Eq. 5)	Parameter	0.55	0.60	0.65	0.70	0.75
Vote Choice:	Health-Weighted	0.37	0.061	δ	1.77	1.38	1.14	0.96	0.84
Pro-Lockdown Party	Anxiety		$(\sigma = 0.009)$	$\beta_1^*$	0.027	0.018	0.008	-0.002	-0.012
Vote Choice:	Health-Weighted	0.51	-0.023	$\delta$	4.47	1.98	1.27	0.94	0.74
Anti-Lockdown Party	Anxiety		$(\sigma = 0.006)$	$\beta_1^*$	-0.017	-0.012	-0.005	0.002	0.008

TABLE A6. Analysis of Unobservable and Observable Selection Under Varying Assumptions About Model Fit

*Notes:* This table reports the results of applying Oster's (2019) test of unobservable selection to the second variant of Equation 5 (estimated with OLS rather than logistic regression, which is not covered by the test). The key test parameters are  $R_{\text{max}}$ , the  $R^2$  from a hypothetical regression of the dependent variable on the explanatory variable and both observed and unobserved controls;  $\delta$ , the degree of selection on unobservables relative to observables that would be necessary to eliminate the explanatory variable's estimated effect; and  $\beta_1^*$ , the explanatory variable's bias-adjusted effect. When  $\delta > 1$ , the degree of selection on unobservables would have to be stronger than the degree of selection on observables to explain away the estimated effect, increasing our confidence that this result is robust to omitted variable bias.

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# C Survey Experiment

Our survey experiment was preregistered with the Open Science Framework on August 1, 2023 and implemented between August 23 and September 29.<sup>1</sup> We recruited 734 adult residents of Spain through two channels: (1) Amazon Mechanical Turk (AMT), a popular crowd-sourcing website that permits "Requesters" to specify the location of "Workers"; and (2) advertising on social media networks, principally Spanish public Facebook groups. AMT Workers do not constitute a random sample of Spain's overall population. Nevertheless, several empirical results based on nationally representative samples have been replicated on the platform (Berinsky et al. 2012; Clifford et al. 2015; Crump et al. 2013). Facebook is more widely used and can generate samples as representative as those recruited via traditional methods in a variety of settings (Thornton et al. 2016; Whitaker et al. 2017). Importantly, our sample is similar to the wider Spanish population on key demographic characteristics, exhibiting only a small bias toward younger, male, nonwhite, and more educated individuals:

- 1. Age. The median age in our sample is 39 years, compared with 43.9 years in Spain as a whole (UN Department of Economic and Social Affairs 2022).
- 2. *Gender*. The male-female ratio in our sample is 1.09, compared with 0.96 in Spain as a whole (UN Department of Economic and Social Affairs 2022).
- Ethnicity. The proportion of whites in our sample is 81%, compared with an estimated 84% in Spain as a whole.<sup>2</sup>
- 4. Education level. The proportion of our sample whose highest educational qualification is a secondary school diploma is 23.6%, while the proportion with an undergraduate, graduate, or professional degree is 42.5%. In Spain as a whole, 23% of people between 25 and 64 years old have an upper secondary but non-tertiary qualification and 41% have

<sup>&</sup>lt;sup>1</sup>The preregistration can be found at https://osf.io/rtz3a. Our pre-analysis plan is provided in Online Appendix F.

<sup>&</sup>lt;sup>2</sup>CIA World Factbook, accessed at https://www.cia.gov/the-world-factbook/countries/spain/.

#### FIGURE A5. Survey Experiment Structure



a tertiary qualification (OECD 2023, 50).

Table A7 in Section C.4 presents summary statistics for these and the remaining variables in our survey experimental analysis.

The survey, which was conducted in Spanish, was divided into four sections (summarized in Figure A5). First, after providing informed consent, respondents were either asked to read one of two vignettes describing the pandemic's impact on Spanish society or transferred to the second section (the control group). Since we are interested in the effect of different COVID-related anxieties on political preferences, we randomized these prompts to emphasize the pandemic's adverse consequences for either public health or the economy.<sup>3</sup> Second, respondents were asked to report their level of anxiety about the pandemic's health and economic ramifications on a 1-10 scale. Third, respondents were presented with descriptions of two hypothetical candidates running for political office (provided below) and invited to choose between them.<sup>4</sup> Finally, they were requested to disclose basic demographic and socioeconomic information (age, sex, race, education level, income bracket, health status, party affiliation) as well as whether they have been personally infected by COVID-19. The average survey completion time was 4.3 minutes (258 seconds).

<sup>&</sup>lt;sup>3</sup>In total, 266 respondents were assigned the health-focused prompt, 264 were assigned the economy-focused prompt, and 204 received neither treatment.

<sup>&</sup>lt;sup>4</sup>We placed the anxiety question before the candidate choice question to ensure that emotional expression was not influenced by the formulation of political preferences.

## C.1 Candidate Descriptions

In the following descriptions presented to respondents, which are translated from Spanish, candidate A is always in favor of strong lockdown restrictions, while candidate B is always opposed to them. Sentences 2, 3, and 4 of each text are randomly assigned to the candidates.

*If there is a resurgence of COVID-19 or a similar pandemic in the near future, Candidate A favors a prudent and vigilant response that protects all members of society. He supports robust lockdown measures where they are appropriate.* [SENTENCE 2]. [SENTENCE 3]. [SENTENCE 4].

*If there is a resurgence of COVID-19 or a similar pandemic in the near future, Candidate B is keen to protect people's livelihoods by minimising any economic disturbance or damage that may arise. He opposes robust lockdown measures that risk undermining this goal.* [SENTENCE 2]. [SENTENCE 3]. [SENTENCE 4].

Sentence 2: (A) He is 48 years old, and was born and brought up in your area, before going to university to study chemistry; (B) He is 46 years old, lives in your district, and studied biology at university. Sentence 3: (A) After university he trained as an accountant, and set up a company 10 years ago; it now employs nine people; (B) After university he trained as a lawyer, and set up a practice 10 years ago; it now employs eight people.

**Sentence 4**: (A) *He likes cycling and is a keen guitarist*; (B) *He likes tennis and is a keen chef.* 

## C.2 Ethical Considerations

The survey received research ethics approval from the University of Oxford's Department of Politics and International Relations Research Ethics Committee (#SSH/DPIR\_C1A\_23\_014) and Columbia University's Institutional Review Board (#IRB-AAAU7133). In general, we do not believe that the exercise raised any ethical issues specific to the Spanish context — in

which our questions were unlikely to be perceived as particularly sensitive or controversial — or physical or psychological risks to the research team. Respondents were provided with an informed consent form detailing the purpose of the research, the survey procedure, their right to withdraw, confidentiality arrangements, remuneration, the complaints procedure, and contact information. Compensation was substantially higher than the Spanish minimum wage (\$5 for an activity typically taking less than five minutes). As discussed earlier, the sample was approximately representative of the Spanish population on several demographic variables, reducing the likelihood that participation differentially benefited or harmed any specific group.

### C.3 Departures from Pre-Analysis Plan

In implementing the survey, we deviated from our pre-analysis plan in three ways, none of which concerns our hypotheses or materially alters our empirical strategy. First, rather than recruiting all participants through AMT, we employed a combination of this platform and advertising on social media websites (mainly Facebook). We made this decision shortly after launching the survey, when it became clear that there were substantially fewer Spain-based AMT Workers than we had anticipated. In addition, since social media networks are widely used across the Spanish population, we believed that incorporating them into our recruitment strategy would enhance the sample's representativeness. Second, our pre-analysis plan specified that all respondents would be assigned one of the two treatment vignettes. After receiving additional feedback on the plan, we realized that a control group — a set of respondents who receive neither prompt — would be needed to estimate treatment effects relative to the appropriate baseline of "unprimed" individuals (Gaines et al. 2007). Third, to test our posited causal mechanism, we also followed advice to include posttreatment questions on COVID-related health and economic anxieties.

# C.4 Summary Statistics

	Ν	Mean	Std. Dev.	Min.	25%	50%	75%	Max.
Prefer Pro-Lockdown Candidate	734	0.53	0.50	0	0	1	1	1
Prefer Anti-Lockdown Candidate	734	0.47	0.50	0	0	0	1	1
Health Prime	734	0.36	0.48	0	0	0	1	1
Economy Prime	734	0.36	0.48	0	0	0	1	1
Health Anxiety	734	5.37	2.90	1	3	5	8	10
Economic Anxiety	734	5.77	2.78	1	3	6	8	10
Age	734	41.5	14.0	18	30	39	52	78
Gender: Female	734	0.48	0.50	0	0	0	1	1
Race: White	734	0.81	0.40	0	1	1	1	1
Party Identification: PP	734	0.26	0.44	0	0	0	1	1
Party Identification: PSOE	734	0.24	0.43	0	0	0	0	1
Party Identification: Vox	734	0.11	0.31	0	0	0	0	1
Party Identification: Podemos	734	0.13	0.34	0	0	0	0	1
Education: None	734	0.012	0.11	0	0	0	0	1
Education: Primary	734	0.22	0.41	0	0	0	0	1
Education: High School	734	0.24	0.42	0	0	0	0	1
Education: Vocational	734	0.11	0.31	0	0	0	0	1
Education: Community College	734	0.074	0.26	0	0	0	0	1
Education: Undergraduate	734	0.26	0.44	0	0	0	1	1
Education: Graduate School	734	0.095	0.29	0	0	0	0	1
Primary / Tertiary Education	734	0.33	0.47	0	0	0	1	1
Poor / Rich	734	0.23	0.42	0	0	0	0	1
Underlying Health Issue	734	0.27	0.44	0	0	0	1	1
COVID-19 Infection	734	0.50	0.50	0	0	0	1	1

TABLE A7. Summary Statistics for Survey Experimental Dataset

## C.5 Additional Regression Results

	(1)	(2)	(3)	(4)	(5)		
Panel A: OLS Estimates, Outcome = Preference for Pro-Lockdown Candidate (0/1)							
Health Prime	0.270***	0.270***	0.271***	0.272***	0.414***		
	(0.0420)	(0.0421)	(0.0425)	(0.0423)	(0.0358)		
Panel B: OLS Estimates, Outcome = Prefe	erence for A1			e (0/1)			
Economy Prime	0.254***	0.270***	0.268***	0.264***	0.409***		
	(0.0437)	(0.0435)	(0.0439)	(0.0440)	(0.0363)		
N	470	470	470	470	734		
Socio-Demographic Controls	×	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		
Political Controls	X	×	1	1	1		
Previous COVID Infection Control	X	X	X	✓	$\checkmark$		
Full Sample (Both Treatment Groups)	X	X	X	X	$\checkmark$		

#### **TABLE A8.** Survey Experiment Results: OLS Estimates

*Notes*: OLS estimates with robust standard errors in parentheses. Socio-demographic controls: age, gender, ethnicity, education level. Political controls: strength of affiliation with PP, PSOE, Podemos, and Vox. \*p < 0.1; \*\*p < 0.05; \*\*\*p < 0.01.

#### **TABLE A9.** Survey Experiment Results: Attentive Subsample

	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Outcome = Prefer Pro-Lockdown (	Candidate					
Health Prime	3.015***	0.446	2.282***			
	(0.754)	(0.362)	(0.705)			
Health Prime $\times$ Age		1.046**				
		(0.0190)				
Health Prime × Underlying Health			4.829**			
Issue			(3.127)			
Panel B: Outcome = Prefer Anti-Lockdown	Candidate					
Economy Prime				4.061***	2.783***	2.117**
				(1.029)	(0.815)	(0.630)
Economy Prime × Poor/Rich					6.752***	
					(4.153)	
Economy Prime × Primary/Tertiary						8.496***
Education						(4.766)
N	385	385	385	383	383	383
Socio-Demographic Controls	$\checkmark$	$\checkmark$	1	1	1	$\checkmark$
Political Controls	$\checkmark$	$\checkmark$	1	1	1	$\checkmark$
Infection Controls	1	1	1	1	1	1

*Notes*: This table replicates column 4 of Table 1 restricting the sample to "attentive" respondents who spent at least three minutes completing our survey. Odds ratios from logistic regressions with robust standard errors in parentheses. \*p < 0.1; \*\*p < 0.05; \*\*\*p < 0.01.

	(1)	(2)	(3)	(4)	(5)
Panel A: Odds Ratios, Outcome = Preference for	Pro-Locka	lown Cand	lidate (0/1	)	
Health Prime	0.678	0.595	0.562	0.540	1.725
	(0.452)	(0.401)	(0.382)	(0.370)	(1.003)
Health Prime $ imes$ Age	1.039**	1.042***	1.044***	1.045***	1.032**
	(0.0155)	(0.0157)	(0.0159)	(0.0160)	(0.0137)
Health Prime	2.430***	2.411***	2.397***	2.465***	5.146***
	(0.603)	(0.605)	(0.606)	(0.628)	(1.040)
Health Prime $ imes$ Underlying Health Issue	5.470***	6.274***	6.600***	6.367***	4.166***
	(3.103)	(3.646)	(3.859)	(3.748)	(2.262)
Panel B: Odds Ratios, Outcome = Preference for	Anti-Lock	edown Can	didate (0/	1)	
Economy Prime	1.564*	1.821**	1.814**	1.799**	3.678***
	(0.369)	(0.451)	(0.455)	(0.452)	(0.760)
Economy Prime × Primary/Tertiary	8.566***	7.869***	7.923***	7.765***	4.775***
Education	(3.994)	(3.735)	(3.779)	(3.708)	(1.978)
Economy Prime	2.165***	2.505***	2.525***	2.477***	4.460***
	(0.493)	(0.608)	(0.616)	(0.607)	(0.884)
$\mathbf{E} = \mathbf{e} + $	3.811***	4.542***	4.605***	4.634***	3.183**
Economy Prime $\times$ Poor/Rich	(1.901)	(2.357)	(2.421)	(2.440)	(1.494)
N	470	470	470	470	734
Socio-Demographic Controls	×	1	1	1	1
Political Controls	×	×	1	1	$\checkmark$
Previous COVID Infection Control	×	×	X	1	$\checkmark$
Full Sample (Both Treatment Groups)	×	×	×	×	1

### TABLE A10. Survey Experiment Results: Interactive Models

*Notes*: This table reports the results underlying Figure 4. Odds ratios from logistic regressions with robust standard errors in parentheses. Socio-demographic controls: age, gender, ethnicity, education level. Political controls: strength of affiliation with PP, PSOE, Podemos, and Vox. \*p < 0.1; \*\*p < 0.05; \*\*\*p < 0.01.

Dependent Variable = COVID-Related	Economic	Anxiety (1-10)	Health Anxiety (1-1		
	(1)	(2)	(3)	(4)	
Economy Prime	2.229***		-0.0909		
	(0.219)		(0.239)		
Health Prime		-1.683***		3.603***	
		(0.231)		(0.214)	
N	468	470	468	470	
Socio-Demographic Controls	1	1	1	$\checkmark$	
Political Controls	1	1	1	1	
Previous COVID Infection Control	1	1	1	1	

#### TABLE A11. Survey Experiment: Analysis of Treatment Spillovers

*Notes*: OLS estimates with robust standard errors in parentheses. Socio-demographic controls: age, gender, ethnicity, education level. Political controls: strength of affiliation with PP, PSOE, Podemos, and Vox. \*p < 0.1; \*\*p < 0.05; \*\*\*p < 0.01.

# D COVID-19 Incidence and Anxiety

TABLE A12. Relationship between COVID-19 Incidence and COVID-19 Anxiety

Dependent Variable = COVID Anxiety	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Independent Variable = COVID C	ases					
Log COVID CPCLog COVID cases pp	0.177***	0.148***	0.177***	0.148***	0.177***	0.148**
	(0.0436)	(0.0456)	(0.0309)	(0.0360)	(0.0626)	(0.0608)
N	46523	42909	46523	42909	46523	42909
$R^2$	0.019	0.046	0.019	0.046	0.019	0.046
Panel B: Independent Variable = COVID Sy	mptoms					
Severity of COVID-19	0.112***	0.0804***	0.112***	0.0804***	0.112***	0.0804**
	(0.0231)	(0.0237)	(0.0164)	(0.0167)	(0.0318)	(0.0313)
Symptoms N	1554	1435	1554	1435	1554	1435
$R^2$	0.142	0.195	0.142	0.195	0.142	0.195
NUTS-3 FEs	✓		✓		· · · · · · · · · · · · · · · · · · ·	·
NUTS-2 $\times$ Wave FEs	1	1	1	$\checkmark$	$\checkmark$	1
Socio-Demographic Controls	X	1	X	1	×	1
SE Cluster	NUTS-3	NUTS-3	NUTS-2	NUTS-2	NUTS-2	NUTS-2
					$\times$ Wave	$\times$ Wave

*Notes*: OLS regressions with robust standard errors, clustered as indicated in the bottom panel, in parentheses. All models control for age, gender, class, and education level. \*p < 0.1; \*\*p < 0.05; \*\*\*p < 0.01.

FIGURE A6. New COVID-19 Cases and COVID-19 Anxiety, April 2020-May 2021



*Notes*: This graph plots the mean value of *COVID Anxiety*<sub>it</sub> and Spain's mean number of new COVID-19 cases per 100,000 population between April 2020 and May 2021.

# E Madrid Regional Election Analysis

FIGURE A7. Campaign Slogans in 2021 Madrid Regional Election

Isabel Díaz Ayuso 🤣 @IdiazAyuso	Pablo Iglesias V 📀 @PabloIglesias	
COMUNISMO O LIBERTAD.	Democracia o fascismo.	
<b>4 de mayo.</b> Translate Tweet 7:22 AM · Mar 15, 2021 · Twitter for iPhone	<b>4 de mayo.</b> Translate Tweet 6:01 AM · Apr 25, 2021 · Twitter Web App	
26.5K Retweets 8,696 Quote Tweets 88.9	OK Likes     5,122 Retweets     717 Quote Tweets     19.5K Likes	
Ф 13	♡ ♀ tì	$\heartsuit$

*Notes*: The left tweet, published by PP's leader in the run-up to the Madrid 2021 regional election, translates to "COMMUNISM OR FREEDOM. 4th of May." The right tweet, published in response by Podemos' leader, translates to "Democracy or fascism. 4th of May."

FIGURE A8. Madrid Regional Election Results, 2021 versus 2019



*Notes*: The left panel displays the vote share of the five major parties in the Madrid regional elections of 2021 and 2019. The right panel shows their share of seats in the Madrid parliament.

## E.1 Summary Statistics

	N	Mean	Std. Dev.	Min.	25%	50%	75%	Max.
Log COVID CDC	179	0.077	0.027	0	0.064	0.078	0.091	0.22
$\Delta$ Population	179	650.8	5133.8	-270	19	78	226	68604
$\Delta$ Proportion of Women	179	0.00084	0.0066	-0.032	-0.0016	0.00025	0.0026	0.045
$\Delta$ Proportion Aged 0-20	177	0.00059	0.013	-0.046	-0.0054	0.00054	0.0062	0.062
$\Delta$ Proportion Aged 21-35	177	-0.056	0.044	-0.16	-0.085	-0.056	-0.036	0.10
$\Delta$ Proportion Aged 36-50	177	0.054	0.049	-0.076	0.022	0.047	0.086	0.21
$\Delta$ Proportion Aged 51-65	177	0.017	0.061	-0.059	-0.021	-0.000033	0.034	0.35
$\Delta$ Proportion Aged 66+	177	-0.055	0.086	-0.21	-0.12	-0.065	-0.017	0.24
$\Delta$ Voter Turnout	179	0.040	0.059	-0.15	0.0061	0.051	0.089	0.14
Nursing Places per Capita	179	0.017	0.029	0	0	0.0053	0.023	0.17
Altitude	179	810.7	209.0	476	652	744	941	1434
Area of Agricultural Holdings (ha)	179	2150.4	2430.4	0	801	1568	2783	21946
$\Delta$ Percentage Employed	179	-0.00079	0.019	-0.063	-0.0085	-0.0012	0.0071	0.12
Log GDP per Capita	179	22.1	12.7	6.93	13.4	18.4	26.3	83.3
$\Delta$ Vote Share of Pro-Lockdown Parties	179	-0.20	0.058	-0.34	-0.25	-0.22	-0.17	-0.025
$\Delta$ Vote Share of Anti-lockdown Parties	179	0.21	0.058	0.0031	0.17	0.22	0.25	0.34
Proportion Aged 66+	179	0.17	0.061	0.059	0.13	0.17	0.20	0.46
Log Respiratory DPC	179	0.0012	0.0026	0	0.00038	0.00068	0.0012	0.029
Top/Bottom Income	179	0.095	0.29	0	0	0	0	1
Hospitality Share	179	0.55	0.41	0	0.29	0.43	0.73	3.45

TABLE A13. Summary Statistics for Madrid Regional Election Dataset

*Notes*: This table presents summary statistics for our Madrid regional election dataset. Electoral variables are differenced between the 2021 and 2019 elections; other variables are either differenced between 2020 and 2018 or measured at their 2020 level. Electoral data are from the Madrid regional government (Comunidad de Madrid 2022), nursing home statistics from Spain's Ministry of Economy and Competitiveness (Envejecimiento en Red 2022), and data on the remaining variables from Madrid's statistics office (Instituto de Estadística de la Comunidad de Madrida 2022).

# E.2 Additional Results

Dep. Var. = $\Delta$ Vote Share of:		Pro-Locka	lown Partie	es	1	Anti-Lockd	lown Partie	es
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Exposure to Health Co	nsequences				1			
Log COVID CPC	-0.790*	-0.502*	-0.563**	-0.624**	0.894*	0.630*	0.708**	0.762**
	(0.384)	(0.250)	(0.226)	(0.245)	(0.399)	(0.288)	(0.259)	(0.279)
Log COVID CPC $\times$	3.963***	2.774**	3.108***	3.216***	-4.611***	-3.538***	-3.921***	-4.012***
Elderly Share	(1.167)	(0.983)	(0.917)	(0.857)	(1.240)	(1.034)	(0.966)	(0.916)
Log COVID CPC	0.0694	-0.0327	-0.0499	-0.0770	-0.0819	0.0187	0.0367	0.0641
	(0.151)	(0.0890)	(0.0566)	(0.0728)	(0.140)	(0.0844)	(0.0548)	(0.0742)
$\operatorname{Log}\operatorname{COVID}\operatorname{CPC}\times\operatorname{Log}$	63.46***	69.95***	89.40***	87.31***	-76.58***	-85.73***	-103.5***	-102.7***
Respiratory DPC	(5.266)	(10.98)	(14.71)	(16.28)	(6.677)	(12.68)	(16.23)	(17.18)
Panel B: Exposure to Economic (	Consequenc	es						
Log COVID CPC	0.279*	0.228**	0.273***	0.251**	-0.322**	-0.283**	-0.320***	-0.301***
	(0.137)	(0.0835)	(0.0578)	(0.0781)	(0.131)	(0.0933)	(0.0672)	(0.0882)
Log COVID CPC $\times$	-0.438**	-0.585***	-0.765***	-0.932***	0.295	0.508**	0.671**	0.831***
Top/Bottom Income	(0.142)	(0.163)	(0.173)	(0.177)	(0.170)	(0.224)	(0.237)	(0.181)
Log COVID CPC	0.512**	0.405*	0.432**	0.390*	-0.594***	-0.492**	-0.509***	-0.477***
	(0.205)	(0.184)	(0.143)	(0.176)	(0.179)	(0.153)	(0.110)	(0.146)
Log COVID CPC $\times$	-0.465**	-0.417*	-0.415**	-0.385**	0.516**	0.463**	0.456***	0.437***
Hospitality Sector	(0.185)	(0.188)	(0.154)	(0.167)	(0.215)	(0.145)	(0.120)	(0.124)
N	178	177	177	177	178	177	177	177
NUTS-4 FEs	1	1	1	1	1	1	1	1
Socio-Demographic Controls	×	$\checkmark$	$\checkmark$	$\checkmark$	×	1	1	$\checkmark$
COVID-Related Controls	×	×	1	1	×	×	1	1
Economic Controls	×	×	×	✓	×	×	×	1

**TABLE A14.** Relationship between COVID-19 Incidence and Support for Pro- and Anti-Lockdown Parties in Madrid Regional Elections

*Notes*: OLS estimates of Equation 8 with robust standard errors, clustered by NUTS-4 region, in parentheses. Sociodemographic controls:  $\Delta$  population,  $\Delta$  age distribution,  $\Delta$  gender ratio. COVID-related controls: log nursing home places per capita, share of agricultural land, altitude,  $\Delta$  turnout. Economic controls:  $\Delta$  unemployment rate, log GDP per capita. \*p < 0.1; \*\*p < 0.05; \*\*\*p < 0.01.

Dep. Var. = $\Delta$ Vote Share of:		Pro-Locka	lown Partie	2S	Anti-Lockdown Parties				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Log COVID CPC	-0.350	-0.396	0.0770	0.0226	0.438	0.546*	-0.111	-0.0289	
	(0.376)	(0.254)	(0.181)	(0.0610)	(0.341)	(0.286)	(0.144)	(0.0708)	
Log COVID CPC $ imes$ Elderly	2.796**	2.642**			-3.456**	-3.453***			
Share	(1.120)	(0.972)			(1.178)	(0.977)			
$Log COVID CPC \times Log$			82.60***	84.42***	I I		-96.98***	-100.0***	
Respiratory DPC			(13.34)	(13.80)	 		(15.95)	(14.48)	
Log COVID CPC $\times$	-0.276		-0.231		0.308**		0.262*		
Hospitality Sector	(0.181)		(0.191)		(0.134)		(0.137)		
$Log COVID CPC \times$		-0.852***		-0.884***	l I	0.729***		0.778***	
Top/Bottom Income		(0.202)		(0.180)	l I	(0.179)		(0.162)	
N	177	177	177	177	177	177	177	177	
NUTS-4 FEs	$\checkmark$	1	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	
Socio-Demographic Controls	1	1	✓	$\checkmark$		1	1	$\checkmark$	
COVID-Related Controls	1	1	1	1		1	1	1	
Economic Controls	1	1	$\checkmark$	$\checkmark$		1	✓	1	

**TABLE A15.** Madrid Regional Election Results Simultaneously Including Proxies for Exposure to Health and Economic Effects

*Notes*: OLS estimates with robust standard errors, clustered by NUTS-4 region, in parentheses. Socio-demographic controls:  $\Delta$  population,  $\Delta$  age distribution,  $\Delta$  gender ratio. COVID-related controls: log nursing home places per capita, share of agricultural land, altitude,  $\Delta$  turnout. Economic controls:  $\Delta$  unemployment rate, log GDP per capita. \*p < 0.1; \*\*p < 0.05; \*\*\*p < 0.01.

# E.3 Difference-in-Differences Analysis

### TABLE A16. Difference-in-Differences Version of Madrid Regional Election Analysis

Dependent Variable = $\Delta$ Vote Share of:			Pro-Lockd	own Partie	s				Anti-Lock	lown Parties		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Panel A: Health Exposure Proxies												
Log COVID CPC	-0.967**	-0.991**	-1.002**	-0.341	-0.0315	-0.0523	0.930**	1.144***	1.155***	0.318	0.0126	0.0352
	(0.396)	(0.424)	(0.421)	(0.301)	(0.151)	(0.151)	(0.422)	(0.438)	(0.437)	(0.309)	(0.159)	(0.160)
Elderly Share	0.224***	0.142	0.143		0.356***	0.356***	-0.218***	-0.0884	-0.0888		-0.346***	-0.346***
	(0.0773)	(0.139)	(0.137)		(0.0825)	(0.0817)	(0.0790)	(0.146)	(0.144)		(0.0875)	(0.0867)
Log COVID CPC $ imes$ Elderly Share	4.310***	4.516**	4.473**				-4.392**	-5.387***	-5.346***			
	(1.618)	(1.862)	(1.803)				(1.755)	(1.979)	(1.925)			
Respiratory DPC				-1.941	0.183	-0.0779	I			2.638	0.464	0.748
				(1.839)	(1.118)	(1.083)	1			(1.978)	(1.118)	(1.084)
Log COVID PC $\times$ Respiratory DPC				133.9***	59.53**	59.58**	I			-144.8***	-72.78**	-72.83**
				(31.49)	(26.13)	(25.67)	1			(32.56)	(29.35)	(28.81)
N	354	354	354	358	354	354	354	354	354	358	354	354
$R^2$	0.973	0.974	0.974	0.952	0.974	0.975	0.974	0.975	0.975	0.955	0.975	0.975
Panel B: Economic Exposure Proxies												
Log COVID CPC	0.543	0.382	0.355	0.0598	0.0582	0.155	-0.613	-0.463	-0.437	-0.212	-0.107	-0.212
	(0.414)	(0.295)	(0.285)	(0.305)	(0.301)	(0.178)	(0.448)	(0.331)	(0.319)	(0.198)	(0.326)	(0.198)
Hospitality Sector	0.0355	0.0209	0.0204				-0.0358	-0.0228	-0.0224			
	(0.0261)	(0.0202)	(0.0199)				(0.0263)	(0.0219)	(0.0217)			
Log COVID CPC $ imes$ Hospitality Sector	-0.895**	-0.475	-0.468*				0.914**	0.515*	0.508*			
	(0.410)	(0.288)	(0.283)				(0.413)	(0.310)	(0.304)			
Top/Bottom Income				0.0383	0.0440	0.0589**	1			-0.0574*	-0.0370	-0.0574*
				(0.0439)	(0.0459)	(0.0279)	I			(0.0295)	(0.0470)	(0.0295)
Log COVID CPC $\times$ Top/Bottom Income				-0.545	-0.624	-0.723*	I			0.665	0.499	0.665
				(0.709)	(0.704)	(0.387)	 			(0.403)	(0.714)	(0.403)
N	358	354	354	358	358	354	358	354	354	354	358	354
R <sup>2</sup>	0.950	0.974	0.974	0.947	0.947	0.974	0.952	0.974	0.974	0.974	0.949	0.974
Municipality FEs		✓	✓		<ul> <li>Image: A start of the start of</li></ul>		, ✓		<pre></pre>		·	✓
Election FEs	1	1	1	✓	1	✓		1	1	1	1	1

*Notes*: This table presents a difference-in-differences version of our analysis of the relationship between COVID-19 incidence and Madrid regional election vote shares as moderated by exposure to the pandemic's health (panel A) and economic (panel B) consequences. OLS estimates with robust standard errors, clustered by municipality, in parentheses. \*p < 0.1; \*\*p < 0.05; \*\*\*p < 0.01.

## E.4 Parallel Trends Assumption



FIGURE A9. Evidence of Parallel Trends in Vote Shares of Pro- and Anti-Lockdown Parties

*Notes*: This figure shows that the combined vote shares of pro- and anti-lockdown parties in the 2021 Madrid regional election have followed approximately parallel trends since the 2007 election. In the left column (panels A and C), municipalities are divided by quartile of the logarithm of cumulative COVID-19 cases per capita as of the 2021 election (May 4). In the right column (panels B and D), they are grouped by whether their value of this variable is above or below the sample median.

# E.5 Instrumental Variables Analysis

FIGURE A10. Weather Patterns before 2021 Madrid Regional Election



*Notes*: Madrid municipalities are shaded by their quartile ranking on the sum of our four month-level weather instruments: total rainfall (panel A), mean daily temperature (panel B), maximum wind speed (panel C), and rainfall  $\times$  maximum wind speed (panel D) over the six months from November 1, 2020 to April 30, 2021.





*Notes*: Madrid municipalities are shaded by their quartile ranking on our four month-level weather instruments: total rainfall (panel A), mean daily temperature (panel B), maximum wind speed (panel C), and rainfall  $\times$  maximum wind speed (panel D) over the six months from November 1, 2020 to April 30, 2021. Diamonds represent weather stations from which measurements were taken. Data were acquired via purchase from Spain's State Meteorological Agency.

Dependent Variable = $\Delta$ Vote Share of	Pro-Locka	lown Partie	es Anti-Lock	down Parties
Panel A: Exposure to COVID Health Consequences	(1)	(2)	(3)	(4)
Log COVID CPC	-1.804	0.868	1.903	-1.114*
	(1.990)	(0.634)	(1.815)	(0.645)
Log COVID CPC $ imes$ Elderly Share	11.04*		-12.07**	
	(6.474)		(5.669)	
Log COVID CPC $\times$ Log Respiratory DPC		26.23**		-23.78*
		(11.81)		(13.79)
First-Stage F-Statistic	206.9	1,758.7	206.9	1,758.7
Panel B: Exposure to COVID Economic Consequence.	s (5)	(6)	(7)	(8)
Log COVID CPC	0.793**	0.717*	-0.749**	-0.479
	(0.350)	(0.421)	(0.375)	(0.383)
Log COVID CPC $\times$ Top/Bottom Income	-1.694***		1.697***	
	(0.433)		(0.395)	
Log COVID CPC × Hospitality Share		-0.427		0.103
		(0.311)		(0.282)
First-Stage F-Statistic	134.7	141.9	134.7	141.9
N	177	177	177	177
NUTS-4 FEs	1	$\checkmark$	1	$\checkmark$
Socio-Demographic Controls	$\checkmark$	$\checkmark$	1	$\checkmark$
COVID-Related Controls	$\checkmark$	$\checkmark$	1	$\checkmark$
Economic Controls	$\checkmark$	1	1	1

### TABLE A17. Madrid Election Analysis: Instrumental Variables Results

*Notes*: Second-stage 2SLS estimates with robust standard errors, clustered by NUTS-4 region, in parentheses. The first stage is described by Equation 9. In both stages, the controls are the same as in Table A14. Lower-order interaction terms are omitted for the four moderator variables. \*p < 0.1; \*\*p < 0.05; \*\*\*p < 0.01.

# F Pre-Analysis Plan for Survey Experiment

### Overview

How does anxiety affect voting behavior? Whereas existing theories treat anxiety as a largely homogeneous emotional state, this study highlights how the same threat can elicit *multiple* types of anxieties in voters, leading to the formation of widely varying political preferences. As part of our empirical investigation, we plan to conduct a survey experiment involving exposure to different anxiety-inducing prompts regarding the societal impact of the COVID-19 pandemic: one prompt that emphasizes the disease's negative *health* consequences; and a second prompt that emphasizes its negative *economic* consequences. We will then ask respondents to choose between two hypothetical political candidates with conflicting positions on the strength of lockdown restrictions required to deal with the pandemic. Our aim is to examine how "varieties of anxieties" — in this case COVID-related health anxiety and economic anxiety — influence voting decisions.

## Brief Summary of Hypotheses

The study proposes a simple theoretical framework based on the insight that societal threats can elicit multiple kinds of anxieties in voters, with widely varying consequences for their political preferences. Different types of anxieties, we posit, can give rise to different axes of political competition around threat mitigation and resolution that overlap with, but are not fully subsumed by, traditional social cleavages. As policies designed to address one type of anxiety may have little bearing on another type, voters concerned about the same threat may favor candidates with distinct — even opposing — platforms.

During the COVID-19 era, two types of anxiety have become particularly prevalent in the general public: (1) anxiety about the pandemic's adverse consequences for physical health; and (2) anxiety about the pandemic's adverse consequences for the economy. These two emotional states have conflicting implications for perhaps the defining public policy issue around COVID-19: the stringency of lockdown measures for containing disease transmission. While assuaging health anxiety by reducing community infection rates, strict lockdowns are likely to deepen economic anxiety by curtailing commerce and business activity. Voters with high levels of health anxiety, who are often more vulnerable to severe COVID-induced illness, should therefore favor candidates who endorse restrictive lockdown measures. Conversely, voters with intense economic anxiety, who tend to be more exposed to COVID-induced market disruption, should prefer candidates who oppose such policies.

This line of reasoning implies two hypotheses:

- **H1** *Voters with high levels of COVID-related health anxiety will favor political candidates who support restrictive lockdown measures.*
- **H2** *Voters with high levels of COVID-related economic anxiety will favor political candidates who oppose restrictive lockdown measures.*

## **Research** Design

#### Sample

To provide a well-identified test of these hypotheses, we intend to implement an online survey experiment using a convenience sample of 650 Amazon Mechanical Turk workers based in Spain (the country on which our study focuses). Our approach closely follows that of Bisbee and Honig (2022), who carried out a similar exercise assessing the impact of *general* anxiety on vote choice in the early stages of the COVID-19 pandemic.

#### Survey

Our anonymous survey will comprise four sections and is designed to be completed in approximately five minutes. First, after providing informed consent, participants will be asked to read one of two paragraphs describing the pandemic's impact on society. Second, they will be presented with descriptions of two hypothetical candidates running for political office and asked to rate them on a 4-item Likert scale. One of the candidates favors strong lockdown measures, while the other prefers loose restrictions. The treatment texts and candidate descriptions are provided in Section F. Third, they will be asked to disclose basic demographic information (age, sex, race, party affiliation, income bracket, health status) and whether they have been personally infected by COVID-19 or are close to anyone who has. Finally, they will be shown the alternative description of the pandemic's impact, ensuring that all participants are given the same information. Since we are interested in the effect of different types of anxiety on voting decisions, we randomize the description of COVID-19's impact (to focus on either health consequences or economic consequences) in the second segment.

#### **Treatment Texts**

Health-focused prompt: "The COVID-19 pandemic has been one of the deadliest plagues in history. In Spain alone, there have been 13.8 million confirmed cases and at least 120,000 deaths. Even among those who have survived, more than 40 percent have suffered long-lasting symptoms, including organ damage affecting the heart, kidneys, skin, and brain. Some experts believe that another pandemic could occur in the near future and have even more damaging health consequences."

Economy-focused prompt: "The disruption caused by the COVID-19 pandemic sent shock waves through the world economy and triggered the largest global economic crisis for more than a century. Spain's economy contracted by more than 10% in 2020 and remains smaller than before the pandemic, with high inflation and low growth expected to persist for several years. Some experts believe that another pandemic could occur in the near future and have even more damaging economic consequences."

#### **Candidate Descriptions**

In the following descriptions, candidate A is always in favor of strong lockdown measures and candidate B is always against such restrictions. Sentences 2, 3, and 4 are randomly assigned to either candidate.

**Candidate A** (pro-lockdown): "If there is a resurgence of COVID-19 or a similar pandemic in the near future, Candidate A favors a prudent and vigilant response that protects all members of society. He supports robust lockdown measures where they are appropriate. [SENTENCE 2]. [SENTENCE 3]. [SENTENCE 4]."

**Candidate B** (anti-lockdown): "If there is a resurgence of COVID-19 or a similar pandemic in the near future, Candidate B is keen to protect people's livelihoods by minimising any economic disturbance or damage that may arise. He opposes robust lockdown measures that risk undermining this goal. [SENTENCE 2]. [SENTENCE 3]. [SENTENCE 4]."

#### Sentence 2:

**A**: *He is 48 years old, and was born and brought up in your area, before going to university to study chemistry.* 

**B**: *He is 46 years old; he lives in your district and studied biology at university.* 

#### Sentence 3:

**A**: After university he trained as an accountant, and set up a company ten years ago; it now employs nine people.

**B**: After university he trained as a lawyer, and set up a practice ten years ago; it now employs eight people.

#### Sentence 4:

NONE: roughly half of respondents will receive no fourth sentence.

**A**: *He is passionate about cycling and a keen guitarist.* 

**B**: *He is passionate about tennis and a keen chef.* 

#### **IRB** and Ethics

This study received research ethics approval from the [redacted] (Ref #: [redacted]) on July 3, 2023; and was determined to be exempt from review by [redacted] (Protocol #: [redacted]) on July 28, 2023.

In general, we do not believe that the study raises any ethical issues specific to the Spanish context (in which our questions would not be perceived as sensitive or controversial) or physical or psychological risks on the part of the research team. Participants will be provided with an informed consent form detailing the purpose of our project, the survey procedure, their right to withdraw, confidentiality arrangements, compensation, the complaints procedure, and contact information.

## Subsequent Analysis

This section describes the planned post-survey analysis, providing a brief sample of Stata code to illustrate our empirical approach. We plan to estimate a logistic specification with regular (non-clustered) standard errors. Our main analysis will report odds ratios representing sample average treatment effects; no weights will be assigned to respondents initially.

#### **Outcome and Treatment Variables**

There is one primary outcome (dependent) variable and one primary treatment (independent) variable. The outcome is a dummy for whether a respondent would vote for candidate A, who supports stringent lockdown restrictions, rather than candidate B, who opposes such measures. This variable, named *vote\_A*, will equal 1 if the respondent would vote for candidate A and 0 if the respondent would vote for candidate B. The treatment, *health\_treatment*, will equal 1 if the respondent received the health-focused prompt and 0 if the respondent received the economy-focused prompt.

#### **Control Variables**

Our model will include a variety of control variables capturing respondents' demographic and socioeconomic characteristics as well as their personal exposure to COVID-19. These variables are: age (*age*); sex (*female*); race (indicator for *white*); party affiliation (indicators for *pp*, *psoe*, *vox*, *podemos*); income (*income*); and whether the respondent has — or is close to someone who has — been infected with COVID-19 (*infection*).

We will construct these variables using the following Stata code:

```
* Age (var name: age) - no transformation necessary
* Sex (var name: female)
. generate female = 0
. replace female = 1 if sex=="f"
. replace female = . if missing(sex)
* Race (var names: white)
. generate white = 0
. replace white = 1 if race=="blanco"
. replace white = . if missing(race)
* Party affiliation (var names: pp, psoe, vox, podemos)
. generate pp = 0
. replace pp = 1 if party=="pp"
. replace pp = . if missing(party)
. generate psoe = 0
. replace psoe = 1 if party=="psoe"
. replace psoe = . if missing(party)
. generate vox = 0
. replace vox = 1 if party=="vox"
. replace vox = . if missing(party)
. generate podemos = 0
```

. replace podemos = 1 if party=="podemos / sumar"
. replace podemos = . if missing(party)
\* Income (var name: income) - no transformation necessary
\* Infection (var name: infection) - no transformation necessary

#### Specification

Our baseline specification will be estimated with the code:

. logit vote\_A health\_treatment age female white pp psoe vox podemos income infection, or

The parameter of interest, the odds ratio for *health\_treatment*, represents the likelihood of voting for candidate A (pro-lockdown) rather than candidate B (anti-lockdown) for respondents who received the health-focused treatment relative to respondents who received the economyfocused treatment, holding all other variables constant. For example, an odds ratio of 1.25 would indicate that receiving the health-focused treatment is associated with a 25% higher likelihood of voting for candidate A. We thus expect this parameter to exceed 1.

Robustness checks, such as omitting subsets of the control variables and weighting the sample to improve its representativeness of the Spanish population, may be included in the main presentation of our results or (depending on space constraints) the supplementary materials.

#### Treatment Effect Heterogeneity

Finally, we may explore heterogeneity in the treatment effect across respondents. In addition to the hypotheses summarized earlier, our framework suggests that levels of a given type of anxiety will vary depending on individuals' socioeconomic and demographic characteristics, which affect their exposure to underlying threats. COVID-related health anxiety, for instance, is likely to be more intense for those with greater exposure to the pandemic's adverse physical consequences, such as elderly people. This prediction can be tested by adding an interaction between *health\_treatment* and *age* in the baseline specification:

. logit vote\_A health\_treatment##age female white pp psoe vox podemos income infection

If the treatment effect is stronger for older respondents, we would expect the coefficient on the interaction term to be positive and statistically significant. Note that since odds ratios are difficult to interpret for interaction terms, we only compute regular logistic coefficients.

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