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COVID-19 and Political Preferences Through Stages of the Pandemic: The Case of the Czech Republic*

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Abstract

We track the effects of the COVID-19 pandemic on political preferences through 'high' and 'low' phases of the pandemic. We ask about the effects of the health and the economic costs of the pandemic measured at both personal and municipality levels. Consistent with the literature, we estimate effects suggestive of political accountability of leaders during 'high' pandemic phases. However, we also find that the pandemic political accountability effects are mostly short-lived, and do not extend to the first post-pandemic elections.

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1 Introduction

The outbreak of a major new infectious disease can affect societal values and preferences: It can increase people's xenophobia and hostility towards foreigners (Bartoš et al., 2021), and it can be exploited as such by politicians Campante et al. (2024). When a new infection turns into a pandemic and results in large-scale economic disruptions, it can generate economic hardship, which is known to lead to rising support for populist and extremist parties (e.g., Autor et al., 2020; Dippel et al., 2021). The radical right also exploits growing anti-science sentiments, particularly during pandemics (Zulianello and Guasti, 2023).

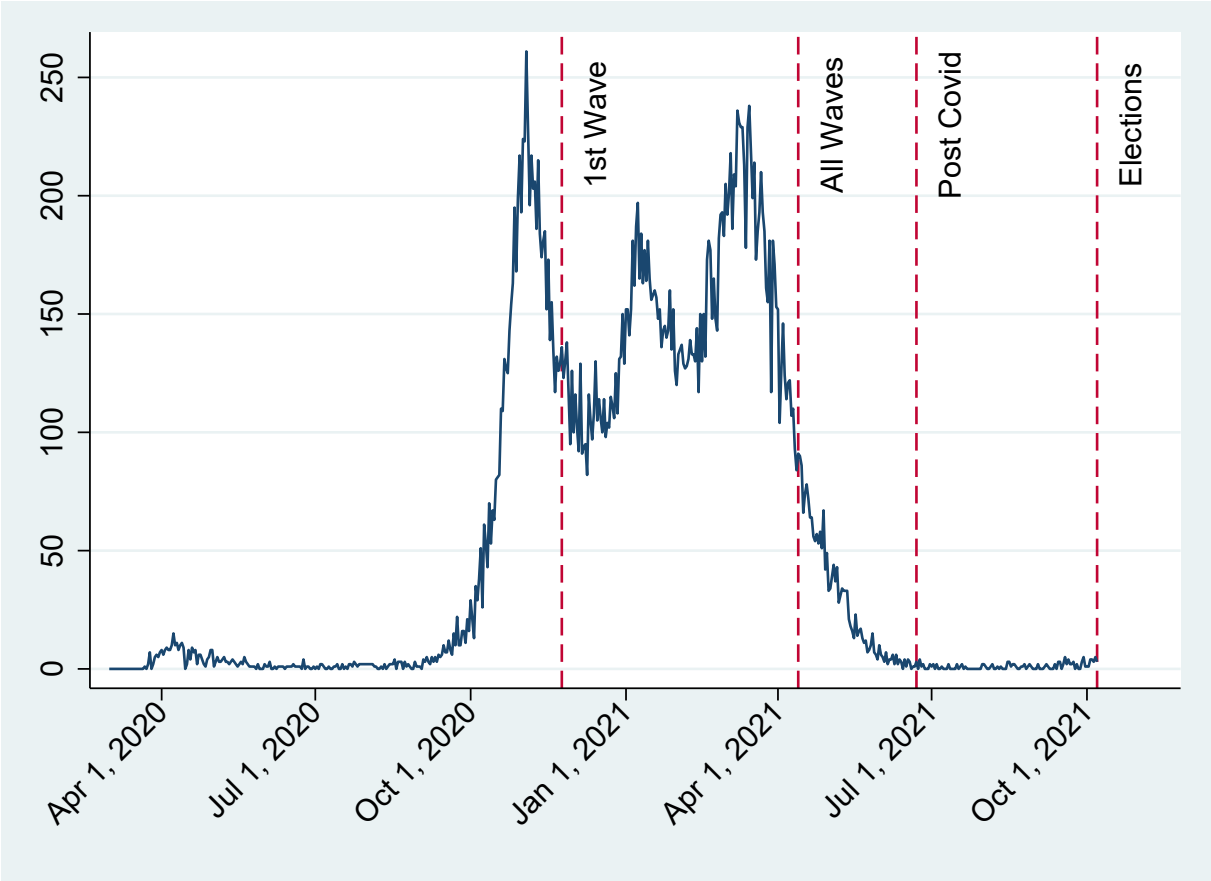
Yet, a growing literature that explores the effects of the COVID-19 pandemic on political preferences and election outcomes finds little evidence of rising support for extremist or populist parties during early 'high' stages of the COVID-19 pandemic—when lock-downs occurred and deaths spiked. Initial lock-downs appear to have led to rising support for incumbents (Bol et al., 2021; Giommoni and Loumeau, 2020), and democratic accountability seems to apply to populist leaders who are perceived as less competent in handling the pandemic, similarly to normal (non-pandemic) political contests (Baccini et al., 2021; Wu and Huber, 2021; Neundorf and Pardos-Prado, 2022).[1] There is comparatively less evidence on the late-pandemic and post-pandemic political consequences.

In this paper, we extend the literature by tracking the effects of the pandemic on political preferences during *multiple phases* of the pandemic. Specifically, we compare the effects at 'high' versus 'low' phases, and we also study the first post-pandemic national elections. Our research design is thus well suited for asking about the *durability* of pandemic-induced changes in political preferences—an important dimension of the political accountability literature (e.g., Duch and Stevenson, 2010; Tilley et al., 2018). We ask about the political consequences of both the health and the economic costs of the pandemic. Further, we extend the literature and minimize ecological fallacy concerns by measuring the health and economic costs of the pandemic at both a local (municipality) level and at the individual personal-experience level.

[1] For evidence on voters rewarding competence in the 1918 pandemic, see Bauernschuster et al. (2023).

We study the case of the Czech Republic, which endured some of the longest COVID-19 lock-downs and one of the highest pandemic death rates in the EU.[2] Figure 1 shows the evolution of COVID-19 fatalities in the country during the pandemic. The four vertical lines signify the four points of our analysis. We study the effect of the pandemic on survey-reported *political preferences* in two 'high' COVID-19 phases: after the first major wave of COVID-19 deaths (Nov 2020, '1st Wave'), and after all major waves (Apr 2021, 'All Waves'). Next, we do the same in a 'low' pandemic phase, when COVID-19 fatalities first declined to near-zero (Jun 2021, 'Post Covid'). Finally, we study actual voting and *election outcomes* in the first national elections held after the pandemic (Oct 2021, 'Elections').

Figure 1: Evolution of Daily COVID-19 Fatalities in the Czech Republic



Note: We observe political preferences and/or votes in Nov 2020, Apr 2021, Jun 2021, and Oct 2021. The COVID-19 waves prior to Nov 2020 and Apr 2021 correspond to national lock-downs.

[2]In April 2021, the Czech Republic ranked first in the EU in terms of cumulative COVID-19 deaths per million people, and it remained near the top of the ranking late into the pandemic: It recorded 2.9 thousand COVID-19 deaths per million people as of October 2021, far above the EU-wide 1.7 thousand (Mathieu et al., 2020). The country also had one of the longest school closures in the EU; with 20 weeks of full closure, it ranks fifth in the EU (`https://en.unesco.org/covid19/educationresponse`).

We measure the health and economic costs of the pandemic at both individual and municipality level, studying both personal experience and group-level exposure to the pandemic. We use precise municipality measures of the severity of the pandemic as well as information on having personally experienced the illness, and having a friend or family member who died of COVID-19. Our study is based on two types of data. First, we use municipality data on COVID-19 deaths and unemployment as of each of the four points of our analysis, as well as municipality data on election outcomes in the Oct 2017 and Oct 2021 parliamentary elections, i.e., national elections held before and after the pandemic. We leverage extensive variation in COVID-19 fatalities across the more than 200 Czech (higher-level) municipalities.[3] Second, we rely on a longitudinal survey of about 2,000 respondents starting in Mar 2020. In four waves of the survey (corresponding to the four points of our analysis shown in Figure 1), respondents state their political preferences, and report on their personal exposure to COVID-19 and on having experienced a job loss. The survey also contains information about respondents' voting behavior in the Oct 2017 and Oct 2021 parliamentary elections.

We track the effects of the pandemic by studying *changes* in political preferences between 2017 and each of the four points of our analysis, i.e., by repeatedly using a simple fixed-effect model based on two time periods.[4] We study the impact of the pandemic on support for three groups of political parties: the populist government (in power during the pandemic), the extremist opposition parties (far-left and far-right), and the mainstream democratic opposition (both opposition groups being in the Parliament during the pandemic).

The five key variables in our analysis of political preferences are: (i) municipality share of unemployed (relative to 2017), (ii) municipality share of COVID-19 fatalities in the population from the start of the pandemic, (iii) individual job losses (from the start of the pandemic), and two measures of personal COVID-19 exposure: (iv) whether a given individual experienced a severe case of COVID-19 illness, and (v) whether someone close to a given individual (a friend or family member) died of COVID-19. Measures (iv) and

[3]The October 2021 max/min ratio across municipalities in COVID-19 fatalities is almost 5. The (higher-level) municipalities of Aš, Mariánské Lázně, and Cheb had 644, 621, and 620 fatalities per 100 thousand inhabitants, respectively; at the low end of the spectrum, Kuřim, Dobříš and Černošice reported fewer than 135 COVID-19 fatalities per 100 thousand.

[4]We thus study those survey respondents who report having voted in 2017.

(v) are novel in the context of the literature on COVID-19 effects on political preferences. Given the close link between age and the health risks of COVID-19, our analysis conditions on local-area (municipality) pre-pandemic age structure.

We find that the political consequences of the pandemic operate similarly at the individual and group (municipality) levels, but that they vary through phases of the pandemic. Much of the literature focuses on local-area exposure to the pandemic. We find that, during the 'high' phases of the pandemic (with elevated death rates), higher municipality-level COVID-19 fatalities lead to lower support for the populist government (in line with the literature), but that this effect gradually dissipates after death rates decline, such that there is no 'memory' of local-area COVID-19 deaths in the post-pandemic parliamentary elections. We uncover a rich set of findings at the personal-experience level: In the 'high' phase of the pandemic, individuals who experienced (recovered from) severe COVID-19 symptoms support the government more, and those who experienced COVID-19 deaths among their friends and family support the government less (and extremist parties more), in line with keeping the government politically accountable for its handling the pandemic.[5] The 'memory' of COVID-19 deaths among friends and family fades quickly, as we detect no effects by the end of the last pandemic wave. Having recovered from a serious case of COVID-19 leads to more votes for the government in Oct 2021 elections, as the only remaining 'memory' of COVID-19. Finally, we find limited evidence that higher municipality unemployment during the pandemic increases electoral support for extremist parties.

We conclude that even the extreme COVID-19 exposure experienced by some Czech locations and by many Czech citizens had few long-lasting consequences for political preferences and election outcomes. While the electorate held its political leaders accountable for handling the pandemic during its acute stages, the electorate's memory is short-lived. Perhaps political accountability is stronger for long-term economic trends, which are more directly attributable to public policies than are 'natural' disasters or pandemics. It is also possible that the post-pandemic accountability effect operates solely at the national level, and is not driven by variation in local exposure and personal experiences.

[5]We find little evidence of survival bias in either individual or municipality data (Section 6.3).

2 Parliamentary Elections of 2017 and 2021

Our empirical analysis uses pre-pandemic 2017 parliamentary elections as a point of departure; we define our categories of political parties with reference to these elections. The 2017 elections were won by the political movement ANO (YES in English) with almost 30% of the vote, followed by ODS (Civic Democratic Party, 11%), Piráti (Czech Pirate Party, 11%), SPD (Freedom and Direct Democracy, 11%), KSČM (Communist Party of Bohemia and Moravia, 8%), ČSSD (Czech Social Democratic Party, 7%), KDU-ČSL (Christian and Democratic Union - Czech People's Party, 6%), TOP 09 (Tradition, Responsibility, Prosperity 09, 5%), and STAN (Mayors and Independents, 5%). Andrej Babiš, Czech billionaire and media owner, founder and leader of ANO, formed a government coalition with Social Democrats that held power between Jun 2018 and Dec 2021, i.e., during our entire analysis period.

We classify these parties based on whether they display populist or extremist features (e.g., Laver, 2014); specifically, we adopt a classification based on the PopuList project (`www.popu-list.org`). According to PopuList (Rooduijn et al., 2019), ANO is a centrist populist political movement, SPD is a far-right party,[6] and KSČM is a far-left party.[7] We thus classify the government coalition as 'populist government', and the two extremist parties as 'extremist opposition'; the remaining opposition parties in the 2017 Parliament are all mainstream parties, which we denote as 'democratic opposition'.

It is also important to understand how parties approached the pandemic, not only where they stand on the left-right/populist spectrum. The government was in charge of the pandemic policies; it introduced early lock-downs and focused on the availability of healthcare facilities (intensive-care in particular).[8] The democratic mainstream opposition also supported pandemic policies, as did (at least tacitly) the far-left Communists. The far-right SPD party was the only party actively involved in pandemic hoax theories.[9]

[6]The party runs on a direct democracy platform, and opposes immigration and the EU. Ministry of the Interior of the Czech Republic (2019) identified SPD as the most influential proponent of religious and ethnic intolerance in the Czech Republic.

[7]The party is one of the least reformed of the formerly ruling Communist parties, as its platform remains close to its original agenda (Handl, 2023).

[8]Slabá (2022) provides an overview of Czech pandemic-related measures in 2020 and 2021.

[9]See Appendix Section A.1 for details on party-specific stances on the COVID-19 pandemic.

Table 1: Mandate Shares and Turnout in Parliamentary Elections in 2017 and 2021

	2017	2021
Populist Government	46.5 %	36.0 %
Democratic Opposition	35.0 %	54.0 %
Extremist Opposition	18.5 %	10.0 %
Total	100 %	100 %
Voter Turnout	60.8 %	65.4 %

Note: Share of mandates obtained and voter turnout. The 2017 government coalition consisted of ANO (a populist party) and Social Democrats. Extremist opposition included the far-right SPD and the far-left Communists. Democratic opposition as of 2017 included ODS, TOP 09, KDU, Pirates, and STAN. Source: https://www.volby.cz/, own calculations.

Table 1 shows how shares of mandates won by the three groups of parties changed between 2017 and 2021. The government of Prime Minister Babiš lost power as the share of mandates received by ANO decreased from 39% in 2017 to 36% in 2021, while Social Democrats failed to reach the 5% minimum of votes and thus dropped out of the 2021 Parliament.[10] While support for the extreme-right SPD remained stable, the extreme-left Communist party also dropped out of the Parliament. The 2021 elections were won by the former mainstream opposition parties, which formed a five-party government coalition. Altogether, the 'democratic opposition' rose from 35% of mandates before the pandemic to 54% afterwards, consistent with the populist government being held politically accountable for the health and economic costs of the pandemic. This national evolution of political preferences forms the background of our analysis, which focuses on the variation in local and personal exposure to the pandemic; it is not designed to explain the (entire) national-level change in political preferences that occurred between 2017 and 2021.

3 Data

Our analysis is based on both individual- and municipality-level data. The individual data come from a unique longitudinal household survey that tracks the evolution of the pandemic in the Czech Republic. Respondents to the 'Life in the Pandemic' survey were asked about their current political preferences at multiple survey waves, and (retrospectively) about their 2017 voting behavior. Depending on the wave, the sample consists of about 2,000 interviews, and it replicates the demographic composition of the Czech population aged

[10]No additional parties entered the Parliament in 2021.

18+ (see Prokop et al., 2021; Bartoš et al., 2022).[11] We rely on multiple data sources at the municipality level: We use precise measures of daily COVID-19 fatalities for the 205 higher-level Czech municipalities[12] obtained from the Institute of Health Information and Statistics of the Czech Republic,[13] and normalized using 2019 municipality population obtained from the Czech Statistical Office (CSO).[14] Finally, we use official municipality data on the share of unemployed[15] and on parliamentary election outcomes.[16]

Table 2 provides variable definitions for both the individual- and the municipality-level data. Table 3 contains summary statistics for both types of data over the multiple time points of our analysis. The Life in the Pandemic survey collected by the PAQ research agency asks about political preferences over political parties (about hypothetical voting behavior) only for those respondents who answered positively that they would participate in a hypothetical election at the time of the survey.[17] Our baseline estimates in Section 5 are based on the combination of survey and administrative data, because this allows us to simultaneously control for individual-level and municipality-level factors. Given that the PAQ survey data does not cover all Czech municipalities and all voters, unlike the administrative municipality-level data, our analysis compares municipality-level estimates based on the set of municipalities covered by the survey to those based on the complete universe of municipalities; these results appear in the appendix.[18]

[11] Our analysis excludes respondents from the capital city of Prague, because it is not possible to measure the local-area exposure to COVID-19 as precisely as for other (smaller) municipalities. We also exclude doctors and nurses and those who report health care as the sector of their occupation, as well as respondents who were under 18 years of age in 2017, since they could not have voted in 2017. These exclusions reduce the number of observations to about 1,000 interviews per wave. Note that we analyze individuals with non-missing values of all control variables who were present in each of the two waves used in our two-period fixed-effect regressions. The share of respondents with missing values is less than 10 %.

[12] The 'municipalities with extended powers' cover all six thousand lower-level municipalities. Excluding Prague, a median lower-level (higher-level) municipality has 438 (31,382) inhabitants.

[13] Downloaded at `https://www.uzis.cz/index.php?pg=covid-19#datove-sady` on May 31, 2021.

[14] We also downloaded CSO information on pre-COVID-19 municipality population age structure from `https://vdb.czso.cz/vdbvo2/faces/cs/index.jsf?page=uziv-dotaz#`.

[15] Downloaded from `https://data.mpsv.cz/web/data/otevrena-data6` on Oct 20, 2022.

[16] Downloaded from `https://volby.cz/opendata` in Nov 2021.

[17] Hence, the number of respondents is higher in Table 4 than in the descriptive Table 3, which corresponds to samples of respondents expressing political preferences and analyzed in Section 5. The standardized municipality cumulative COVID fatality indicator ('Std Cumu COVID') can have a negative mean, because it is standardized at the level of municipalities, while the table reports means across survey respondents, and larger municipalities (with more respondents) have lower numbers of fatalities.

[18] Appendix Table A.1 provides a comparison of the key descriptive statistics for the Oct 2021 parliamentary elections between the PAQ survey and the administrative municipality-level data.

Table 2: Variable Definition: 'Life in the Pandemic' Survey and Municipal Data

Variable Name	Variable Description
VOTE	Binary variable that equals 1 if an individual voted in the 2017 parliamentary elections (first period), or would have voted in hypothetical elections at the time of the survey (second period), or voted in the 2021 parliamentary elections (second period), and zero otherwise.
GOV	As above but the statement concerns voting for the 2017-2021 government coalition: either the populist ANO or the Czech Social Democratic Party (CSSD).
EXT	As above but the statement concerns voting for an extremist opposition party: either left-wing (KSCM) or right-wing (SPD)
DEM	As above but the statement concerns voting for one of the democratic opposition parties: TOP 09, ODS, KDU-CSL, Pirates, and STAN (which formed a government coalition in 2021).
Severe COVID	Equals 1 in the second period if the respondent experienced a severe COVID-19 infection since the start of the pandemic, otherwise equals 0.
COVID Death	Equals 1 in the second period if the respondent experienced a death of someone close (family or friend) caused by COVID-19 since the start of the pandemic, otherwise equals 0.
Jobless	Equals 1 in either first or second period if the respondent reports to be unemployed, zero otherwise.
Unemployment %	Share of unemployed (in %) in the month preceding the time of the second-period analysis (survey wave or the 2021 parliamentary elections), and in the same month of 2017 for first-period analysis.
Std Cumu COVID	Share of COVID-19 fatalities (since the start of the pandemic) in the population, standardized at the municipality level.
Std Cumu COVID (-2W)	As above, but measured since the start of pandemic up to two weeks before the survey.
Std Recent COVID (2W)	As above, but measured over the last two weeks.
Share of < 15	Share of individuals aged 14 or younger in the municipality as of December 31, 2019.
Share of $15 - 64$	Share of individuals aged 15-64 in the municipality as of December 31, 2019.
Share of 65+	Share of individuals aged 65 or older in the municipality as of December 31, 2019.

Table 3: Summary Statistics - Survey Data used in the Main Regressions

	2017 Election		1st Wave		All Waves		Post Covid		2021 Elections	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
EXT	0.14	0.35	0.15	0.36	0.14	0.35	0.16	0.37	0.16	0.36
DEM	0.30	0.46	0.35	0.48	0.31	0.46	0.27	0.44	0.31	0.46
GOV	0.43	0.50	0.35	0.48	0.32	0.47	0.33	0.47	0.37	0.48
Cumu COVID	0.00	0.00	0.07	0.02	0.27	0.07	0.29	0.07	0.29	0.07
Std Cumu COVID	0.00	0.00	-0.24	0.80	-0.21	0.87	-0.21	0.85	-0.19	0.87
COVID Death	0.00	0.00	0.04	0.19	0.10	0.30	0.21	0.41	0.22	0.41
Severe COVID	0.00	0.00	0.02	0.13	0.04	0.21	0.05	0.21	0.05	0.22
Jobless	0.02	0.15	0.02	0.15	0.03	0.17	0.02	0.13	0.02	0.16
Unemployment %	3.93	1.86	3.85	1.57	4.39	1.71	4.20	1.83	3.94	1.78
Share of < 15	0.16	0.01	0.16	0.01	0.16	0.01	0.16	0.01	0.16	0.01
Share of 15-64	0.64	0.01	0.64	0.01	0.64	0.01	0.64	0.01	0.64	0.01
Share of 65+	0.20	0.01	0.20	0.01	0.20	0.01	0.20	0.01	0.20	0.01
Observations	783		783		769		749		764	

Note: Based only on individuals who reported their voting choices both in 2017 and the respective survey wave. Voting in 2017 parliamentary elections is based on respondents' recollection. Political preferences in all other columns except the last one are based on a hypothetical question about who the respondent would vote for if elections were held today (on the day of the survey). The last column is based a question on who the respondent voted for in the 2021 parliamentary elections (asked about a week after the elections were held.) The share of COVID-19 fatalities in the population is standardized at a given point in time at the municipality level (Std Cumu COVID), which is why the individual-weighted mean is not equal to zero.

4 Methodology

We apply a series of fixed-effects regressions, each based on comparing two periods: a pre-pandemic benchmark versus one of the four pandemic points described in Figure 1 (1st Wave, All Waves, Post Covid, Elections). The pre-pandemic benchmark consists of the votes in the Oct 2017 parliamentary elections coupled with individual March 2020 data on current unemployment status, 2017 municipality data on the share of unemployed, and 2019 municipality data on pre-pandemic age structure.[19] In all of our analyses, we cluster standard errors at the municipality level, and control for pre-pandemic municipality age structure (to reflect the close relationship of COVID-19 fatalities with age). We thus estimate the following models:

$$Y_{imt} = \beta_0 + \beta_1 C_{mt} + \beta_2 U_{mt} + \beta_3 CC_{imt} + \beta_4 CD_{imt} + \beta_5 JL_{imt} + \gamma_1 AGE15to64_{mt} + \gamma_2 AGE65_{mt} + \delta_t + \alpha_i + \epsilon_{imt}, \quad (1)$$

[19] See Table 2 for the exact definitions of the variables.

where $t = 1, 2$ ($t = 1$ refers to the year 2017 and $t = 2$ to one of the four points in time denoted in Figure 1). The outcome variable Y_{imt} equals 1 if an individual i who resides in municipality m exhibited certain behaviour at time t in parliamentary elections (voted / voted for a particular party) or expresses certain political preference—hypothetical voting behavior (would have participated in elections / would have voted for a particular party if elections had been held at one of the time points of our analysis). Next, C_{mt} equals 0 in $t = 1$ and equals COVID-19 fatalities in municipality m population from the beginning of the pandemic up to time $t = 2$ (one of the four time points we analyze), while U_{mt} is the share of unemployed in municipality m in the month preceding the $t = 2$ moment of analysis and in the same month of 2017 for the initial $t = 1$ benchmark. Turning to individual-level measures, CC_{imt} equals 0 in $t = 1$ and equals 1 in $t = 2$ if an individual experienced (recovered from) a severe COVID-19 case up to the $t = 2$ time, and zero otherwise, while CD_{imt} equals 0 in $t = 1$ and equals 1 in $t = 2$ if someone close to an individual died of COVID-19 up to the $t = 2$ time, and zero otherwise. Finally, JL_{imt} equals to 1 if an individual i who resides in municipality m is jobless at time t and zero otherwise, while $AGE15to64_{mt}$ and $AGE65_{mt}$ are variables controlling for the share of individuals aged 15-64 and 65+, respectively, in municipality m in 2019. Again, these age controls are set to 0 in $t = 1$ and equal their 2019 value in $t = 2$. The regression conditions on δ_t, the time fixed effect, and α_i, the individual i fixed effect, while ϵ_{imt} is the error term; the regression thus explains the within-person (within-municipality) outcome Y change between 2017 and one of the pandemic points of analysis, and it does not attempt to explain the aggregate (national) change in support for each political party group.[20]

5 Results

We first study the effect of the pandemic on voter turnout at various stages of the pandemic. Next, we focus on the effects on preferences and/or votes for one of the three party types defined in Section 2. Finally, we check whether our results are affected by survival bias.

[20]Since personal COVID-19 exposure may be correlated with unobservables (risk attitudes) that also explain political preferences, it would be ideal to instrument for the individual-level COVID-19 controls (COVID death, Severe COVID). We attempted to do so using occupational COVID-19 fatality rates and a survey-based indicator of high-infection-risk occupations, but the instruments were too weak to be usable.

5.1 Pandemic Impact on Voter Turnout

The COVID-19 pandemic has been shown to lower voter turnout during the early stages of the pandemic (e.g., Fernandez-Navia et al., 2021; Picchio and Santolini, 2022).[21] The decision not to vote (in person) may reflect fear of COVID-19 infection; it may also reflect disappointment with governmental pandemic policies or diminishing trust in democracy. Our focus on 'high' versus 'low' phases of the pandemic can help to shed light on these underlying mechanisms, since the health fear factor is less important in the 'low' phases. Moreover, during the pandemic, respondents to the Life in the Pandemic survey answer a *hypothetical* question whether they "would participate in elections if they were held now" in the four stages of the pandemic denoted in Figure 1–they are thus at no health risk when answering yes. Finally, we study actual turnout in the first national elections that took place after the pandemic, in Oct 2021, when all major COVID-19 waves were over.

We find no impact of individual or municipality-level COVID-19 exposure on hypothetical voter election participation during the pandemic, or on actual voter turnout in the 2021 post-pandemic Parliamentary elections. The first three sets of regressions presented in Table 4 contrast hypothetical voting participation of a respondent at a given survey wave during the pandemic with the respondent's participation in the 2017 parliamentary elections. None of our explanatory variables, measured at the municipality or individual-experience level, make a statistically significant impact on hypothetical voting behavior, in contrast to results reported in the literature on actual voter turnout in elections held during acute phases of the pandemic. In particular, exposure to COVID-19 fatalities has a negligible impact on turnout. Perhaps our *hypothetical* question speaks to voting intentions as they reflect (dis)satisfaction with politics in general, free of direct health concerns linked to personal participation in elections during acute stages of the pandemic.

We obtain qualitatively and quantitatively similar estimates in the final two columns of Table 4, where we study the actual (non-hypothetical) voting participation change between the Oct 2017 and the Oct 2021 parliamentary elections using individual-level election participation self-reported by respondents to the Life in the Pandemic survey.

[21] This effect may be stronger for far-right voters (Leromain and Vannoorenberghe, 2022), which would strengthen the electoral showing of mainstream parties.

Table 4: COVID-19 Impact on Voter Turnout

	1st Wave		All Waves		Post Covid		Elections	
	VOTE	VOTE	VOTE	VOTE	VOTE	VOTE	VOTE	VOTE
Std Cumu COVID	−0.001	−0.001	−0.028	−0.028	−0.021	−0.020	−0.007	−0.009
	(0.015)	(0.016)	(0.015)	(0.016)	(0.015)	(0.015)	(0.019)	(0.019)
Unemployment %	0.015	0.014	0.013	0.013	0.008	0.009	−0.023	−0.023
	(0.017)	(0.017)	(0.014)	(0.014)	(0.019)	(0.020)	(0.019)	(0.019)
COVID Death		−0.057		−0.024		−0.029		0.039
		(0.045)		(0.024)		(0.027)		(0.029)
Severe COVID		0.019		0.033		0.006		−0.005
		(0.064)		(0.072)		(0.062)		(0.053)
Jobless		−0.066		−0.062		0.060		0.038
		(0.100)		(0.067)		(0.089)		(0.104)
Obs.	2,046	2,046	1,970	1,970	1,930	1,930	2,056	2,056
Individuals	1,023	1,023	985	985	965	965	1,028	1,028
Nr. of Clusters	170	170	168	168	167	167	171	171
Mean of Y	0.843	0.843	0.857	0.857	0.858	0.858	0.823	0.823

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$

Note: Regressions specifications correspond to Equation 1 estimated at the individual level (survey data). Standard errors are clustered at the municipality level.

The estimated coefficients are consistent with pandemic experiences having no impact on actual post-pandemic election turnout, in line with zero effects of the pandemic on *hypothetical* election participation question during the pandemic, since both answers carry no concerns regarding health impacts. Similarly, in none of our regressions does municipality unemployment or individual joblessness have any effect on election participation.

In the Appendix Table A.2, we confirm the municipality-level findings presented in Table 4 in alternative (robustness) specifications based on complete administrative data on voter turnout across all Czech municipalities (except the capital of Prague).[22]

5.2 COVID-19 Phases and Political Preferences

In Tables 5 and 6, we analyze the impact of the health and economic costs of the pandemic on political preferences for the three party types defined in Section 2 during the two 'high' COVID-19 phases: after the 1st major wave of fatalities and after the extended period of all major pandemic waves in the Czech Republic.[23] In Table 5, we detect no evidence of any impact on political preferences at either the personal or the municipality level. The individual-level estimates are noisy, but the municipality-level coefficients suggest precisely estimated zero impact of the pandemic at this 1st-wave stage of the pandemic.

By the end of a six-month period of high fatality levels, in April 2021, this picture changes substantially. In Table 6, relatively high COVID-19 fatalities at the municipality level lower support for the government that was handling the pandemic, consistent with the literature (e.g., Baccini et al., 2021). A one standard deviation increase in the municipality level of COVID-19 fatalities lowers support for the government coalition by over 4 percentage points, which is more than 10 percent of its base support level. Further, the personal experience of (recovering from) a serious COVID-19 case raises support for the government,[24] while

[22]Specifically, in the first column of the table, we use the entire set of Czech higher-level municipalities and the official turnout data covering all eligible Czech voters. In the next column, we restrict our municipality-level analysis to those municipalities that are covered in the survey data. Finally, the last column shows the municipality-level coefficients based on individual-level survey responses data. The survey-based estimates are only nearly identical to those in Table 4 due to the fact that, here the survey-data regressions are weighted to ensure comparability to the municipality-data regressions.

[23]The finding of no effect of the pandemic on turnout alleviates sample selection concerns regarding our samples of respondents reporting on their political preferences, which consist only of those respondents who answered positively that they would have participated in a hypothetical election at the time.

[24]Flückiger et al. (2019) show trust in government during the Ebola epidemic rises with exposure.

Table 5: Political Preferences - 1st Wave - November 2020

	Local Effects			Local and Individual Effects		
	EXT	GOV	DEM	EXT	GOV	DEM
Std Cumu COVID	0.019	−0.009	0.016	0.020	−0.010	0.016
	(0.016)	(0.017)	(0.016)	(0.016)	(0.017)	(0.016)
Unemployment %	−0.011	0.012	0.005	−0.010	0.012	0.005
	(0.021)	(0.019)	(0.019)	(0.021)	(0.018)	(0.018)
COVID Death				−0.086	0.122	−0.067
				(0.049)	(0.076)	(0.051)
Severe COVID				−0.093	−0.003	−0.054
				(0.083)	(0.127)	(0.160)
Jobless				−0.004	−0.204	0.053
				(0.142)	(0.144)	(0.123)
Obs.	1,566	1,566	1,566	1,566	1,566	1,566
Individuals	783	783	783	783	783	783
Nr. of Clusters	152	152	152	152	152	152
Mean of Y	0.146	0.391	0.324	0.146	0.391	0.324

Note: Regressions specifications correspond to Equation 1 estimated at the individual level (survey data). Standard errors are clustered at the municipality level. The sample consists of those respondents who voted in 2017 and stated that they would vote in November 2020 if elections were held then.

losing a friend or family member to COVID-19 leads to dramatically higher support for extremist opposition parties (at the expense of the government), consistent with the political accountability literature. We find little evidence that economic hardship (at the municipality or individual level) matters for voting intentions.

Next, we turn our attention to two 'low' COVID-19 phases. In Table 7, we ask about the pandemic impact on hypothetical voting preferences in June 2021, when COVID-19 fatalities first declined to near-zero, and all pandemic restrictions were lifted. The negative effect of accumulated municipality-level fatalities is still present, if somewhat smaller than during the acute phase of the pandemic. However, the effects of individual experience we uncovered in the acute pandemic phase in Table 6 are no longer present, suggesting a short-lived memory of the pandemic. Further, we still do not detect any effects of economic conditions on political preferences at either the personal or the municipality level.

In Table 8, we ask about the presence of pandemic effects on the first post-pandemic parliamentary elections in Oct 2021, three months after COVID-19 fatalities declined to near-zero levels. With one exception, the results are consistent with the notion that the effects measured immediately after all major pandemic waves are short-lived.

Table 6: Political Preferences - All Waves - April 2021

	Local Effects			Local and Individual Effects		
	EXT	GOV	DEM	EXT	GOV	DEM
Std Cumu COVID	−0.002	−0.046*	0.032	−0.004	−0.044*	0.033
	(0.013)	(0.019)	(0.017)	(0.013)	(0.019)	(0.017)
Unemployment %	−0.011	0.011	0.001	−0.010	0.010	0.001
	(0.011)	(0.021)	(0.016)	(0.011)	(0.021)	(0.015)
COVID Death				0.077*	−0.055	−0.009
				(0.031)	(0.048)	(0.035)
Severe COVID				−0.001	0.118**	−0.116
				(0.043)	(0.044)	(0.066)
Jobless				−0.000	−0.044	0.170
				(0.112)	(0.085)	(0.092)
Obs.	1,538	1,538	1,538	1,538	1,538	1,538
Individuals	769	769	769	769	769	769
Nr. of Clusters	152	152	152	152	152	152
Mean of Y	0.144	0.371	0.296	0.144	0.371	0.296

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$

Note: Regressions specifications correspond to Equation 1 estimated at the individual level (survey data). Standard errors are clustered at the municipality level. The sample consists of those respondents who voted in 2017 and stated that they would vote in April 2021 if elections were held then.

Table 7: Political Preferences - Post-COVID-19 - June 2021

	Local Effects			Local and Individual Effects		
	EXT	GOV	DEM	EXT	GOV	DEM
Std Cumu COVID	0.002	−0.034*	0.014	0.002	−0.034*	0.013
	(0.016)	(0.017)	(0.020)	(0.016)	(0.017)	(0.020)
Unemployment %	0.006	0.021	0.006	0.006	0.019	0.007
	(0.017)	(0.023)	(0.019)	(0.017)	(0.023)	(0.018)
COVID Death				−0.015	0.001	0.015
				(0.034)	(0.044)	(0.034)
Severe COVID				−0.017	0.049	−0.064
				(0.057)	(0.040)	(0.067)
Jobless				−0.065	−0.183	0.204
				(0.069)	(0.149)	(0.156)
Obs.	1,498	1,498	1,498	1,498	1,498	1,498
Individuals	749	749	749	749	749	749
Nr. of Clusters	149	149	149	149	149	149
Mean of Y	0.154	0.377	0.279	0.154	0.377	0.279

Note: Regressions specifications correspond to Equation 1 estimated at the individual level (survey data). Standard errors are clustered at the municipality level. The individual-level sample consists of those respondents who reported having voted in both the 2017 and the 2021 elections.

The exception corresponds to the positive effect of having recovered from a severe case of COVID-19 on voting for the government, which is similar to that estimated in April 2021. By the first post-pandemic elections, there are no detectable effects of of losing a friend or family member to COVID-19. Also, using survey-based data, we find no effects of higher municipality unemployment or individual job loss.

Table 8: Post-COVID-19 Elections - October 2021

	Local Effects			Local and Individual Effects		
	EXT	GOV	DEM	EXT	GOV	DEM
Std Cumu COVID	0.016	−0.014	0.025	0.014	−0.015	0.026
	(0.021)	(0.026)	(0.017)	(0.021)	(0.025)	(0.018)
Unemployment %	−0.017	0.021	0.015	−0.017	0.021	0.015
	(0.025)	(0.030)	(0.020)	(0.025)	(0.030)	(0.020)
COVID Death				0.028	0.044	−0.034
				(0.032)	(0.041)	(0.026)
Severe COVID				−0.071	0.094**	0.022
				(0.048)	(0.037)	(0.058)
Jobless				0.082	0.056	−0.075
				(0.130)	(0.072)	(0.134)
Obs.	1,528	1,528	1,528	1,528	1,528	1,528
Individuals	764	764	764	764	764	764
R^2	0.000	0.003	0.001	0.001	0.003	0.002
Nr. of Clusters	152	152	152	152	152	152

Standard errors in parentheses
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Note: Regressions specifications correspond to Equation 1 estimated at the individual level (survey data). Standard errors are clustered at the municipality level. The individual-level sample consists of those respondents who report having voted in both the 2017 and the 2021 elections.

Finally, in Appendix Table A.3, Section A.2, we provide a robustness check for the municipality-level coefficients based on official voting data from Oct 2017 and Oct 2021 covering all municipalities. We also estimate the municipality-level regressions on the subset of municipalities covered in the survey. All of these estimates confirm a lack of COVID-19 fatality effects on voting behavior. Looking across municipalities in which, at the maximum (minimum) of the municipality distribution 0.6 (0.1) of a percentage point of the population died of COVID-19 during the pandemic, voters do not hold the government accountable three months after the end of the pandemic. However, in line with, e.g., Wu and Huber (2021), using the precise full-coverage administrative municipality data, we now find that higher unemployment (relative to the 2017 benchmark) leads to stronger

support for the extremist opposition at the expense of the vote share of the government coalition. Increasing the share of unemployed in a municipality by 1 percentage point leads to a 0.6 p.p. increase in the support for extremist parties.

In sum, we find evidence consistent with the political accountability literature: During the acute phases of the pandemic, voters respond to their COVID-19 exposure at both the personal and community level in line with punishing less competent handling of the pandemic. Shortly after the pandemic, however, only variation in unemployment affects voter behavior in Parliamentary elections (again, consistent with the literature), while there appears to be almost no electoral 'memory' of extreme COVID-19 experiences.

6 Extensions and Robustness Checks

6.1 Long-term vs. Recent Local COVID-19 Exposure

Our baseline estimates suggest political preferences may feature only a short-lived memory of pandemic experiences. The issue of voter memory is important for the political accountability literature. For example, if voters have only short memory, this may lead to cycles of polarization in models where voters collectively learn about parties and policies (Razin and Levy, 2021). Therefore, in this section, we ask in more detail about voters' reaction to *recent* COVID-19 exposure as opposed to long-term accumulated COVID-19 exposure; we do so using the precisely measured extensive variation in the level and timing of COVID-19 fatalities at the municipal level. Specifically, we re-estimate our baseline 'high'-COVID-19 models from the previous section, additionally controlling for an indicator of local-area COVID-19 exposure over the prior two weeks. In Table 9, we adjust the cumulative municipality measure of the total number of COVID-19 fatalities from the beginning of the pandemic, so that it excludes the fatalities from the prior two weeks, and we separately condition on the long-term and recent local COVID-19 exposure. The analysis is based on the April 2021 data, i.e., immediately after all major COVID-19 waves, when our baseline analysis uncovers significant responses to the recently experienced 'high' phase of the pandemic.

The estimates in Table 9 show that, in their survey-reported voting intentions, voters react to the longer-term accumulated municipality COVID-19 exposure, while they do not react to the municipality pandemic experience over the prior two weeks. This suggests that voters do keep an account of the longer-term health consequences of the pandemic, while the pandemic was in its acute 'high' phase. Alternatively, it could be that voters do not have data on recent local COVID-19 fatalities.[25]

Table 9: Cumulative and Recent (2W) COVID-19 - All Waves - April 2021

	Local Effects			Local and Individual Effects		
	EXT	GOV	DEM	EXT	GOV	DEM
Std Cumu COVID (-2W)	0.001	−0.049*	0.028	−0.002	−0.048*	0.031
	(0.014)	(0.021)	(0.017)	(0.013)	(0.021)	(0.017)
Std Recent COVID (2W)	−0.009	0.011	0.010	−0.007	0.011	0.006
	(0.015)	(0.021)	(0.018)	(0.014)	(0.021)	(0.018)
Unemployment %	−0.013	0.013	0.003	−0.012	0.012	0.002
	(0.011)	(0.021)	(0.016)	(0.011)	(0.021)	(0.015)
COVID Death				0.076*	−0.053	−0.008
				(0.031)	(0.048)	(0.035)
Severe COVID				−0.001	0.119**	−0.116
				(0.043)	(0.044)	(0.066)
Jobless				0.002	−0.048	0.168
				(0.112)	(0.087)	(0.092)
Obs.	1,538	1,538	1,538	1,538	1,538	1,538
Individuals	769	769	769	769	769	769
Nr. of Clusters	152	152	152	152	152	152
Mean of Y	0.144	0.371	0.296	0.144	0.371	0.296

Note: Regressions specifications correspond to Equation 1 estimated at the individual level (survey data). Standard errors are clustered at the municipality level. We control for the share of COVID-19 fatalities in the municipality population from the start of pandemic (cumulative, without the prior two weeks) and in the final two weeks prior to April 2021. Recent fatalities are subtracted from the cumulative COVID-19 measure to separate the effect of the two different measures and avoid collinearity.

6.2 Extreme Left versus Extreme Right

So far, we have analyzed preferences for the two Czech extremist parties with parliamentary representation jointly. However, the extreme-right SPD party was a stronger proponent of pandemic hoax theories than the extreme-left Communists, and the two extremist

[25]We obtain qualitatively similar findings when we focus on the prior month (rather than on two weeks), and when we study this issue in the 'low' phases of the pandemic. There is insufficient variation in the timing of individual-level COVID-19 experiences to allow us to estimate this specification for individual-level COVID-19 variables.

voter groups could thus have had a different reaction to pandemic experiences.[26] We now therefore separately study the pandemic effects on political preferences for the far-right and the far-left party. In each panel of Table 10, we first reproduce our baseline estimates for all extremist parties (EXT) as of the high-COVID-19 phase in April 2021, and then we separately study the far-right party (SPD) and the far-left party (KSCM).

Table 10: Extreme Right versus Extreme Left - All Waves - April 2021

	Local Effects			Local and Individual Effects		
	EXT	SPD	KSCM	EXT	SPD	KSCM
Std Cumu COVID	−0.002	−0.006	0.004	−0.004	−0.007	0.002
	(0.013)	(0.012)	(0.007)	(0.013)	(0.012)	(0.007)
Unemployment %	−0.011	−0.007	−0.005	−0.010	−0.006	−0.004
	(0.011)	(0.012)	(0.008)	(0.011)	(0.012)	(0.008)
COVID Death				0.077*	0.027	0.050**
				(0.031)	(0.023)	(0.017)
Severe COVID				−0.001	−0.051	0.050
				(0.043)	(0.030)	(0.026)
Jobless				−0.000	0.053	−0.053
				(0.112)	(0.095)	(0.055)
Obs.	1,538	1,538	1,538	1,538	1,538	1,538
Individuals	769	769	769	769	769	769
Nr. of Clusters	152	152	152	152	152	152
Mean of Y	0.144	0.090	0.055	0.144	0.090	0.055

Note: Regressions specifications correspond to Equation 1 estimated at the individual level (survey data). Standard errors are clustered at the municipality level. The preference for extremist parties (EXT) in the first column is separated into the preference for the far-right party (SPD) and the far-left party (KSCM). The sample consists of those respondents who voted in 2017 and stated that they would vote in April 2021 if elections were held then.

There is no difference in the (small and statistically insignificant) effects of municipality-level COVID-19 fatalities or unemployment on voting intentions across the two parties. However, there is a distinct pattern of COVID-19 effects at the personal-experience level. The increase in the probability of voting for an extremist party after losing a friend or relative to COVID-19 is mostly driven by a rise in the preferences for the far-left party (KSCM). Further, the coefficients corresponding to recovering from a severe COVID-19 case are qualitatively different, even if they are both statistically indistinguishable from zero. The size of the positive effect of having recovered from a severe case of COVID-19

[26]The openly expressed attitudes of the SPD leaders also included downplaying the risks of the pandemic by claiming that the media were scaring people, and that the national statistics on cases of COVID-19 infection were overstated. See Appendix Section A.1.

on the probability of voting for the Communist party (a 5 p.p. increase) is comparable in magnitude to the positive impact on support for the Communist party of the loss of a relative or friend to COVID-19. Perhaps these positive effects for the Communist party are in line with strong support of the party for public health-care system, i.e., affordable health care provision.[27] On the other hand, having a personal experience with a severe case of COVID-19 lowers support for the far-right SPD—the only Czech party associated with hoax pandemic theories—albeit without reaching statistical significance.

6.3 Survival Bias

Politicians can affect voters' risky behavior in a pandemic (Ajzenman et al., 2023; Bursztyn et al., 2023), and a conspiracy mentality has been shown to be greater among those with extreme left and, especially, extreme right political preferences (Imhoff et al., 2022). Our main analysis explores the impact of local and individual COVID-19 exposure on political preferences and voting behavior. However, to the extent that some (particularly extremist) parties or political leaders encouraged risky behavior during the pandemic, they risked losing part of their electorate to COVID-19 fatalities. This could lead to survival bias in the samples we study in our baseline analysis. Survival biases due to differences in risky behavior could also arise solely in relation to pre-pandemic political preferences, i.e., without additional encouragement of risky behavior during the pandemic.

Imhoff and Lamberty (2020) show that conspiracy beliefs describing the pandemic as a hoax are linked to more risky behavior during the pandemic, while conspiracies about a purposeful creation of the virus are associated with less risky behavior. As we document in Appendix Section A.1, only the extreme-right SPD party supported hoax theories, while the populist government imposed strong lock-downs and encouraged preventative behavior. Could this lead to survival bias among SPD voters? We provide two checks on the presence of survival bias: one based on municipality data, the other based on survey data.

First, we find no relationship between the municipality share of votes cast for extremist parties in the pre-pandemic 2017 parliamentary elections and our cumulative COVID-19

[27]The far-left party (KSCM) lists securing the right to free health care among its 11 most important political goals (https://www.kscm.cz/program/).

municipality fatality rate as of Oct 2021 (see Table A.4 in the Appendix Section A.2).[28] As for our survey data, in Appendix Section A.2, Figures A.1, A.2, and A.3, we relate the share of survey respondents who indicate that they voted for a particular party in the 2017 Parliamentary elections in the first wave of the survey (before any COVID-19 deaths, weighted using the sampling weights) to the subsequent municipality cumulative COVID-19 death rate up to the October 2021 wave. We again find no relationship, which is reassuring in terms of the potential presence of survival bias. There is a positive but very small and statistically insignificant coefficient of the vote share for the Communists (KSCM) and the populist government on the subsequent municipality cumulative COVID-19 death rate. The coefficient for the far-right SPD, the only party whose pandemic views could have increased risky behavior, is actually negative (and also extremely small and statistically insignificant). Note that a difference of 10 p.p. in the vote share for KSCM (populist government) across municipalities in the 2017 elections would result in only 0.002 (0.001) p.p. difference in the size of the municipality populations during the 2021 elections.

7 Conclusion

We make two contributions to the literature on the effects of the COVID-19 pandemic on political preferences: We track the effect of the pandemic through its qualitatively different stages, and we control for economic and health costs of the pandemic at both the individual and the local-area level. This allows us to paint a comprehensive picture of the effects of the pandemic on political preferences and election outcomes in a country that experienced long pandemic lock-downs and high rates of COVID-19 fatalities.

Our findings on *voter turnout*, combined with those in the literature, are consistent with the health risks of voting during acute stages of the pandemic depressing voter turnout, and with the pandemic having no effect on the willingness to vote, either in post-pandemic elections or in terms of hypothetical voting (with no health exposure) during the pandemic.

[28]There is a positive relationship between the 2017 share of votes for the populist government and subsequent municipality cumulative COVID-19 death rates, but this relationship is quantitatively negligible: a 10 p.p. higher share of votes for the government is linked with a 0.06 p.p. decrease in the municipality population due to COVID-19.

Turning to *political preferences*, we find that extremist voters who themselves experienced severe cases of COVID-19 tend to switch from the extreme-right to the extreme-left, consistent with extreme right being more strongly associated with pandemic hoax theories, which lose credibility through personal experiences. Outside of extreme-party voters, less able handling of the pandemic is associated with voters moving away from the government, which was in charge of anti-pandemic measures. However, this adjustment of political preferences occurs only in the 'high' COVID-19 phase, and by the time of the first post-pandemic elections, the pandemic appears to have mostly been forgotten, despite the fact that in several Czech municipalities, more than 0.6% of the population died of COVID-19.

Our analysis is thus consistent with the literature, in that it supports the notion that political accountability applies to acute stages of the pandemic similarly as to other political contests (Duch and Stevenson, 2010; Tilley et al., 2018; Lewis-Beck and Stegmaier, 2000). Next, our novel findings suggest that this accountability is short-lived, i.e., that voters have a short memory of the attribution of COVID-19 experiences to political leaders. If confirmed in other setting (e.g., Achen and Bartels, 2017), this short memory could be an important driver of party polarization, as suggested by models in which voters collectively learn about parties and policies (Razin and Levy, 2021).

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Appendix

A.1 Political Parties' Attitudes towards COVID-19

This appendix briefly characterizes the attitudes of the parties and groups of parties considered in this paper towards the COVID-19 pandemic.

SPD was the most active party in the Czech Republic in spreading hoax theories during the COVID-19 pandemic, according to an analysis of local media produced by European Values, a Czech NGO. See, e.g., https://europeanvalues.cz/cs/rok-2020-jak-ceska-vlada-prohrala-s-dvema-vlnami-dezinformaci-o-koronaviru/ and https://www.seznamzpravy.cz/clanek/zebricek-nejuspesnejsich-dezinformatoru-vede-spd-i-csakova-148558. The influence of Tomio Okamura, the SPD leader, on social media appears to have been particularly substantial (https://archiv.hn.cz/c1-67224580-okamura-je-hlavnim-dezinformatorem-v-eu-ma-nejvetsi-dosah-na-socialnich-sitich-ukazala-analyza). In Fall 2020, for example, he expressed opposition to mandatory testing and vaccination and downplayed the risks of the pandemic, claiming that media were scaring people and that the national statistics on cases of COVID-19 infection were overstated. There is no evidence that other parties systematically engaged in disinformation during the pandemic. Further, no Czech party, including the SPD, openly opposed voluntary vaccination (see, e.g., https://rozalio.cz/nazory-politickych-stran-na-situaci-covid-19-a-na-povinnost-ockovani-obecne/).

A.2 Supplementary Tables and Figures

Table A.1: Summary Statistics - 2021 Elections

	Election Data		Election Data PAQ Subset		PAQ Data	
	Mean	SD	Mean	SD	Mean	SD
VOTE	0.64	0.05	0.64	0.05	0.83	0.37
EXT	0.14	0.03	0.14	0.03	0.18	0.38
DEM	0.40	0.08	0.40	0.08	0.30	0.46
GOV	0.33	0.05	0.34	0.05	0.36	0.48
Cumu COVID	0.29	0.08	0.30	0.08	0.28	0.04
Std Cumu COVID	-0.17	0.95	-0.14	0.97	-0.36	0.53
Unemployment %	3.60	1.57	3.55	1.57	4.59	1.82
Observations	205		152		764 (1028)	

Note: The election data are weighted by the pre-COVID-19 municipality population. To apply a similar weighting scheme for comparability purposes, the survey data are weighted by municipality sample size (in March 2020).

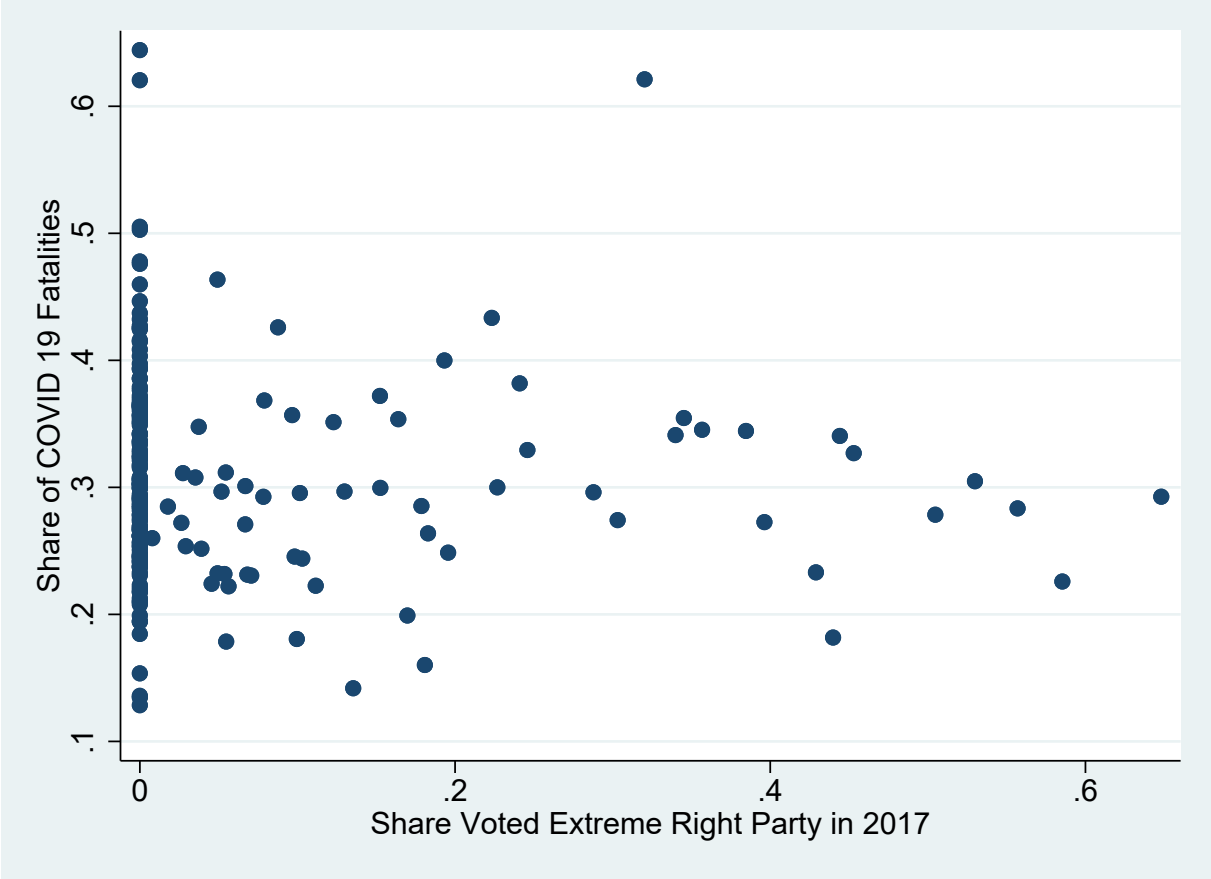
Table A.2: Voter Turnout - October 2021 Elections

	Election Data	Election Data PAQ Subset	PAQ Data
	VOTE	VOTE	VOTE
Std Cumu COVID	0.001	0.001	−0.026
	(0.001)	(0.001)	(0.017)
Unemployment %	0.000	0.000	−0.016
	(0.001)	(0.001)	(0.019)
Obs.	410	342	2,056
Individuals			1,028
Nr. of Clusters	205	171	171
Mean of Y	0.621	0.622	0.833

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$

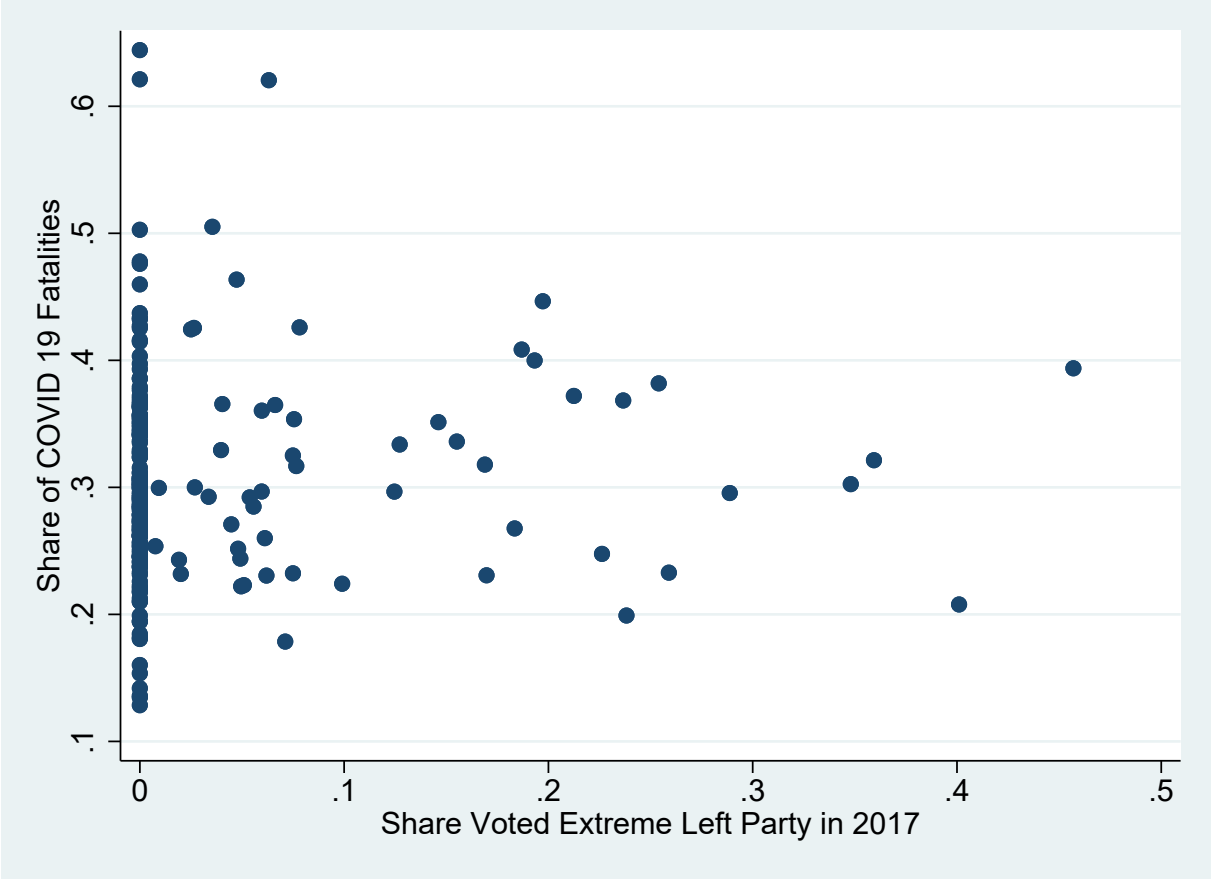
Note: Regressions specifications correspond to Equation 1 estimated at the individual level (survey data) or the municipality level (election data). The regression specifications, which are weighted by municipality population, include year fixed effects and control for pre-COVID-19 municipality age structure. Standard errors are clustered at the municipality level. The first column covers all Czech municipalities (except Prague), and the second column covers the subset of municipalities we observe in the survey data. The first two columns use administrative election data, and the last column uses the survey data. The municipality-level regressions using administrative election data are weighted by the pre-COVID-19 municipality population. To use a similar weighting scheme for comparability purposes, survey-based regressions are weighted by municipality sample size (in March 2020).

Figure A.1: Checking Survival Bias - Extreme Right Party (SPD)



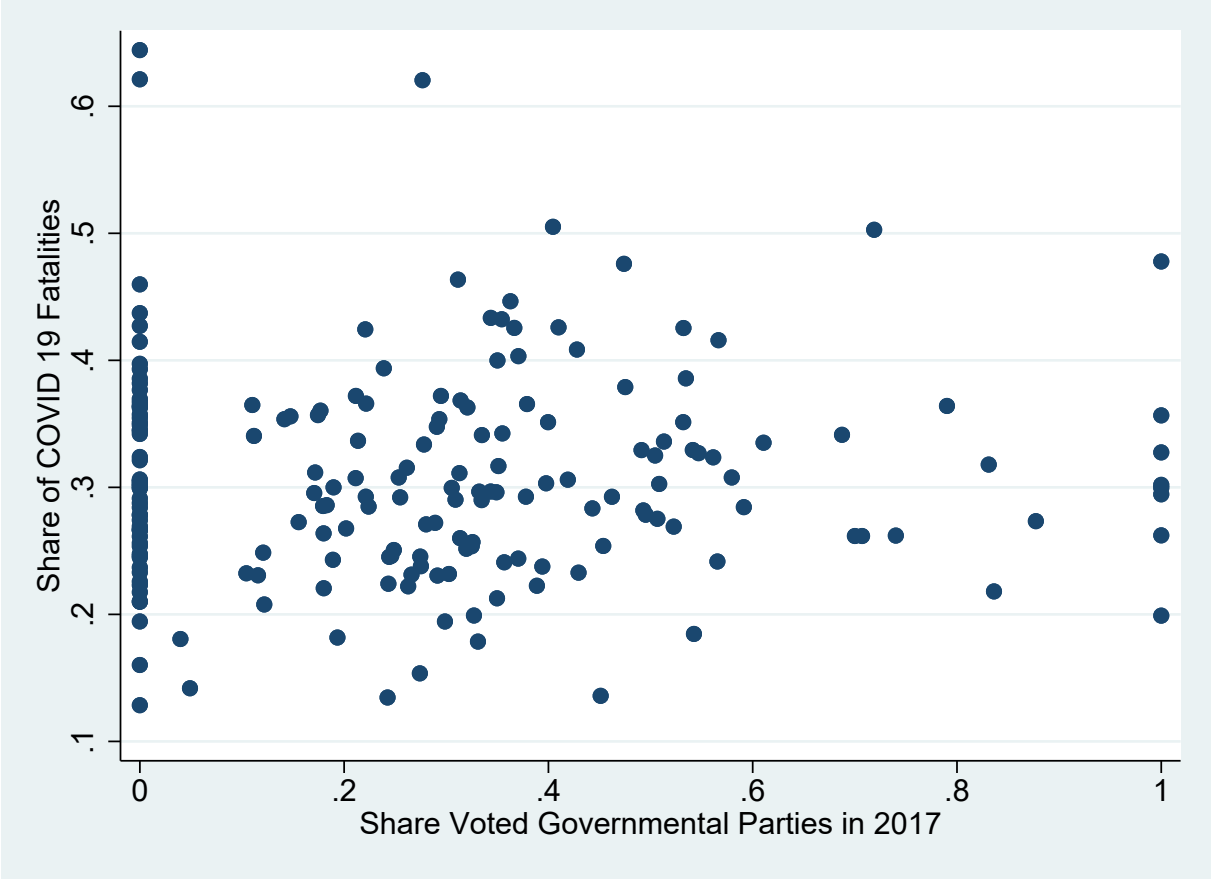
Note: The figure shows simple correlations between the local COVID-19 fatality shares (fatalities cumulative up to October 2021) and the share of those who voted for the far-right party in 2017. Regression of local COVID-19 fatality shares on the share of those who voted for extremist parties in 2017 (controlling for pre-COVID-19 municipality age-structure) yields a coefficient of -0.02 with p-value=0.62.

Figure A.2: Checking Survival Bias - Extreme Left Party (KSCM)



Note: The figure shows simple correlations between the local COVID-19 fatality shares (fatalities cumulative up to October 2021) and the share of those who voted for the far-left party in 2017. Regression of local COVID-19 fatality shares (fatalities cumulative up to October 2021) on the share of those who voted for extremist parties in 2017 (controlling for local pre-COVID-19 municipality age-structure) yields a coefficient of 0.02 with p-value=0.77.

Figure A.3: Checking Survival Bias - Populist Government



Note: The figure shows simple correlations between the local COVID-19 fatality shares (fatalities cumulative up to October 2021) and the share of those who voted for the populist government in 2017. Regression of local COVID-19 fatality shares on the share of those who voted for the populist government in 2017 (controlling for pre-COVID-19 municipality age-structure) yields a coefficient of 0.01 with p-value=0.74.

Table A.3: Post-COVID-19 Election Results - October 2021

	Election Data			Election Data PAQ Subset			PAQ Data		
	EXT	GOV	DEM	EXT	GOV	DEM	EXT	GOV	DEM
Std Cumu COVID	−0.001	0.001	−0.002	−0.001	0.001	0.000	0.023	−0.017	0.022
	(0.001)	(0.002)	(0.003)	(0.001)	(0.002)	(0.002)	(0.028)	(0.034)	(0.020)
Unemployment %	0.006**	−0.004*	0.002	0.006**	−0.004*	0.002	0.038	−0.014	0.003
	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.033)	(0.039)	(0.018)
Obs.	410	410	410	304	304	304	1,528	1,528	1,528
Nr. of Clusters	205	205	205	152	152	152	152	152	152
Mean of Y	0.169	0.361	0.380	0.170	0.362	0.378	0.179	0.394	0.282

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$

Note: Regressions specifications correspond to Equation 1 estimated at the individual level (survey data) or at the municipality level (election data). Weighted by municipality population. Standard errors are clustered at the municipality level. The first three columns cover all Czech municipalities (except Prague), the second three columns cover the subset of municipalities we observe in the survey data. The first six columns use administrative election data, the last three columns use the survey data. The municipality-level regressions using administrative election data are weighted by the pre-COVID-19 municipality population. To use a similar weighting scheme for comparability purposes, survey-based regressions are weighted by municipality sample size (in March 2020).

Table A.4: Parliamentary Elections in 2017 Vote Shares and the COVID-19 Death Rate

	Cumu COVID
SPD	-0.207
	(0.279)
KSCM	0.436
	(0.297)
GOV	0.591**
	(0.146)
Obs.	205
Mean of Y	0.307

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$

Note: Regression of the cumulative COVID-19 fatality shares (up to October 2021) at the municipality level on the shares of votes for the far-right party (SPD), far-left party (KSCM), and for the populist government (GOV) in the Parliamentary Elections in 2017. Share of votes for the democratic opposition and parties that did not received any mandates form the baseline category. The regression controls for pre-COVID-19 municipality age-structure.

Abstrakt

Zabýváme se vlivem pandemie COVID-19 na politické preference během "vysokých" a "nízkých" fází pandemie. Zajímá nás vliv zdravotních a ekonomických následků pandemie měřených na úrovni osob a lokalit (obcí s rozšířenou působností). V souladu s literaturou naznačují naše odhady politickou odpovědnost vůdců za následky pandemie během jejích "vysokých" fází. Zjišťujeme však také, že tato politická odpovědnost je většinou krátkodobá a nepřetrvává ani do prvních voleb po skončení pandemie.

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