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When Distrust Goes Viral: Causal Effects of Covid-19 on European Political Attitudes

Abstract

To investigate how Covid-19 is shaping the way Europeans think about institutions, we conducted a large online survey experiment during the first wave of the epidemic (June). With a randomised survey ow we varied whether respondents are given Covid-related treatment questions first, before answering the outcome questions. We find that the crisis has severely undermined trust in politicians, the media, the EU and social welfare spending financed by taxes. This is mainly due to economic insecurity, but also because of health concerns. We also uncover a rallying effect around (scientific) expertise combined with populist policies losing ground.

JEL-Codes: D720, H510, H530, H550, O520, P520.

Keywords: Covid-19, institutional trust, political attitudes, online survey experiment, European Union, welfare, taxation, populism.

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1 Introduction

The Covid-19 shock set off an unprecedented doom loop between a severe health crisis and even graver economic repercussions. Government interventions to handle the outbreak and its aftermath first stopped public life in its tracks, and then entirely reshaped it. This has left us in a kind of 'new normal', in which changes to social interactions and labour conditions have radically changed for months or even years to come. The logical question then becomes if the crisis has also changed the way we think about our politicians and our institutions.

To answer this question, we conducted an online survey experiment in Italy, Spain, Germany and the Netherlands well into the first wave of the epidemic (June 2020), with over 2000 respondents per country. We find that trust in politics, the welfare state and the EU has taken a severe blow. This drop does not translate into increased support for populist parties, however, despite the waves of economic and cultural insecurity they were surfing before the Covid-19 crisis. Trust in (scientific) expertise on the other hand, comes out of the crisis reinforced.

We adopted a randomised survey flow design to arrive at these results. Respondents in our treatment group answered a set of Covid-19 related questions first, putting the crisis front and center in their minds, after which they were asked about their political attitudes. Their answers were then compared to the baseline group which received the two blocks in reversed order. By centering the attention of treated respondents squarely on the Covid-19 crisis in this way, we can identify the impact of the epidemic on their political attitudes.¹

Moreover, we can disentangle the impact of the various dimensions of the crisis by dividing our Covid-related treatment questions into three categories. The first category covers all health and social aspects of the crisis, with questions on social distancing, testing and exposure to the virus. The second category focuses on economic concerns with questions on job security, future opportunities, and consequences for local economies. The third category tackles perceptions of the crisis as a conflict against an invisible enemy, asking about the importance of national unity and solidarity to navigate the crisis. Combining these categories, we construct three priming conditions: a 'Health' condition, a 'Health & Economic' condition, and a 'Health & Conflict' condition, each presented to one third of the overall treatment group. This design allows us to pinpoint the different impact of the economic and conflict dimensions of the crisis, in addition to the health

¹See Alesina et al. (2018) for another example of the use of this strategy of randomising the order of survey blocks.

dimension. We do so by comparing responses under each of these conditions with those provided in the baseline.²

Our results can be thought of as two sides of the same coin. Starting with the downside, the crisis seems to have severely undermined trust in politicians, the media and the EU. The perceived benefits and efficacy of the EU, as well as the attachment to the European project, also fall. On the policy side, we find that support for financing the welfare state with taxes is negatively affected. This holds across all surveyed expenditure categories – poverty alleviation, health expenditure, unemployment benefits and pensions – and coincides with a higher reported dissatisfaction with the general tax burden.³

Similar bolts of 'disillusion' have occurred before, often in the wake of natural disasters or economic shocks which will always overwhelm political institutions to some degree. The Covid-19 crisis certainly seems no exception here. Clearly citizens expected their institutions to be better prepared for such a shock, and better at managing its fallout. Interestingly, this is not just an economic story. Two thirds of our respondents did not receive priming questions on the economic aspects of the crisis yet also report significant levels of distrust. When we add priming questions on job security or economic opportunities, however, respondents are even more disappointed in their political institutions.

On the upside, we find that *incumbent* governments manage to somewhat stand their ground. The group of respondents that only received health-related priming questions even show increased support for the parties in power. Moreover, support for scientists and expertise shoots up, especially among respondents who received priming questions framing the crisis as a conflict. Both results suggest a second effect is at play, often called 'rallying around the flag', where citizens unite around a common cause and put their shoulders under any competent crisis response. We furthermore find evidence that typical 'populist' attitudes have weakened, both in terms of support for a strong leader to deal with a crisis, and the preference to let the 'people' make the most important policy decisions instead of politicians. Support for populist parties is, if anything, unaffected.

All in all, competent leadership and expertise seem to retain some support when focusing on the health and national unity dimensions of the crisis. When the economic fallout is brought to mind, however, the trust relationship between citizens and political

²The economic and conflict categories by themselves may already trigger health related elements of the crisis. Explicitly activating the health dimension in all three conditions allows us to take the health component as fixed and to identify the *additional* impact of the other two.

³In the Appendix, we show that the negative effects on trust and welfare support are attenuated among treated individuals more concerned about the pandemic and more compliant with anti-Covid-19 measures. We do not find any relevant heterogeneity when looking at individual characteristics, i.e. gender, age, education and income (results available on request).

institutions takes a severe hit across the board.

These findings suggests that we may have reached a critical juncture, with the crisis potentially pushing our societies onto a different path. Much will depend on the way governments manage the economic recovery and a possible resurgence of the virus in the months and years to come. Our results certainly show that this will not be easy. Exactly when the need for social welfare increases, citizens' confidence in political institutions is undercut. At the time the response to the global pandemic requires the intervention of international institutions, citizens are distrustful of the EU. This misalignment between the state of the world and the political preferences of individuals opens up a range of possible scenarios, certainly more complex and difficult for governments to manage.

It will hence be interesting to see if the rising demand for competence that the survey uncovers, can be met in the future, or whether the 'disillusion' effect of the crisis is eventually channelled in renewed, or even bolstered support for populist parties. In this sense, a new fault line in the political arena may be opening up, setting simple policy solutions against the complexity of nuanced and competent approaches.

Related Literature

Our work first of all contributes to the small literature discussing the effect of the Covid-19 crisis on trust and political attitudes. Our main innovation is to study the causal effect of the crisis, by providing experimental evidence on a comprehensive set of political attitudes across several countries. We also tackle the mechanisms behind this effect with our experimental design. Previous studies with a similar scope were largely based on correlational evidence, whilst experiments were so far only used to study a specific question in a one-country context.

More specifically, Brück et al. (2020) find that those who have had contact with sick people and are unemployed exhibit lower trust in people and institutions. Bol et al. (2020), suggest lockdowns can boost support for incumbent parties and satisfaction with democracy. Bækgaard et al. (2020) arrive at similar conclusions based on a Danish survey. Our treatment effects also suggest such a 'rallying' effect is at play, yet our 'Health & Economic' condition shows it can easily be crowded out by the economic fallout of the crisis. This suggests the lockdown rally was temporary, and tapered out as more material consequences of the crisis manifested itself.

Amat et al. (2020) find that having an infected relative or friend boosts the preference for technocratic government and competent management. They also find that the crisis has eroded political trust and democratic preferences, as well as increased support

for authoritarian emergency measures and strong leadership. Whilst the trust and competence results are in line with our experimental treatment effects, we find the inverse when it comes to populist attitudes.

Foremny et al. (2020) implement two information treatments on the Covid-19 fatality rate on a pool of 1000 respondents in Spain in early April. Results suggest that preferences for health care expenditures have almost doubled. Similarly, Rees-Jones et al. (2020) find that demand for social safety nets have increased since the outbreak of the epidemic. Our heterogeneity analyses are in line with this finding, showing that those concerned about the virus or those who have contracted it, would like to spend more taxes to finance health care.

Second, and moving beyond the specific work on the Covid-19 crisis, our focus also overlaps with the literature studying the effect of pandemics on institutional trust and political preferences in general. Aksoy et al. (2020) find that epidemic exposure in an individual's impressionable years has a persistent negative effect on confidence in political institutions and leaders. Our findings are similar, although we also uncover a sizeable effect of economic insecurity related to the crisis. Importantly, since Aksoy et al. (2020) show that pandemic exposure during one's impressionable years leads to persistent effects on trust, the shocks we report can be lasting.⁴

The 'rally around the flag' literature, thirdly, holds that approval rates for incumbents usually increase when a crisis is due to an external conflict, while they decrease when it is due to an economic downturn.⁵ The question is whether the Covid-19 pandemic exhibits both of these characteristics. It can be perceived as a natural catastrophe, as an external enemy to fight against, but also as an economic disaster (Fetzer et al., 2020) from which the government should have protected citizens. In line with this literature, we find that support for the incumbent is maintained or even increases in the 'Health' and 'Health and Conflict' conditions, while it collapses in the 'Health & Economic' condition.

Since the economic effects of the pandemic indeed seem to play a crucial role, fourthly, our work is close to the literature documenting dissatisfaction with the political establishment during severe economic crises. Stevenson and Wolfers (2011) document an enormous loss of trust in US political institutions in the aftermath of the Great Recession. Frieden (2016) observes increased dissatisfaction with EU institutions over the

⁴Eichengreen et al. (2021) show that individuals exposed to epidemics during their impressionable years are less likely to trust scientists. Our finding that treated individuals show remarkably higher support for (scientific) expertise shows that the effect of a global pandemic might differ from that of local epidemics in this respect.

⁵See, among others, Hetherington and Nelson (2003), Gibler et al. (2012) and Ariely (2017), and the literature therein.

course of the 2008-2012 crisis (see also Dustmann et al. (2017), Hernández and Kriesi (2016); Guiso et al. (2020); Margalit (2019)). Algan et al. (2017) uncover a strong relationship between economic insecurity and populist voting in Europe. We do not find clear evidence that the Covid-19 crisis strengthens the preference for populist parties, the association even becomes clearly negative in the 'Health and Economic' treatment.⁶

For a further extensive overview of the rapidly expanding body of work on the economics of Covid-19 in general, we refer to Brodeur et al. (2020), and the literature therein.

2 The Survey

We hired the survey company 'Respondi' to simultaneously distribute the link to our survey in Germany, Italy, the Netherlands and Spain in the first two weeks of June 2020.⁷ We collected data from a random sample of adults (above 17 and under 70 years of age) exceeding 2000 individuals per country (see Appendix C.1 for details).⁸ We aimed at representativeness of the samples by age, geographic area of residence and gender, and targeted a distribution of disposable equivalent household income as close as possible to the one available in Eurostat.⁹ The English questionnaire (link in Appendix A) was translated by the native-speaking authors, except for the Spanish version which was instead translated by Respondi, and was administered in the local language (links to the local surveys in Appendix A).

The survey is structured as follows:

Background information Gender, age, marital status, household size (number of adults and number of children), household monthly disposable income.

Political attitudes block (outcome questions) We asked respondents about their political attitudes, grouped into four different dimensions:¹⁰

 $^{^6}$ As mentioned above, the populist economic recipe seems to have lost its specific appeal when it comes to Covid-19, possibly because the incompetence of some populist leaders became apparent during the crisis.

⁷https://www.respondi.com/EN/

⁸We are a priori able to detect a minimum effect MDE=0.12 on standardised outcome measures at $\alpha = 0.05$ and power $\pi = 0.8$ in within-country analyses.

⁹EU-SILC: https://ec.europa.eu/eurostat/web/main/home

¹⁰This paper discusses a selection of our outcome variables, leaving the remaining to companion papers. A link to the complete list of the outcome questions can be found in the questionnaire reported in Appendix A.

Institutional trust Trust in politicians, trust in the government, trust in science, trust in the European Union, trust in the media.

Attitudes towards the European Union We elicit a incentivised measure of support for the European Union, ¹¹ perceived benefit of European Union membership, perceived efficacy of the European Union, hypothetical voting intentions in a "Leave the EU" referendum, sense of belonging to Europe.

Voting and political preferences Hypothetical voting intentions (used to classify respondents as supporting incumbent governments and populist parties), demand for a strong leader, demand for privacy protection, demand for more direct democracy ('power to the people'), demand for media freedom.

Taxation and the welfare state We elicit attitudes towards levying taxes to finance the welfare state. In particular we analyze approval of tax-financed poverty alleviation, levying taxes to provide public health care, to ensure adequate unemployment benefits and to provide a reasonable standard of living for the elderly. We also elicit perceived excessiveness of overall and own fiscal burden.

Covid-19 block (priming questions) We administered a range of questions regarding the Covid-19 epidemic and its consequences, which are not part of our outcome analysis but used to construct our experimental interventions. These questions are divided into three categories:

Health We ask about the basic day-to-day experience of the epidemic, e.g. which of the commonly recommended behaviours to contain the spread respondents have adopted (e.g. social distancing, disinfection, testing), whether they had Covid-19 cases among their acquaintances and family members, and whether they were concerned for their health and for that of those around them.

Economic We elicit perceived economic consequences (for oneself and the whole of society) of the epidemic, e.g. whether respondents were impacted themselves in terms of job loss and future job opportunities.

Conflict We ask about perceptions of the Covid-19 epidemic as a conflict against an invisible enemy, mimicking the rhetoric often used in relation to the epidemic and emphasising the explicit need for social solidarity in winning a 'war against an invisible enemy'.

¹¹Similar to Dellavigna et al. (2017) we ask respondents to invest time, here by reading a pro-European text. For a detailed description of this incentivised measure see Appendix B.

Further background information Highest educational attainment, media information sources, employment status, immigration background, political beliefs and turnout at the last election.

3 Experimental Design and empirical strategy

Our design consists of a Baseline condition in which the respondents provide their unprimed political attitudes before answering Covid-related questions. In the COVID-FIRST condition inversely, respondents provide their political attitudes *after* receiving Covid-related questions which activate crisis-awareness.

As explained in Section 2, the range of these priming questions regarding the Covid-19 epidemic fit into three categories: a 'health', 'economic' and 'conflict' category. Using these categories, we divide the COVIDFIRST condition into three mutually exclusive groups to delve deeper into the different aspects of the epidemic. A first group only receives the health category questions, and is hence placed in a 'Health' sub-condition. A second group, in the 'Health & Economic' sub-condition, receives the economic category of questions in addition to the health category questions. Finally, a third group, in the 'Health & Conflict' sub-condition, receives the conflict category of questions in addition to the health category questions.

This experimental design is summarised in Table 1.¹²

¹²The same Covid-19 sub-conditions are also introduced in the Baseline, allowing us to perform the placebo tests reported in Appendix E.3.

Table 1: Summary of the experimental design with survey flow randomization

Baseline COVIDFIRST

Background information

Political attitudes block (outcomes)

Covid-19 block
Presented with one of:
Health
Health & Economic
Health & Conflict

Further background information

Background information

Covid-19 block

Presented with one of:

Health

Health & Economic

Health & Conflict

Political attitudes block (outcomes)

Further background information

The Covid-19 crisis is primarily a health crisis, but also affects the economy and society as a whole. For this reason, our economic and conflict category questions may trigger health-related elements in respondents' mind as well. Our choice to include the health category questions in all three conditions allows us to disentangle these. By activating the health dimension in all conditions we take the health component as fixed and cleanly identify the impact of the economic and conflict dimensions. A design where all three dimensions would be assigned exclusive groups of respondents would not achieve this.

In sum, we compare the responses from our 'Health', 'Health & Economic' and 'Health & Conflict' conditions with those from the Baseline condition as follows, with T taking values

$$T = \begin{cases} 0 & if \quad COVIDFIRST = 0 \\ 1 & if \quad COVIDFIRST = 1 \quad and \quad \text{`Health' condition} \\ 2 & if \quad COVIDFIRST = 1 \quad and \quad \text{`Health \& Economic' condition} \\ 3 & if \quad COVIDFIRST = 1 \quad and \quad \text{`Health & Conflict' condition}. \end{cases} \tag{1}$$

We then estimate the following statistical model via OLS regression

$$Y = \beta_0 + \beta_1 T + \beta_2 X + \beta_3 W + \beta_4 \kappa + \varepsilon, \tag{2}$$

where Y is the vector of answers from the socio-political attitudes block, T is a condition indicator as in Equation (1), X and W are respectively vectors of individual and regional controls, and κ denotes country fixed effects. We cluster the standard errors at the finest level available for each country. To ease the interpretation of our results, all outcome variables have been standardised with respect to the outcomes in the Baseline condition. All regressions control for gender, age, employment status, education, immigrant status, family status and number of family members, equivalent household income, and a dummy indicating the position of the question we use to get a behavioural (incentivised) measure of support for the European Union (see Appendix E.1 for more details). Regional controls are the population size, life expectancy at birth, adult unemployment rate, per capita GDP and the per capita cumulated number of daily new Covid-19 cases. Appendix Table C2 shows that the randomization strategy is effective as there are no sizeable differences in these variables between individuals in the Baseline groups and the COVIDFIRST groups.

4 Results

We now report a graphical analysis of the estimates of model (2). The tables are reported in Appendix C.3.¹⁶ The analysis is organized around four main outcomes blocks: institutional trust, attitudes towards the European Union, voting & political preferences, and taxation & the welfare state.¹⁷ In the figures below we present the estimated treatment effect on each outcome variable and the associated confidence intervals, relative to the Baseline. In the left panel of each figure, we compare the responses of the overall COVIDFIRST treatment group (pooling all three conditions) to those of the overall Baseline group. In the right panel we then disentangle this pooled effect across our 'Health' (H), 'Health & Economic' (H+E) and 'Health & Economic' (H+C) conditions. Our main results are generally similar across all four countries.¹⁸

 $^{^{13}}$ NUTS-3 for Italy and Germany and NUTS-2 for Spain and the Netherlands. Our results are unchanged by clustering at different levels.

¹⁴Regional data was collected from Eurostat for 2017, Covid-19 cases from the Department of Civil Protection (Italy), the Robert Koch Institute (Germany), National Institute for Public Health (The Netherlands), and the Ministry of Health (Spain).

¹⁵An exception is the covid-19 incidence variable, although the difference is small in terms of magnitude. We control for this variable in all regressions, and adding or removing this control does not affect our findings which resolves this concern.

 $^{^{16}}$ We ran all of our tests without covariates and obtain the same results in all cases. For the sake of brevity we do not report them here.

¹⁷Appendix E.4 shows that our results survive correction for multiple hypotheses.

¹⁸See Section 4.5 and Appendix C.2 for our country-specific analysis.

4.1 The impact of Covid-19 on trusting attitudes

Figure 1 reports the point estimates and the confidence intervals from our analysis of institutional trust: trust in the media, trust in the national government, trust in politicians, trust in the European Union and trust in science.

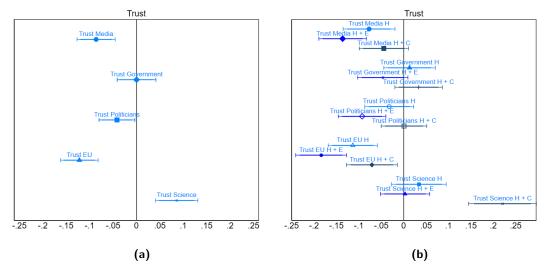


Figure 1: Trust attitudes

The figure displays the aggregate impact of answering questions about Covid-19 on respondents' institutional trust attitudes (Panel a), and the different impact of the 'Health', 'Health & Economic' and 'Health & Conflict' conditions (Panel b). The figure also displays 95% (delimited by vertical bars) and 90% (bold line) confidence intervals.

As shown in Panel (a) of Figure 1, trusting attitudes drop considerably among respondents who have been primed with Covid-related questions. Trust in the media drops -8.6% (p<0.01) of the Baseline's standard deviation, whilst trust in politicians drops -4.1% (p=0.03) and trust in the EU drops -12% (p<0.01).¹⁹ These results are intuitive and consistent with the literature. All crises, from natural disasters to economic shocks, will overwhelm governing institutions to some degree. In the aftermath of such events, a sense of disappointment and disillusion causes citizens to blame their governing institutions, and possibly the whole political system, for not having protected them. The overall consequence is a generalized loss of trust in these institutions.

On the other hand, and as also shown in Panel (a) on the left of Figure 1, trust in experts and science goes up (+8.5%, p<0.01), while trust in the (incumbent) government remains stable. This suggests a second, 'rally around the flag' effect is at play, which works in the opposite direction of the 'disillusion' effect, described above. Precisely

¹⁹We will henceforth omit the reference group to enhance readability unless necessary due to changes in the specification.

because a crisis is an extraordinary event, citizens are more easily rallied around a common cause and are willing to put their shoulders under any kind of crisis response with enthusiasm, even with patriotism if the threat concerns the country as a whole. Again, the COVID-19 crisis fits perfectly: the pandemic was in fact mostly framed as a national rather than as a global struggle. Because national governments and especially experts were seen as actively (trying to) take on the brunt of the crisis, trust in those 'in charge' received a boost.

In Panel (b) of Figure 1 we branch out the pooled effects across our three conditions. We can see that the strongest effect is associated with the 'Health & Economic' condition, where point estimates are mostly negative and always significant at conventional levels. Trust in the media drops significantly in this case (-13.6%, p<0.01), as does trust in politicians (-9.2%, p<0.01) and trust in the European Union (-18.4%, p<0.01). These results indicate the 'disillusion' effect is in full swing when the economic consequences of the crisis are brought to mind, which should not come as a surprise. Events that fuel economic insecurity often have a strong negative impact on the trust citizens place in their institutions.

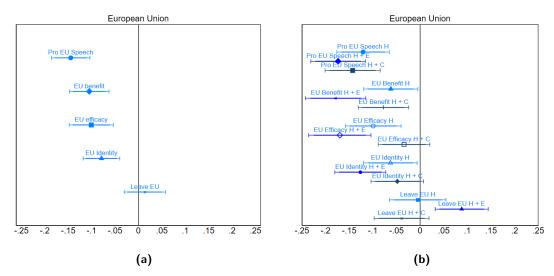
When focusing on the 'Health' condition in Panel (b), however, we see that although trust in the media (-7.7%, p<0.01) and the European Union (-11.3%, p<0.01) drop significantly still, trust in politicians and the government are less affected and even seem to hold their ground in the latter case. The 'disillusion' effect seems to shine through less in this case, and the 'rally around the flag' dynamics seem to work in favour of the incumbent government but less for politics as a whole, let alone for EU institutions. Similarly, when respondents are reminded of the 'Health & Conflinct' aspects of the crisis, trust in science and experts shoots up drastically (+22%, p<0.01). These findings offer further evidence for a 'rally around the flag' effect, centred on (scientific) expertise.

Overall, competent leadership and expertise seem to retain some support when focusing on the health and national unity dimensions of the crisis. In the economic arena, however, the trust relationship between citizens and political institutions has taken a severe blow.

4.2 The impact of Covid-19 on attitudes towards the European Union

Our results for the variables measuring attitudes towards the European Union are reported in Figure 2.

Figure 2: Attitudes towards the European Union



The figure displays the aggregate impact of answering questions about Covid-19 on respondents' attitudes towards the European Union (Panel a), and the different impact of 'Health', 'Health & Economic' and 'Health & Conflict' conditions (Panel b). The figure also displays 95% (delimited by vertical bars) and 90% (bold line) confidence intervals.

From Panel (a) of Figure 2, we see that the overall impact of the epidemic on attitudes towards the European Union is negative for almost all its measures. Firstly, it is evident that the strongest effect is recorded on our incentivised measure of support for the European Union (Pro EU Speech, -14.4%, p<0.01). Further, the perceived benefit of the European Union for one's country, its perceived efficacy in dealing with world problems, and the respondents' sense of identification with the European Union drop strongly and significantly (respectively -10.5%, p<0.01, -10%, p<0.01, and -7.9%, p<0.01). The only zero effect is recorded on the respondents' vote intentions on an hypothetical 'leave' referendum in their country.

In Panel (b) we again recognise that the strongest effect is associated with the 'Health & Economic' condition: the point estimates are all negative with magnitudes around 15% of the Baseline group's standard deviation (all p<0.01), including our behavioural measure of support for the European Union (Pro EU Speech). Noticeably, 'leave' voting intentions record an increase in response to the economic condition (+8.8%, p<0.01). The impact of the 'Health' condition (H) is in general negative as well, with magnitudes between 5% and 10% and significant, except for 'leave' voting intentions which are unaffected. The 'Health & Conflict' condition negatively impacts our incentivised measure of support for the European Union (-14.2%, p<0.01), the respondents' perception of benefit from the European Union membership (-7.7%, p<0.01) and their sense of European identity (-4.8%, p=0.09).

All of these results can be interpreted as further expressions of the 'disillusion' effect. European institutions were clearly perceived as incapable of managing the fallout of the crisis. This is true for all dimensions of the crisis, but especially when it comes to economic concerns as in Section 4.1. Perhaps citizens had high hopes of a supranational coordinated response to the pandemic, which at the time of our survey was still underway. It remains to be seen whether the EU Recovery Fund and other initiatives set in motion over the summer of 2020 will be seen as sufficient.

4.3 The impact of Covid-19 on voting intentions and political preferences

Figure 3 reports our results for the variables measuring voting intentions and attitudes towards populism. We classify our respondents in terms of their intentions to support parties in government or populist parties, and in terms of their demand for strong leaders and more direct democracy.

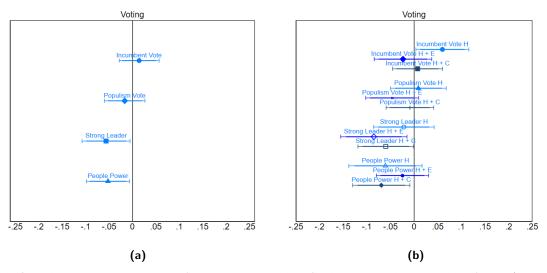


Figure 3: Political preferences

The figure displays the aggregate impact of answering questions about Covid-19 on respondents' political preferences (Panel a), and the different impact of the 'Health', 'Health & Economic' and 'Health & Conflict' conditions (Panel b). The figure also displays 95% (delimited by vertical bars) and 90% (bold line) confidence intervals.

In terms of the aggregate effect of exposure to the Covid-19 epidemic in Panel (a), we find evidence of retrenching populist attitudes: respondents are significantly less prone to express support for a strong leader and for bringing power back to the 'people' (respectively -5.6%, p=0.031 and -5.2%, p=0.025). This is a somewhat surprising result, as crises are often identified as fruitful breeding grounds for populist movements in earlier

work.

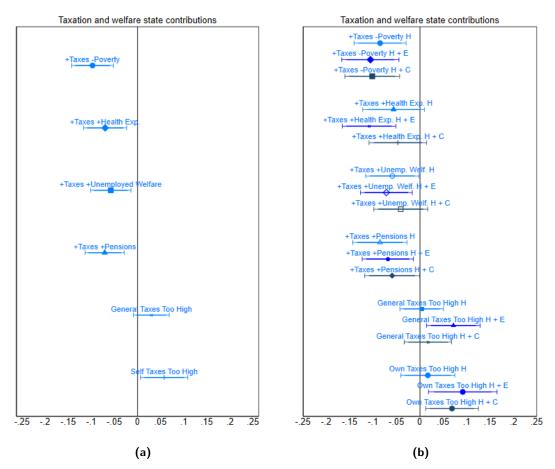
A possible explanation emerges from the more nuanced picture painted in Panel (b) of Figure 3. We can see that the significant retreat of populist attitudes in Panel (a) is driven by all three of our conditions. This again confirms that disillusion has not morphed into sheer anti-establishment sentiment, not even when activating economic insecurity. The 'Health & Economic' condition even shows a negative, though not significant, effect on voting intentions for populist parties (-4.6%, p=0.104). In a world where economic insecurity was singled out as one of the main drivers of populism pre-Covid-19, this is remarkable. We also uncover a positive and significant impact of the 'Health' condition on support for incumbent governments (+6%, p=0.037).

Bundling all of these findings, it seems the crisis has, if anything, sapped support for populist platforms and ring-fenced incumbent parties. Since incumbent parties in June 2020 were largely non-populist in the countries we study, the 'rally around the flag' effect can be an explanation also here. Additionally, populist leaders in the US, UK, or Brazil were widely seen as doing a worse job in fighting the virus than their centrist counterparts in the rest of the world at the time. Populist parties in opposition have also struggled to address the fallout of the pandemic in the countries we study, as their communication strategies were often overtaken by events on the ground.

4.4 The impact of Covid-19 on attitudes towards taxation and the welfare state

Our results for the variables measuring attitudes towards the welfare state, and to what extent it should be financed through taxation, are reported in Figure 4.

Figure 4: Demand for taxation and welfare state



The figure displays the aggregate impact of answering questions about Covid-19 on the respondents' demand for taxation and welfare state provision (Panel a), and the different impact of the 'Health', 'Health & Economic' and 'Health & Conflict' conditions (Panel b). The figure also displays 95% (delimited by vertical bars) and 90% (bold line) confidence intervals.

Figure 4 shows that the effect of our conditions on attitudes towards levying taxes to finance the welfare state is consistently negative. From Panel (a), people are less in favour of levying taxes to alleviate poverty, of providing public health care, and of organising income replacement during unemployment and in old age (respectively - 9.7%, -7%, -5.8% and -7.1%, all p<0.01). Further, perceptions of the general and one's own tax burden as excessive also increase (+3%, p=0.131 and +5.7%, p=0.027). A possible explanation could be the widespread disillusion we uncover in sections 4.1 and 4.2, leading to a decreased willingness to pay into the redistributive system since the political classes running these programs are trusted less.²⁰.

From Panel (b) we see that these effects are driven mostly by the 'Health' and the

 $^{^{20}\}mathrm{Daniele}$ and Geys (2015) provide evidence on such a mechanism

'Health & Economic' conditions, though significant effects are also found for the 'Health & Conflict' condition on poverty reduction, income replacement in old age and own tax burden. Noticeably, perceptions of own tax burden as excessive increase in responses to the 'Health & Economic' condition (+9.1%, p=0.014), and while not significant on aggregate, so do perceptions of the general tax burden as excessive (+7.1%, p=0.014). These results also suggest that *if* citizens are aware that a massive increase in public spending will be needed to salvage the crisis, they do not want this to be financed by taxation.

4.5 Additional analysis

While the analysis has so far focused on the entire sample, we report a detailed country analysis in Appendix C.2. Overall, the effects are quite similar across Germany, Italy and the Netherlands. Spain partially represents an exception as there is weaker evidence of the 'disillusion' effect (i.e. the trust decline is attenuated and there is no effect on taxation/welfare attitudes). A possible explanation is that the countervailing 'rally around the flag' effect was stronger in Spain. In line with this interpretation, the 'Health & Conflict' condition significantly fosters trust towards (scientific) expertise and national politicians among Spaniards, whilst this only holds for scientific expertise in the other countries.

Moreover, in Appendix D we focus on heterogeneity analyses along the dimensions of i) compliance with anti-pandemic policies; ii) health concerns and iii) exposure to the virus. We find that those who, during the treatment, declared a higher level of compliance with the lockdown measures seem to be less subject to the disillusion effect. They display higher trust in political institutions, and in the EU. They are also less likely to deem their tax burden as excessive. We also find that, once treated, those who declare higher concern about the risk of contracting the virus are more willing to pay taxes to fight poverty or to finance health care.

Finally, in Appendix E we report several relevant robustness tests to tackle possible confounds of the experimental design (Appendix E.1) and possible demand effects (Appendix E.2), and we also report the p-values corrected for multiple hypothesis testing (Appendix E.4).

5 Conclusions

In this paper we show that the Covid-19 crisis has had a causal effect on political attitudes. More specifically, people's views on their government, their politics, their institutions in general as well as the design of their welfare state seem to be severely affected. We uncover this causal effect by randomising the order in which we present our online survey questions: half of our respondents first received a block of questions activating their personal experience with the Covid-19 crisis, followed by a block of questions eliciting their political attitudes. Half of our respondents receive the blocks in reversed order. We then compare their answers.

When their attention is centered squarely on the Covid-19 crisis in this way, respondents lose confidence in the democratic system and in the European Union. They trust the media less, are more likely to view their tax burden as excessive and are also less willing to pay into the welfare state. At the same time, and this is certainly good news, confidence in scientific expertise increases and individuals declare themselves less attracted by a populist-type political project giving more power to the people or a strong political leader. Digging deeper into the mechanisms explaining these results, we find that much of the negative effects show up when individuals are primed with the economic consequences of the crisis. This signals their strong sensitivity regarding economic issues related to Covid-19. We also find that the pandemic has induced a 'rally around the flag' effect which however only partially mitigates the economic effect. The latter clearly prevails in negatively influencing the relationship between citizens and their political institutions.

When individuals are induced to focus on the bleak economic future that awaits them, they are disillusioned and suspicious of the political system's ability to offer the right answers. This is problematic precisely because the post-pandemic world will see considerable interventions of economic policies into the private sphere of citizens. Nations will come out of the crisis with huge public debt. Societies will be more unequal and governments will have to implement massive redistribution policies. Policies will have to be coordinated with other countries, causing an inevitable increase in the role of international institutions. If citizens' trust in their democratic institutions falls, the future appears highly unstable.

Of course, our results should first and foremost be interpreted as a shock, diverging from existing trends. Whether we have in fact uncovered a critical juncture setting these trends on an entirely different path, can only be ascertained by conducting followup waves of our survey experiment. In any case it will be interesting to see whether the rising demand for competent leaders and policies we uncover is met in the future, or whether the 'disillusion' effect our study also brings to the surface will eventually be channeled into renewed populist support if the opportunity is missed.

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Appendix

A Links to local language surveys

The local language surveys and the English translation can be found at the links below.

English translation: http://www.gianmarcodaniele.com/quest.html

Dutch: https://taxmpg.eu.qualtrics.com/jfe/form/SV_850cx81c4806tzT

German: https://taxmpg.eu.qualtrics.com/jfe/form/SV_5ouJ8nUBnj111Mp

Italian: https://taxmpg.eu.qualtrics.com/jfe/form/SV_5apXa5HwDkB55it

Spanish: https://taxmpg.eu.qualtrics.com/jfe/form/SV_0ln902bfxiBsH1r

B Incentivised willingness to support European integration

To better capture the epidemic's impact on the respondents' attitudes towards the European Union, we include an incentivised measure of their willingness to engage in an action explicitly framed as supportive of the European integration project. The respondents read that "For educational purposes, we are considering informing students about the importance of the European Union using real texts. We selected a speech given in front of the European Parliament promoting European integration." ²¹

We then ask the respondents whether they would be willing to read a five-minute long transcription of the speech and to give us their opinion about the suitability of the text for the purpose it was selected for. We thus provide a clear incentive to decline to respondents who are not willing to spend five minutes (it took on average approximately 20 minutes to complete the survey without reading the text) to read a pro-European Union text (see also Dellavigna et al. (2017)). We explicitly fixed the amount of time needed to read the speech in order to fix beliefs about the length of the task and the amount of time and effort needed to complete it. Further, the explicit reference to the educational usage of the text (in a Public Economics undergraduate course at the University of Stirling taught by one of the authors) serves the purpose of providing the respondents with a sense of consequentiality of the action. The identity of the speaker and the context in which the speech was given was not disclosed to the respondents at the time of choosing. We informed the respondents that their agreement or lack thereof will not affect their payment. In case of agreement, the respondents were told that they

²¹For an English transcription of the speech: https://www.elysee.fr/emmanuel-macron/2018/04/17/speech-by-emmanuel-macron-president-of-the-republic-at-european-parliament.en

would read and review the text only at the end of the survey.²²

We interpret the respondents' choice of (not) reading the text as (un) willingness to support the European integration, and not the rating provided: It might be that a respondent with positive attitudes towards the European integration might legitimately find the text unsuitable for the purpose and assign it a low rating. A non-trivial choice was whether to explicitly frame the action as supportive of European integration or whether to maintain a neutral wording. In the latter case, however, the interpretation of the agreement to read the text would have not been straightforward. As argued above, framing it as pro-integration allows for a combination of agreement to read and lowrating assigned to still be interpretable as supportive of the European integration. This would not have been the case with neutral wording, as a respondent antagonising the integration process could have agreed to read the text with the mere intent of assigning a low score. It can be argued that our incentivised measure of support for the European integration could have in such case been the rating distribution. Notice however that those choosing not to read the text would have been dropped out of the analysis and that the incentivisation would have been lost (it is costly to spend five more minutes to read but it is costless to assign the rating). We cannot completely exclude that the respondents might accept to read and then assign ratings without reading. The incidence of such behaviours is however likely to be orthogonal to our design and smaller than with neutral wording. Our choice moreover allows us to perform analyses allowing us to gauge the validity of the responses collected and of our incentivised measure.

B.1 The text agreement question: behavioural analyses

The analyses here presented follow the analytical framework outlined in Section 3 and confirm the validity of our behavioural measure of support for the EU. In order to obtain a more realistic picture, we trim the data by excluding from the following analyses the upper tail of the distribution of time spent reading text: the top 1%. These are respondents who spent half an hour or more on the text screen. The respondents spent on average 213 seconds (slightly short of 4 minutes) on the text screen, with little variation across conditions (Baseline: 204.56, SD=248.75; COVIDFIRST: 218.03, SD=258.04; Health: 217.57, SD=264.42; Economic: 213.72, SD=242.4; Conflict: 222.72, SD=266.34).

We use OLS analyses to look for differences in the amount of time spent reading the text across the conditions and the baseline. Differences in time spent on the text are mostly not significant at conventional levels, and where significant they are small

 $^{^{22}}$ For the experimental challenges posed by this question and how they are addressed, see Appendix E.1.

in magnitude (COVIDFIRST vs Baseline: $\beta=13.32$, SE=5.858; 'Health' vs Baseline: $\beta=10.84$, SE=8.115; 'Health & Economic' vs Baseline: $\beta=9.23$, SE=7.732; 'Health & Conflict' vs Baseline: $\beta=19.58$, SE=9.268). The largest recorded difference is that observed between COVIDFIRST and the Baseline: respondents in the former condition spent on average 13 seconds more on the text screen than respondents in the Baseline condition.

We moreover compare the distributions of the text ratings across conditions using two-sided Kolmogorov-Smirnov tests. The distributions are extremely similar in all cases: null hypothesis of equality of the populations cannot be rejected in three out of four comparisons (COVIDFIRST vs Baseline, p-value=0.118; Health vs Baseline, p-value=0.060; Economic vs Baseline, p-value=0.535; Conflict vs Baseline, p-value=0.867).

Finally, we investigate whether a relationship exists between the rating assigned to the text and the time spent reading it among those who chose to do so. An OLS regression reveals that respondents who assigned a greater rating also spent a significantly larger amount of time in seconds reading the text ($\beta = 0.000814$, SE=0.000151, p-value< 0.01).²³ Notice however that though precisely estimated, the coefficient is small: an additional 30 seconds increases the score by 0.02 points.

C Additional Figures and Tables

C.1 Sample size and balancing test

Tables C1 and C2 report respectively the sample size for each country and the balance of our sample across conditions.

Table C1: Sample size per country

Country	Sample size	Share of total
Germany Italy Netherlands	2161 obs. 2003 obs. 2071 obs.	26.24% $24.32%$ $25.15%$
Spain Total	2000 obs. 8235 obs.	$\frac{24.29\%}{100.00\%}$

²³Controls include gender, age groups, employment status, education, immigrant status, family status and number of family members, equivalised household income (coded into five quantiles), a dummy to define the position of the Macron Speech question (see Section E.1 for more details) and country fixed effects. Regional controls include population size, cumulated number of Covid-19 cases at the time of the survey, adult unemployment rate, life expectancy, and per capita GDP.

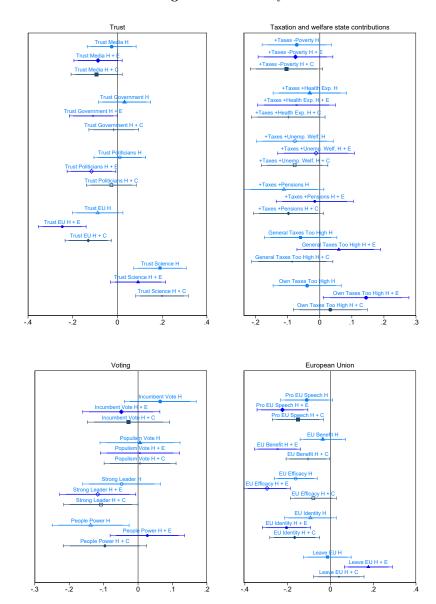
Table C2: Balancing Test

	Δ :	Δ:	Δ:	Δ:
Variables	Covidfirst-Baseline	Health-Baseline	Economic-Baseline	Conflict-Baseline
Unemployed	-0.012**	-0.012	-0.014*	-0.009
	(0.041)	(0.104)	(0.064)	(0.238)
Education	0.076**	0.083*	0.059	0.084*
	(0.029)	(0.065)	(0.187)	(0.058)
Native	-0.000	-0.002	0.003	-0.001
	(0.998)	(0.804)	(0.676)	(0.864)
Female	-0.018	-0.031**	-0.014	-0.008
	(0.127)	(0.039)	(0.355)	(0.574)
Age	-0.002	0.011	-0.009	-0.008
	(0.834)	(0.335)	(0.428)	(0.498)
Household size	0.032	0.017	0.051*	0.029
	(0.160)	(0.578)	(0.080)	(0.320)
HH income	-0.021	-0.015	-0.005	-0.042*
	(0.271)	(0.525)	(0.853)	(0.082)
Single	0.013	0.024*	0.006	0.010
	(0.233)	(0.092)	(0.692)	(0.488)
Population (x100k)	-0.906	-2.167	0.501	-1.053
	(0.389)	(0.110)	(0.714)	(0.442)
Life expectancy	-0.025	-0.015	-0.023	-0.036
	(0.318)	(0.640)	(0.468)	(0.258)
Unemp. $(\%15-64)$	0.151	0.107	0.136	0.212
	(0.297)	(0.564)	(0.466)	(0.257)
GDP pc	-266.847	-405.930	-39.507	-355.277
	(0.321)	(0.239)	(0.909)	(0.304)
Cum. C-19 cases $(x100k)$	-0.620*	-0.954**	-0.091	-0.815*
	(0.077)	(0.035)	(0.845)	(0.072)
Observations	8,235	4,571	4,572	4,570

Sample balance table displaying the difference in means across conditions for all our observables, and its significance: * p < 0.1; *** p < 0.05; *** p < 0.01

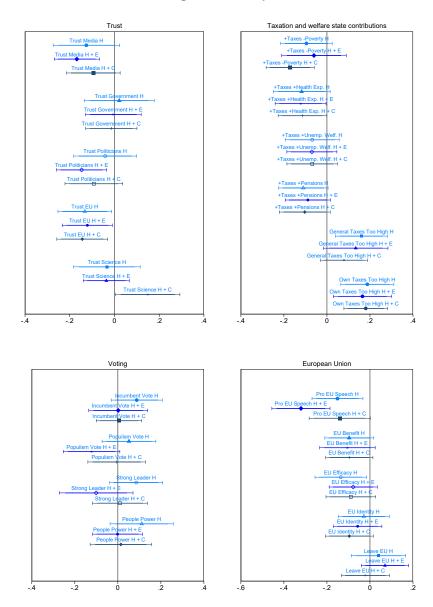
C.2 Results by country

Figure C.1: Germany



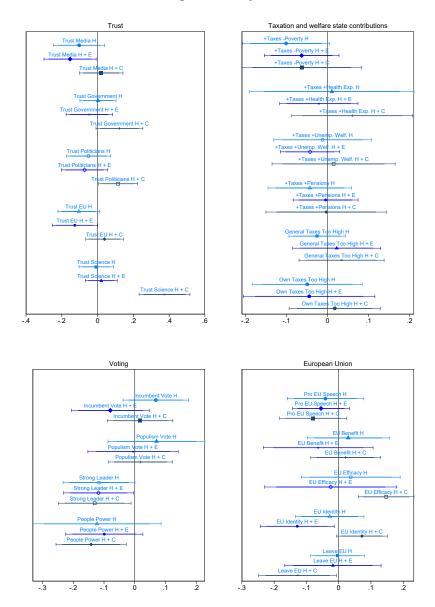
The figures display the impact of the 'Health', 'Health & Economic' and 'Health & Conflict' conditions on our set of outcomes in Germany, together with 95% (delimited by vertical bars) and 90% (bold line) confidence intervals.

Figure C.2: Italy



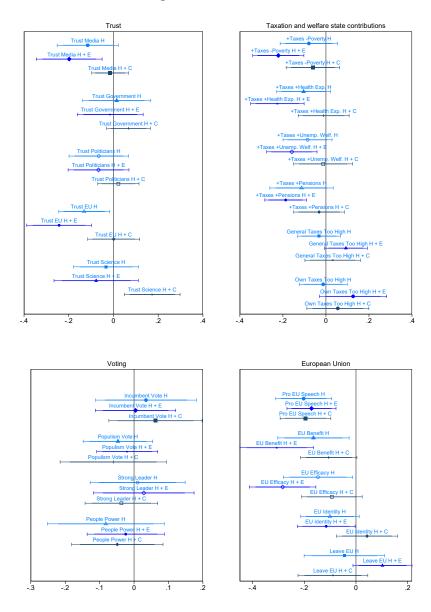
The figures display the impact of the 'Health', 'Health & Economic' and 'Health & Conflict' conditions on our set of outcomes in Italy, together with 95% (delimited by vertical bars) and 90% (bold line) confidence intervals.

Figure C.3: Spain



The figures display the impact of the 'Health', 'Health & Economic' and 'Health & Conflict' conditions on our set of outcomes in Spain, together with 95% (delimited by vertical bars) and 90% (bold line) confidence intervals.

Figure C.4: Netherlands



The figures display the impact of the 'Health', 'Health & Economic' and 'Health & Conflict' conditions on our set of outcomes in the Netherlands, together with 95% (delimited by vertical bars) and 90% (bold line) confidence intervals.

C.3 Pooled analyses: COVIDFIRST vs Baseline

Table C1: Effects of Covidfirst vs Baseline - Trust outcomes

	(1)	(2)	(3)	(4)	(5)
	Trust	Trust	Trust	Trust	Trust
	Media	Government	Politicians	EU	Science
Covidfirst	-0.0861***	8.34e-05	-0.0417**	-0.122***	0.0858***
	(0.0208)	(0.0210)	(0.0195)	(0.0204)	(0.0230)
Observations	8,235	8,235	8,235	8,235	8,235
R-squared	0.146	0.127	0.186	0.029	0.049

The table presents estimates from OLS models. The outcome variables are stated in the first row. The sample compares the COVIDFIRST condition to the Baseline group. Controls include gender, age groups, employment status, education, immigrant status, family status and number of family members, equivalised household income (coded into five quantiles), a dummy to define the position of the Macron Speech question (see Section E.1 for more details) and country fixed effects. All controls are omitted to enhance readability. Robust standard errors clustered at the province level are in parentheses. * p < 0.1; ** p < 0.05; *** p < 0.01

Table C2: Effects of Covidfirst vs Baseline - EU attitudes

	(1)	(2)	(3)	(4)	(5)
	Pro EU Speech	EU Benefit	EU Efficacy	Leave EU	EU Identity
Covidfirst	-0.145***	-0.105***	-0.101***	0.0135	-0.0790***
	(0.0208)	(0.0215)	(0.0239)	(0.0224)	(0.0199)
Observations	8,235	8,235	8,235	8,235	8,235
R-squared	0.064	0.069	0.060	0.043	0.038

The table presents estimates from OLS models. The outcome variables are stated in the first row. The sample compares the COVIDFIRST condition to the Baseline group. Controls include gender, age groups, employment status, education, immigrant status, family status and number of family members, equivalised household income (coded into five quantiles), a dummy to define the position of the Macron Speech question (see Section E.1 for more details) and country fixed effects. All controls are omitted to enhance readability. Robust standard errors clustered at the province level are in parentheses. * p < 0.1; *** p < 0.05; **** p < 0.01

Table C3: Effects of Covidfirst vs Baseline - Voting outcomes

	(1)	(2)	(3)	(4)
	Incumbent Vote	Populism Vote	Strong Leader	People Power
Covidfirst	0.0142	-0.0167	-0.0564**	-0.0523**
	(0.0217)	(0.0220)	(0.0261)	(0.0235)
Observations	8,235	8,235	8,235	8,235
R-squared	0,025	0.088	0.028	0.041

The table presents estimates from OLS models. The outcome variables are stated in the first row. The sample compares the COVIDFIRST condition to the Baseline group. Controls include gender, age groups, employment status, education, immigrant status, family status and number of family members, equivalised household income (coded into five quantiles), a dummy to define the position of the Macron Speech question (see Section E.1 for more details) and country fixed effects. All controls are omitted to enhance readability. Robust standard errors clustered at the province level are in parentheses. * p < 0.1; *** p < 0.05; **** p < 0.01

Table C4: Effects of Covidfirst vs Baseline - Taxation

	(1)	(2)	(3)	(4)	(5)	(6)
	Tax Poverty	Tax Health Exp	Tax Unemp Welf	Tax Pensions	General Tax	Own Tax
Covidfirst	-0.0977*** (0.0229)	-0.0703*** (0.0238)	-0.0581*** (0.0223)	-0.0712*** (0.0215)	0.0297 (0.0197)	0.0574** (0.0260)
Observations	8,235	8,235	8,235	8,235	8,235	8,235
R-squared	0.017	0.052	0.055	0.047	0.126	0.107

The table presents estimates from OLS models. The outcome variables are stated in the first row. The sample compares the COVIDFIRST condition to the Baseline group. Controls include gender, age groups, employment status, education, immigrant status, family status and number of family members, equivalised household income (coded into five quantiles), a dummy to define the position of the Macron Speech question (see Section E.1 for more details) and country fixed effects. All controls are omitted to enhance readability. Robust standard errors clustered at the province level are in parentheses. * p < 0.1; ** p < 0.05; *** p < 0.01

C.4 Condition comparisons

C.4.1 'Health' vs Baseline

Table C5: Effects of Health vs the Baseline: Trust outcomes

-	(1)	(2)	(3)	(4)	(5)
	Trust	Trust	Trust	Trust	Trust
	Media	Government	Politicians	EU	Science
Health	-0.0772*** (0.0294)	0.0130 (0.0292)	-0.0324 (0.0278)	-0.113*** (0.0278)	0.0339 (0.0310)
Observations	4,571	4,571	4,571	4,571	4,571
R-squared	0.154	0.141	0.194	0.034	0.056

The table presents estimates from OLS models. The outcome variables are stated in the first row. The sample compares the Health condition to the Baseline group. Controls include gender, age groups, employment status, education, immigrant status, family status and number of family members, equivalised household income (coded into five quantiles), a dummy to define the position of the Macron Speech question (see Section E.1 for more details) and country fixed effects. All controls are omitted to enhance readability. Robust standard errors clustered at the province level are in parentheses. * p < 0.1; ** p < 0.05; **** p < 0.01

Table C6: Effects of Health vs the Baseline: EU attitudes

	(1)	(2)	(3)	(4)	(5)
	Pro EU Speech	EU Benefit	EU Efficacy	Leave EU	EU Identity
Health	-0.121*** (0.0282)	-0.0620** (0.0291)	-0.0992*** (0.0299)	-0.00518 (0.0303)	-0.0630** (0.0288)
Observations	4,571	4,571	4,571	4,571	4,571
R-squared	0.081	0.071	0.061	0.043	0.045

The table presents estimates from OLS models. The outcome variables are stated in the first row. The sample compares the Health condition to the Baseline group. Controls include gender, age groups, employment status, education, immigrant status, family status and number of family members, equivalised household income (coded into five quantiles), a dummy to define the position of the Macron Speech question (see Section E.1 for more details) and country fixed effects. All controls are omitted to enhance readability. Robust standard errors clustered at the province level are in parentheses. * p < 0.1; *** p < 0.05; **** p < 0.01

Table C7: Effects of Health vs the Baseline: Voting outcomes

	(1)	(2)	(3)	(4)
	Incumbent Vote	Populism Vote	Strong Leader	People Power
Health	0.0597** (0.0285)	0.00886 (0.0299)	-0.0217 (0.0326)	-0.0608 (0.0394)
Observations	4,571	4,571	4,571	4,571
R-squared	0.034	0.099	0.031	0.041

The table presents estimates from OLS models. The outcome variables are stated in the first row. The sample compares the Health condition to the Baseline group. Controls include gender, age groups, employment status, education, immigrant status, family status and number of family members, equivalised household income (coded into five quantiles), a dummy to define the position of the Macron Speech question (see Section E.1 for more details) and country fixed effects. All controls are omitted to enhance readability. Robust standard errors clustered at the province level are in parentheses. * p < 0.1; *** p < 0.05; **** p < 0.01

Table C8: Effects of Health vs the Baseline: Taxation

	(1)	(2)	(3)	(4)	(5)	(6)
	Tax Poverty	Tax Health Exp	Tax Unemp Welf	Tax Pensions	General Tax	Own Tax
Health	-0.0853***	-0.0565*	-0.0590**	-0.0855***	0.00377	0.0169
	(0.0283)	(0.0335)	(0.0290)	(0.0295)	(0.0237)	(0.0293)
Observations R-squared	4,571 0.022	4,571 0.048	4,571 0.059	$4,571 \\ 0.045$	4,571 0.127	4,571 0.104

The table presents estimates from OLS models. The outcome variables are stated in the first row. The sample compares the Health condition to the Baseline group. Controls include gender, age groups, employment status, education, immigrant status, family status and number of family members, equivalised household income (coded into five quantiles), a dummy to define the position of the Macron Speech question (see Section E.1 for more details) and country fixed effects. All controls are omitted to enhance readability. Robust standard errors clustered at the province level are in parentheses. * p < 0.1; *** p < 0.05; **** p < 0.01

C.4.2 'Health & Economic' vs Baseline

Table C9: Effects of 'Health & Economic' vs Baseline: Trust outcomes

	(1)	(2)	(3)	(4)	(5)
	Trust	Trust	Trust	Trust	Trust
	Media	Government	Politicians	EU	Science
Economic	-0.136***	-0.0466	-0.0927***	-0.184***	0.00302
	(0.0270)	(0.0285)	(0.0270)	(0.0289)	(0.0280)
Observations	4,572	4,572	4,572	4,572	4,572
R-squared	0.152	0.133	0.194	0.034	0.053

The table presents estimates from OLS models. The outcome variables are stated in the first row. The sample compares the Economic condition to the Health group. Controls include gender, age groups, employment status, education, immigrant status, family status and number of family members, equivalised household income (coded into five quantiles), a dummy to define the position of the Macron Speech question (see Section E.1 for more details) and country fixed effects. All controls are omitted to enhance readability. Robust standard errors clustered at the province level are in parentheses. * p < 0.1; *** p < 0.05; **** p < 0.01

Table C10: Effects of 'Health & Economic' vs Baseline: EU attitudes

	(1)	(2)	(3)	(4)	(5)
	Pro EU Speech	EU Benefit	EU Efficacy	Leave EU	EU Identity
Economic	-0.174*** (0.0293)	-0.179*** (0.0325)	-0.170*** (0.0336)	0.0879*** (0.0285)	-0.127*** (0.0275)
Observations	4,572	4,572	4,572	4,572	4,572
R-squared	0.064	0.070	0.059	0.042	0.044

The table presents estimates from OLS models. The outcome variables are stated in the first row. The sample compares the Economic condition to the Health group. Controls include gender, age groups, employment status, education, immigrant status, family status and number of family members, equivalised household income (coded into five quantiles), a dummy to define the position of the Macron Speech question (see Section E.1 for more details) and country fixed effects. All controls are omitted to enhance readability. Robust standard errors clustered at the province level are in parentheses. * p < 0.1; *** p < 0.05; **** p < 0.01

Table C11: Effects of 'Health & Economic' vs Baseline: Voting outcomes

	(1)	(2)	(3)	(4)
	Incumbent Vote	Populism Vote	Strong Leader	People Power
Economic	-0.0236 (0.0310)	-0.0464 (0.0285)	-0.0852** (0.0357)	-0.0249 (0.0281)
Observations	4,572	4,572	4,572	4,572
R-squared	0.024	0.084	0.025	0.048

The table presents estimates from OLS models. The outcome variables are stated in the first row. The sample compares the Economic condition to the Health group. Controls include gender, age groups, employment status, education, immigrant status, family status and number of family members, equivalised household income (coded into five quantiles), a dummy to define the position of the Macron Speech question (see Section E.1 for more details) and country fixed effects. All controls are omitted to enhance readability. Robust standard errors clustered at the province level are in parentheses. * p < 0.1; *** p < 0.05; **** p < 0.05

Table C12: Effects of 'Health & Economic' vs Baseline: Taxation

	(1)	(2)	(3)	(4)	(5)	(6)
	Tax Poverty	Tax Health Exp	Tax Unemp Welf	Tax Pensions	General Tax	Own Tax
Economic	-0.106*** (0.0311)	-0.109*** (0.0292)	-0.0718** (0.0282)	-0.0688** (0.0278)	0.0715** (0.0292)	0.0915** (0.0373)
Observations	4,572	4,572	4,572	4,572	4,572	4,572
R-squared	0.022	0.055	0.059	0.055	0.117	0.105

The table presents estimates from OLS models. The outcome variables are stated in the first row. The sample compares the Economic condition to the Health group. Controls include gender, age groups, employment status, education, immigrant status, family status and number of family members, equivalised household income (coded into five quantiles), a dummy to define the position of the Macron Speech question (see Section E.1 for more details) and country fixed effects. All controls are omitted to enhance readability. Robust standard errors clustered at the province level are in parentheses. * p < 0.1; ** p < 0.05; *** p < 0.01

C.4.3 'Health & Conflict' vs Baseline

Table C13: Effects of 'Health & Conflict' vs Baseline: Trust outcomes

	(1)	(2)	(3)	(4)	(5)
	Trust	Trust	Trust	Trust	Trust
	Media	Government	Politicians	EU	Science
Conflict	-0.0443 (0.0279)	0.0333 (0.0269)	0.000709 (0.0259)	-0.0709** (0.0288)	0.220*** (0.0385)
Observations	4,570	4,570	4,570	4,570	4,570
R-squared	0.143	0.125	0.184	0.034	0.062

The table presents estimates from OLS models. The outcome variables are stated in the first row. The sample compares the Conflict condition to the Health group. Controls include gender, age groups, employment status, education, immigrant status, family status and number of family members, equivalised household income (coded into five quantiles), a dummy to define the position of the Macron Speech question (see Section E.1 for more details) and country fixed effects. All controls are omitted to enhance readability. Robust standard errors clustered at the province level are in parentheses. * p < 0.1; *** p < 0.05; **** p < 0.01

Table C14: Effects of 'Health & Conflict' vs Baseline: EU attitudes

	(1)	(2)	(3)	(4)	(5)
	Pro EU Speech	EU Benefit	EU Efficacy	Leave EU	EU Identity
Conflict	-0.143*** (0.0297)	-0.0776*** (0.0272)	-0.0340 (0.0278)	-0.0393 (0.0295)	-0.0483* (0.0283)
Observations	4,570	4,570	4,570	4,570	4,570
R-squared	0.071	0.075	0.061	0.043	0.045

The table presents estimates from OLS models. The outcome variables are stated in the first row. The sample compares the Conflict condition to the Health group. Controls include gender, age groups, employment status, education, immigrant status, family status and number of family members, equivalised honome (coded into five quantiles), a dummy to define the position of the Macron Speech question (see Section E.1 for more details) and country fixed effects. All controls are omitted to enhance readability. Robust standard errors clustered at the province level are in parentheses. * p < 0.1; ** p < 0.05; *** p < 0.01

Table C15: Effects of 'Health & Conflict' vs Baseline: Voting outcomes

	(1)	(2)	(3)	(4)
	Incumbent Vote	Populism Vote	Strong Leader	People Power
Conflict	0.00727 (0.0269)	-0.00901 (0.0256)	-0.0601** (0.0299)	-0.0695** (0.0307)
Observations	4,570	4,570	4,570	4,570
R-squared	0.024	0.091	0.028	0.046

The table presents estimates from OLS models. The outcome variables are stated in the first row. The sample compares the Conflict condition to the Health group. Controls include gender, age groups, employment status, education, immigrant status, family status and number of family members, equivalised household income (coded into five quantiles), a dummy to define the position of the Macron Speech question (see Section E.1 for more details) and country fixed effects. All controls are omitted to enhance readability. Robust standard errors clustered at the province level are in parentheses. * p < 0.1; *** p < 0.05; **** p < 0.01

Table C16: Effects of 'Health & Conflict' vs Baseline: Taxation

	(1)	(2)	(3)	(4)	(5)	(6)
	Tax Poverty	Tax Health Exp	Tax Unemp Welf	Tax Pensions	General Tax	Own Tax
Conflict	-0.102*** (0.0298)	-0.0472 (0.0313)	-0.0411 (0.0293)	-0.0595** (0.0298)	0.0171 (0.0257)	0.0685** (0.0287)
Observations	4,570	4,570	4,570	4,570	4,570	4,570
R-squared	0.015	0.049	0.055	0.042	0.116	0.097

The table presents estimates from OLS models. The outcome variables are stated in the first row. The sample compares the Conflict condition to the Health group. Controls include gender, age groups, employment status, education, immigrant status, family status and number of family members, equivalised household income (coded into five quantiles), a dummy to define the position of the Macron Speech question (see Section E.1 for more details) and country fixed effects. All controls are omitted to enhance readability. Robust standard errors clustered at the province level are in parentheses. * p < 0.1; *** p < 0.05; **** p < 0.01

D Heterogeneity analysis: exposure to Covid-19 and compliance with lock-down rules

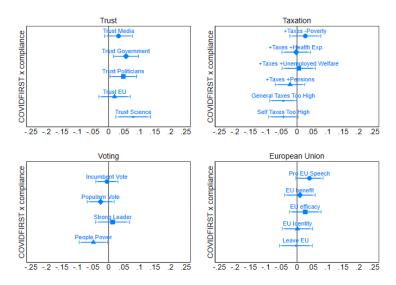
We now focus on the heterogeneous effects in regard to individuals' experiences with the Covid-19 19 and lockdown measures. These questions were by design asked to all the respondents in our study. We are interested in whether our findings are systematically heterogeneous with respect to individuals' experience with the Covid-19 epidemic.

We group these questions into three groups: i) Contracted: whether the respondents, someone in their family or acquaintances, has contracted the virus; ii) Compliance: the degree to which the individual complies with the lock-down laws, including whether the respondent perceived social distancing rules as being too strict, kept social distancing and wore a mask; and iii) Concerned: the degree to which the respondents are concerned with the epidemic, elicited as whether they tried to get or got tested for Covid-19 and as their self-reported level of concern about their health. We run a factor analysis on

all questions in each group, revealing the presence of a single main factor (i.e. all factor loadings exceed 0.61; eigenvalues: $\lambda_{Contr.} = 1.43$, $\lambda_{Comp.} = 1.42$, $\lambda_{Conc.} = 1.14$).

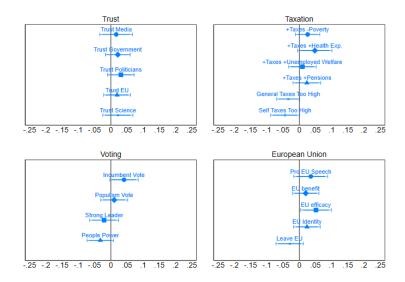
The predicted values from each factor can be interpreted as a summary index of the information contained in each underlying variable, and are used to analyse of how the impact of COVIDFIRST varies along the Compliance, Concerned and Contracted dimensions. In Figures D1, D2 and D3 we display the interaction coefficients. In terms of Compliance (Figure D1), treated individuals with higher levels of compliance are more likely to trust politicians, the government and science, and to perceive the tax burden as less problematic. These findings are aligned with the 'rally around the flag' effect, in the form of cooperation with the government and a higher approval of the policy implemented to counter the health crisis. Figure D2 shows that Concern slightly increases the impact of being treated on levels of institutional trust, but mostly marks remarkably higher support for taxation and welfare programs. From Figure D3 we learn that exposure to the virus leads to similar results, with a significantly higher support to raise taxes to finance public health expenditure.

Figure D1: Interaction effects: compliance



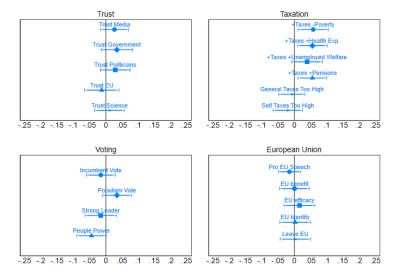
The figure shows the impact of the interaction $COVIDFIRST \times Compliance$ on the four set of socio-political outcomes. For each coefficient, 95% (delimited by horizontal bars) and 90% (bold line) confidence intervals are shown.

Figure D3: Interaction effects: exposure to the virus



The figure shows the impact of the interaction $COVIDFIRST \times Contracted$ on the four set of socio-political outcomes. For each coefficient, 95% (delimited by horizontal bars) and 90% (bold line) confidence intervals are shown.

 $\textbf{Figure D2:} \ \, \textbf{Interaction effects: health concerns} \\$



The figure shows the impact of the interaction $COVIDFIRST \times Concern$ on the four set of socio-political outcomes. For each coefficient, 95% (delimited by horizontal bars) and 90% (bold line) confidence intervals are shown.

E Robustness analyses

E.1 Challenges of the experimental design

Fatigue Fatigue might influence the propensity to review our text on European integration. Recall that half of the respondents will receive the question on whether they wish to read a lengthy text (explicitly fixed at 5 minutes of time) about the European integration relatively early in the survey, while half will receive it relatively late due to the randomization into COVIDFIRST and Baseline condition. Among the latter, greater fatigue is expected to decrease the likelihood of agreement. For this reason, we treat fatigue as a confound deserving high priority.

The text agreement question is therefore randomly placed at the beginning or at the end of the outcomes block: its placement varies therefore between early on, somewhat in the middle and towards the end of the entire survey. In case of agreement, the respondents will read the text and provide their opinion at the end of the questionnaire, shielding the following parts of the survey from additional fatigue.

Experimenter demand effects Participants to surveys or experiments might infer the researchers' underlying objectives from the questions asked and/or from the experiment's architecture, and act to comply with what they believe are the experimenter's objectives Zizzo (2010). In our case, a respondent might form an idea that our objective is that of measuring socio-political sentiments. Demand effects could bias our respondents' answers and reduce the likelihood of observing the effects of interest.

We cannot address this concern directly, as we must tradeoff between reaching our research objectives and eliminating the risk of demand effects. We however are able to evaluate the likelihood of demand effects polluting our questionnaire by exploiting the randomization of the position of the text agreement question. The explicit pro-EU sentiment in that question leads to a strengthened pro-EU demand effect affecting subsequent questions beyond the natural demand induced by the questionnaire itself de Quidt et al. (2018). Comparing the responses of those exposed to the text agreement at the beginning and at the end of the outcomes block allow us to establish whether the survey is susceptible to any demand effect.

E.2 Demand effects: the text agreement question

Figure E1 illustrates the coefficients associated to a dummy variable indicating whether the respondents were asked whether they wished to read the text about the European Union integration before or after they had answered our target outcome questions. The coefficients are statistically indistinguishable from zero in almost all cases, and they are small and unsystematic wherever they are significantly different at conventional levels. Noticeably, the only exceptions are outcomes on trust towards the national governments and politicians, and support for the incumbent government. We interpret this finding as evidence that demand effects, intended as in respondents trying to provide answers in alignment with the perceived objectives of the experimenters, originating from the text agreement questions are at most small and inconsequential in our survey. As the question is explicitly asking the respondents to incur into effort and time costs to engage in an action that is explicitly pro-EU, we take the demand effects originating from this question as upper bounds to any demand effects potentially induced by the questionnaire itself.

Trust Media
Trust Media
Trust Politicians
Trust Science
-25 -2 -15 -1 -05 0 .05 .1 .15 .2 .25

Voting

European Union

Eu tenefit

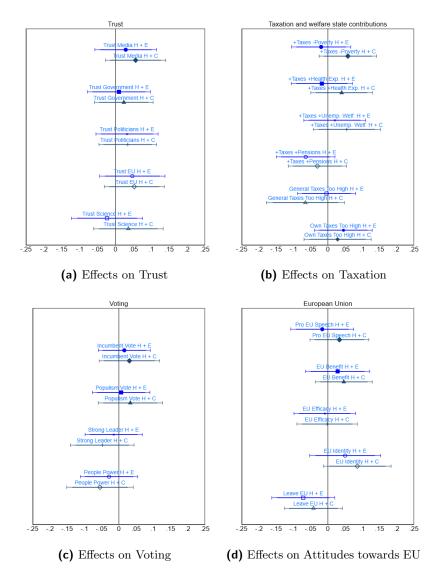
Figure E1: Effect of the position of the text agreement question

The figure displays the impact of the position of the text agreement question: at the very beginning or at the very end of the socio-political attitudes block. The figure also displays 95% (delimited by vertical bars) and 90% (bold line) confidence intervals.

E.3 Placebo tests

Figure E2 presents the impact of participating in the 'Health', 'Health & Economic' or 'Health & Conflict' conditions *after* having already answered the socio-political attitudes block of question. As expected, we see no systematic impact on our outcome variables.

Figure E2: Placebo analysis



The figure displays the impact of participating in the 'Health', 'Health & Economic' or 'Health & Conflict' conditions among respondents in the Baseline group. The Figure also displays 95% (delimited by vertical bars) and 90% (bold line) confidence intervals.

E.4 Multiple hypothesis testing

We correct the p-values for our coefficients for multiplicity of tested hypotheses (List et al., 2019; Barsbai et al., 2020). The uncorrected p-values in Table E1 can be directly interpreted in case of interest in the impact of our intervention on a specific outcome.

We further report family-wise corrections, i.e. trust, attitudes towards the European Union, voting behaviours and taxation. These p-values are relevant in case of interest in the broader outcome categories. All our significant estimates survive, apart from trust in politicians. Finally, the last column of Table E1 reports the p-values corrected for the simultaneous estimation of all the equations for which we have presented results. Except trust in politicians, demand for devolution of power to the people, and the perception of one's own tax burden, all results remain within conventional significance levels.²⁴

Table E1: Uncorrected p-values and p-values corrected for multiplicity of hypotheses

	Uncorrected	Family-wise	All equations				
Trust		-	_				
Trust Media	< 0.001***	< 0.001***	0.002***				
Trust Government	0.8239	0.8239	0.976				
Trust Politicians	0.095*	0.135	0.277				
Trust EU	< 0.001***	< 0.001***	< 0.001***				
Trust science	< 0.001***	< 0.001***	0.002***				
European Union							
Pro EU speech	< 0.001***	< 0.001***	< 0.001***				
EU benefit	< 0.001***	< 0.001***	< 0.001***				
EU efficacy	< 0.001***	< 0.001***	< 0.001***				
EU identity	< 0.001***	0.001***	0.006***				
Leave EU	0.549	0.549	0.796				
Voting							
Incumbent voting	0.520	0.520	0.879				
Populism voting	0.445	0.689	0.895				
Strong leader	0.013**	0.051*	0.094*				
People power	0.024**	0.071*	0.146				
Taxation and welfare state contr	Taxation and welfare state contributions						
+ Taxes - Poverty	< 0.001***	< 0.001***	< 0.001***				
+ Taxes + Health expenditure	0.003***	0.012**	0.033**				
+ Taxes + Unemployment Welfare	0.019***	0.024**	0.097*				
+ Taxes + Pensions	0.003***	0.014**	0.033**				
General Tax Too High	0.188	0.188	0.620				
Own Tax Too High	0.011***	0.031**	0.101				

Significance stars denote conventional significance levels.

²⁴Notice that for computational reasons we are not able to apply clustering of the observations in our correction.