Solidarity and Fairness in Times of Crisis

BY Alexander W. Cappelen, Ranveig Falch, Erik Ø. Sørensen & Bertil Tungodden

DISCUSSION PAPER





Institutt for samfunnsøkonomi

Department of Economics

SAM 06/2020

ISSN: 0804-6824

May 2020

This series consists of papers with limited circulation, intended to stimulate discussion.

Solidarity and Fairness in Times of Crisis

Alexander W. Cappelen¹ Ranveig Falch¹ Erik Ø. Sørensen¹ Bertil Tungodden^{1†*}

May 14, 2020

Abstract

In a large-scale pre-registered survey experiment with a representative sample of more than 8,000 Americans, we examine how the COVID-19 pandemic causally affects people's solidarity and fairness. We randomly manipulate whether respondents are asked general questions about the crisis before answering moral questions. By making the pandemic particularly salient for treated respondents, we causally identify how the crisis changes moral views. We find that the crisis makes respondents more willing to prioritize society's problems over their own problems, but also more tolerant of inequalities due to luck. We show that people's moral views are strongly associated with their policy preferences for redistribution. The findings suggest that the pandemic may alter the moral and political landscape in the United States and, consequently, the support for redistribution and welfare policies.

 $^{^{*1}\}mbox{FAIR},$ Department of Economics, Norwegian School of Economics, Bergen, Norway. $^{\dagger}\mbox{e-mail: bertil.tungodden@nhh.no.}$

The COVID-19 pandemic has dramatically affected our lives and imposed huge health and economic costs on people worldwide. It presents unprecedented medical, economic, and societal challenges, and has led to staggering unemployment ad restrictions in daily life that would have been unimaginable for most people just a short time ago: travel bans, closed schools, and shutdown of businesses.

The pandemic raises fundamental moral and political questions about what we owe one another [1] and has the potential to change our moral views. In response to the pandemic, there are widespread calls for solidarity [2], encouraging people to give priority to public health concerns over their own self-interest and to support those who are most affected. The heated debate about solidarity across borders and globalization has been reinforced, with some arguing for increased global cooperation and others arguing that the appropriate response to the crisis is more protectionism [3]. The pandemic has also invoked fundamental questions about fairness, reflecting the fact that the health and economic costs of the pandemic are unevenly distributed and to a great extent a result of factors outside individual control. It has triggered an intense political debate about the fair allocation of medical resources and fair compensation for those who suffer economically as a result of the pandemic [4, 5].

To study the causal effect of the COVID-19 pandemic on people's moral views, we conducted a large-scale pre-registered survey experiment with a nationally representative sample of more than 8,000 Americans. All participants were asked questions about key components of their moral views [6]: the degree to which they think society's problems should be given priority over one's own problems (**solidarity**), the degree to which they think their country's problems should be given priority over global problems (**nationalism**), and the extent to which they view inequalities due to luck as fair (**fairness**). To study the broader impact of the COVID-19 pandemic on the political debate, we also asked respondents about their attitudes to economic redistribution and universal health care.

To identify how the pandemic has shaped people's moral views, we randomly allocated the respondents into a treatment group and a control group. Immediately before answering the moral questions, the respondents in the treatment group were reminded of the COVID-19 pandemic by questions about how the pandemic had affected their community and how long they expected the crisis to last. The respondents in the control group did not answer these questions. This experimental design makes the pandemic particularly salient for the treated respondents, and we assume that a reminder of the pandemic shifts moral views in the same direction as the pandemic itself. Thus, the treatment effect identifies the directional effect of how the crisis shapes people's moral view. The size of the treatment effect, both overall and for different subgroups, will depend on the extent to which the COVID-19 reminder increases the salience of the crisis for the treated respondents and on the extent to which the increased salience of the crisis affects their moral views

[7].

The pandemic may shift people's moral views through different mechanisms. It may instigate social learning [8] and establish new role models [9, 10, 11]. Extraordinary moral acts of ordinary people may become a source of inspiration and imitation, and the moral standards of political leaders may be seen as signals of social norms [12]. In line with the social heuristics hypothesis [13, 14, 15, 16], the crisis may make certain behaviors more successful in social interactions, and these behaviors may be internalized as default heuristics and, ultimately, as components of people's moral views. Finally, the pandemic may shape people's moral reasoning through the situational features of the crisis and political debate, and thereby activate new moral intuitions [6] and affect people's deliberate moral reasoning [17].

The present study does not aim to identify which of these mechanisms are of greater importance in shaping people's moral views during the pandemic; however, in the discussion of the results we will provide examples of features of the crisis that are likely to invoke one or several of these mechanisms.

Results

In this section, we present how the pandemic affected the moral views and policy attitudes of the respondents. In the Supplementary Information, we provide variable definitions, supporting figures and tables (Sections A1–A3) and multiple hypothesis adjustments (Section A4). All our main results are robust to the multiple hypothesis adjustments.

The sample is balanced between the treatment group and the control group on the observable characteristics of the respondents. The median respondent in the sample is 48 years old and the median household income is 57,500 USD. Almost 20 percent of the respondents have reached retirement age and about 40 percent have at least a bachelor's degree. The sample is balanced on political affiliation, with about 37 percent expressing support for the Republican party and 42 percent for the Democratic party. We provide more details about the sample in Table S1 in the Supplementary Information.

Moral views

A key component of people's moral views is the extent to which they are willing to show solidarity with others even when it is costly in terms of their own self-interest. The experimental literature has shown that a substantial fraction of subjects in economic experiments show some solidarity with others, even though

there is considerable heterogeneity in the relative weight people attach to their own self-interest [18, 19, 20]. To investigate whether the pandemic moves people towards solidarity or towards self-interest, we asked the participants whether they thought they should give priority to solving society's problems or to solving their own problems. They answered on a 0–10 scale, where 0 means "absolute priority to solving my own problems" and 10 means "absolute priority to solving my society's problems."

It has been argued that the situational features of the crisis put people in a moral conundrum that may trigger opposing intuitions on this question [21]. The feeling of a common enemy may bring us together, whereas stress and anxiety may activate selfish impulses. The pandemic has made salient the selfless behavior of many individuals and groups in society, e.g., the heroism of the health workers [22], and people-to-people solidarity has flourished through activities such as assisting elderly people and neighbors with shopping and volunteer work in hospitals [23]. At the same time, selfish behavior has been evident, as illustrated by hoarding in shops and people not respecting the call for social distancing.

The majority of the respondents thought they should give priority to solving their own problems, as shown in Figure 1a, with an average response of 3.57 (standard deviation 2.32). In Table S2 in the Supplementary Information, we show that the degree to which people express solidarity with others is strongly associated with their background characteristics: females and respondents with higher education express more solidarity, while Republicans and people who have reached the retirement age express less solidarity. In Figure 2a, we report the standardized effect of the COVID-19 reminder on solidarity for the full sample and for different subgroups. We find that respondents who were reminded of COVID-19 were significantly more likely to agree with the view that one should give priority to society's problems rather than one's own problems. Controlling for background characteristics, the extent to which the respondents prioritized society's problems over their own increased by 0.065 standard deviations in the treatment group (z = 2.56, p = 0.010, Table S2). The share of respondents who put at least as much weight on society's interests as their own (response of 5 or more) increased by 10 percent, from 37.6 percent to 40.9 percent. Finally, we observe from Figure 2a that the direction of the shift is the same for all subgroups, and is independent of political affiliation, income, education, gender, and age (see also Table S3).

[Figure 2 about here]

The extent to which our solidarity should extend across borders has been an important topic in the normative literature [24, 25], but there is less research on how people actually trade off global interests and the interests of their own society [26, 17]. To study whether the crisis makes us focus more on the needs of our own

society, which we refer to as nationalism, we asked the respondents whether they thought their country's leaders should give priority to solving global problems or to solving their country's problems. They answered on a 0–10 scale where 0 means "absolute priority to solving global problems" and 10 means "absolute priority to solving their country's problems."

The pandemic has made the trade-off captured by this question salient in various ways, as illustrated by poor countries struggling to get scarce medical resources to combat the coronavirus because the United States (US) and Europe are outspending them [27]. In many cases, the crisis has been conceived as a zero-sum game among world leaders, who push nationalist arguments that undermine global collective attempts to fight the virus [28]. It has caused people to question the potential for international arrangements and the willingness of countries to truly share the burden in times of crisis [29]. At the same time, the crisis has provided examples of global solidarity and collaboration. Countries have sent health workers and supplies to other countries to support their fight against the virus [30], and we have witnessed unprecedented worldwide scientific collaboration in the development of vaccines against the virus [31, 32].

Figure 1b shows that respondents largely agreed that their country's leaders should give priority to solving their country's problems, with an average response of 7.1 (standard deviation 2.38). In Table S2, we show that support for nationalism is strongly associated with background characteristics: Republicans, people who have reached the retirement age, and females are significantly more in agreement with focusing on solving their country's problems, whereas people with higher education are significantly more focused on global problems. In Figure 2b, we report the effect of the COVID-19 reminder on nationalism for the full sample and for different subgroups. The COVID-19 reminder had no significant effect on the response to this question (z = 0.24, p = 0.812, Table S2), and this holds for all subgroups (see also Table S4). A large majority in both the treatment group and the control group (73 percent) agree that the country's leaders should give priority to their country's problems (a response of 6 or more). This null-result on nationalism may reflect that the pandemic has counteracting effects on nationalism, highlighting both critical global issues and national sentiments among political leaders.

Fairness is of fundamental importance for people and economic experiments have shown that people typically find inequalities due to luck unfair [33, 20], even though a recent large-scale study of the US and Norway shows significant differences in fairness views between countries: Americans are much more accepting of inequalities due to luck than are Norwegians [34]. To study whether the crisis has affected people's views on whether inequality due to luck is unfair, we asked the respondents whether they considered it unfair if luck determines people's economic situation. They answered on a 1–5 scale, where 1 means "strongly disagree"

and 5 means "strongly agree".

The pandemic has accentuated concerns about inequality in society. It has called attention to how important life outcomes can be determined by factors beyond individual control, and to how the crisis reinforces existing inequalities [35]. The crisis might change how people think about inequalities due to luck by affecting whether people conceive luck to be controllable (option luck) or uncontrollable (brute luck). This distinction has played a key role in the normative political literature [36], and recent experimental work has shown that it is of great importance for people's willingness to accept inequalities due to luck [37]. The most immediate consequence of the pandemic is that it creates health and economic inequality as a product of chance. Some people have bad health luck and become infected or have bad economic luck and become unemployment or experience some other unforeseen economic loss because of the crisis. However, the role of choice has also been highlighted in the pandemic. Public health officials and the media have emphasized the precautions that people can take to reduce the risk of getting infected by washing their hands, maintaining social distance, and avoiding crowded places [38]. The fact that the crisis reinforces existing economic inequalities in the US has revived the question about the extent to which these inequalities—and the economic losses people experience during the crisis—reflect individual choices or factors beyond individual control.

Figure 1c shows that the majority of respondents considered inequality due to luck as unfair, with an average response of 3.66 (standard deviation 1.12). In Table S2, we show that inequality acceptance is strongly associated with background characteristics. In particular, Republicans, people with high income, and people who have reached the retirement age are significantly more accepting of inequality, whereas females are significantly less accepting of inequality. In Figure 2c, we observe that respondents who were reminded of COVID-19 were significantly more accepting of inequalities due to luck. The COVID-19 reminder caused the respondents to consider luck less unfair by 0.084 standard deviations in the treatment group compared with the control group (z = -3.28, p = 0.001, Table S2). Overall, the share of respondents in the treatment group who found inequality due to luck unfair (responses 4 and 5) was reduced by about 10 percent, from 60.3 percent in the control group to 54.2 percent in the treatment group (z = -5.04, p < 0.001). Finally, we observe from Figure 2c that the direction of the shift is the same for all subgroups independent of age, gender, income, education or political affiliation (see also S5).

Policy attitudes

The pandemic has led to extensive discussions about the government's responsibility to implement policies that mitigate economic inequality, both in the short and long term, and its responsibility to ensure the health of all Americans. To study the implications of the pandemic for the broader policy debate, we asked the respondents about their attitudes to economic redistribution and universal health coverage.

Specifically, we asked the respondents whether they agreed that the US government should aim to reduce economic differences on a 1–3 scale, where 1 means "generally disagree" and 3 means "generally agree," and we asked whether the federal government is responsible for ensuring that all Americans have health care coverage, with a binary "yes/no" response scale. Figure 1d shows that the majority of Americans agree that the government should aim to reduce economic differences, but we also observe that a significant minority disagree. In terms of universal health coverage, 62.7 percent of the respondents agree that this is the responsibility of the federal government.

The moral views studied in this paper are predictive of people's policy attitudes (Table S12). Figure 3a–c show at the state level how the measures of solidarity, nationalism, and fairness are associated with support for income-equalizing policies. We observe that there is more support for economic redistribution in states where respondents assign more priority to society's problems relative to their own, believe that their leaders should assign more priority to global problems relative to their country's problems, and are more averse to luck-based inequality. In Figure S1 in the Supplementary Information, we show that the patterns are very similar for support for universal health care. In Tables S6 and S7, we show that these findings hold at the individual level, including when controlling for state-fixed effects and other background characteristics. Finally, in Tables S8–S11, we show that the patterns remain when we conduct the individual-level analysis by party affiliation, and we observe that the moral views are particularly predictive of the policy attitudes of Republicans.

The associations between the moral views and the policy attitudes suggest that the treatment effects on solidarity and fairness pull in opposite directions in terms of policy attitudes. The fact that the crisis has increased solidarity suggests that there should be more support for redistribution, given the pattern observed in Figure 3a, whereas the fact that the crisis has made people more accepting of inequalities due to luck suggests that there should be less support for redistribution, given the pattern observed in Figure 3c. Consistent with the treatment effects on the moral views having countervailing effects on policy attitudes, we observe in Figure 3d that there is no significant treatment effect of the COVID-19 reminder on attitudes to economic redistribution for the full sample.

[Figure 3 about here]

However, we do find an interesting political heterogeneity in the treatment effect on economic redistribution (z = 2.40, p = 0.016, Table S13), as shown in Fig-

ure 3d. The COVID-19 reminder makes Republicans more supportive of economic redistribution (z=2.08, p=0.038), whereas we do not find a significant effect for non-Republicans (z=-1.21, p=0.228). This political difference is consistent with how the COVID-19 reminder has different effects on the moral views of Republicans and non-Republicans. The COVID-19 reminder causes a significant increase in inequality acceptance among non-Republicans (z=-4.07, p<0.001, Table S5), but has no significant effect on inequality acceptance among Republicans (z=-0.24, p=0.813); the difference is statistically significant (z=2.29, p=0.022). Thus, the effects on the moral views suggest that we should see an increase in support for economic redistribution among Republicans based on the increase in solidarity and the absence of an effect on inequality acceptance, in line with what we observe in Figure 3d. For the non-Republicans, there are countervailing effects on their moral views, consistent with the absence of an effect on support for economic redistribution.

In Table S14 in the Supplementary Information, we show that the COVID-19 reminder has no effect on the support for universal health coverage among Republicans or non-Republicans, which suggests that attitudes to this policy are hard to shift in the polarized political landscape in the US.

Discussion

Our study suggests that the crisis is moving the moral landscape in the US in a way that may shape moral views and public policy. We find evidence of the crisis moving Americans towards solidarity, independent of political affiliation, gender, age, and geography. The increase in solidarity may reflect that the crisis makes salient the selfless behavior of others in society, but it may also reflect an increased recognition of our mutual dependence. This finding is in line with other studies on the effect of dramatic life events showing that personal exposure to violence or war causes people to become more altruistic [39, 40, 41], but contrasts with studies suggesting that economic recessions make people more selfish [42].

We find evidence suggesting that the crisis affects inequality acceptance, in line with studies showing that personal experience with unemployment changes what people consider fair [43, 44]. One might expect that the pandemic would make people less accepting of such inequalities, based on the idea that the crisis highlights how chance shapes life outcomes. In contrast, we find that people become more accepting of inequality, consistent with the crisis making people focus more on luck as being controllable. This may reflect that the pandemic has highlighted the role of individual choice, but it may also reflect a self-serving bias in people's fairness views [45, 46]. People may unconsciously aim to maintain a belief in a just world where inequality reflects controllable factors [47, 48], which also would

serve as a rationale for not providing more support to those who are most affected by the crisis.

In Figure 4a, we show the development of the number of confirmed cases in each state before, during, and after the survey period. We observe that the pandemic had rapidly developed when we implemented the survey. There is some variation in the exposure to the crisis across states but, as reported in Figure 2, we do not find differential treatment effects based on the number of confirmed cases in the state of the respondent. This may reflect that greater exposure to the crisis creates opposing effects; it may make people more susceptible to the COVID-19 reminder but at the same time also more saturated with the pandemic [7]. It may also reflect that the exposure is about the developments at the national level more than at the state level. In Figure 4b, we show that the responses to the question in COVID-19 reminder concerning the extent to which the respondents considered their local community to be affected are strongly associated with the confirmed number of cases in the state of the respondents. This provides evidence of the respondents in the treatment group paying attention to the COVID-19 reminder, and, thus, suggests that the experimental design succeeded in creating random variation in how salient the pandemic was for the respondents when answering the moral and policy questions.

[Figure 4 about here]

The study was designed to identify the directional effect of the crisis on moral views, and it does not allow us to estimate the size of the effect. The full impact of the crisis is likely to be much larger than the effect we can capture through the COVID-19 reminder. Still, it is instructive to compare the estimated treatment effects with the average difference in moral views among Republicans and non-Republicans with respect to solidarity and inequality acceptance. From Figure 5, we observe that the change in the moral views of Americans due to the reminder equals about one-fifth of the difference that we observe between Republicans and non-Republicans in the control group on each of the moral dimensions. Given that the full impact is likely to be much larger and that these dimensions are predictive of people's policy preferences, we believe that our findings are suggestive of the pandemic having the potential to shape the political landscape and welfare policy in the US.

[Figure 5 about here]

An interesting question for future research is whether the effects of the crisis on moral views are lasting. Related studies on wars, natural disasters and economic shocks have shown that people internalize moral perspectives that emerge in times of crisis [39, 40, 41, 43, 44], and there is experimental and observational evidence of habit formation in moral behavior suggesting that the changes that we observe in the present study may be sustained in normal times [13, 14, 15, 16]. Therefore, our results give reason to believe that the pandemic may cause more solidarity among Americans in the long run, but also greater acceptance of inequality due to luck.

Methods

A total of 8,116 unique respondents from the general population in the US were recruited by survey provider Ipsos. The experiment ran between March 24 and April 2, 2020 as part of the Ipsos eNation online omnibus, under oversight of the Norwegian School of Economics Institutional Review Board. The sample consists of individuals above 18 years of age or older, and they were quota sampled from the online segment of Ipsos's actively recruited and managed panel to be balanced and representative of the general population (based upon region, gender, age, and household income data from the US Census Bureau).

The respondents were randomly allocated to either a treatment group, who were reminded of the COVID-19 pandemic (n = 4,074), or a control group (n = 4,042)—before answering a set of survey questions. The respondents also answered a set of standard background questions. The full set of questions are provided in the Supplementary Information (Section B).

Ipsos provided population weights to weight appropriately for various demographic factors, including: age, income, the four national census regions, and gender. The Current Population Survey from the US Census Bureau was used to determine the weighting targets. All reported analyses use these weights. Supporting analysis, including regression tables for the numbers reported in graphics in the paper, is reported in the Supplementary Information (Section A), together with complete variable definitions and corrections for multiple hypothesis testing [49, 50]. All reported *p*-values are for two-sided Wald tests (*z*-tests).

The data sources, the structure of the experiment, and the empirical strategy were pre-specified at the American Economic Association's registry for randomized controlled trials prior to receiving the data [51]. Pre-specified analysis not reported in the main body of the paper is reported in the Supplementary Information (Section C).

References

[1] Sandel, M. J. Are we all in this together? The New York Times (2020). URL https://www.nytimes.com/2020/04/13/opinion/

- sunday/covid-workers-healthcare-fairness.html.
- [2] UN Secretary-General António Guterres. Secretary-general remarks on COVID-19: A call for solidarity. United Nations (2020). URL https://www.un.org/sites/un2.un.org/files/sg_remarks_on_covid-19_english_19_march_2020.pdf.
- [3] Schifferes, S. Will coronavirus be the turning point for globalisation? The Conversation (2020). URL https://theconversation.com/will-coronavirus-be-the-turning-point-for-globalisation-134739.
- [4] Emanuel, E. J. *et al.* Fair allocation of scarce medical resources in the time of covid-19. *New England Journal of Medicine* (2020). URL https://doi.org/10.1056/NEJMsb2005114.
- [5] Bell, R. How do i compensate hourly workers during the coronavirus pandemic? Workforce.com (2020). URL https://www.workforce.com/news/how-do-i-compensate-hourly-workers-during-the-coronavirus-pandemic.
- [6] Haidt, J. *The Righteous Mind: Why Good People Are Divided by Politics and Religion* (Vintage Books, New York, NY, 2012).
- [7] Benjamin, D. J., Choi, J. J. & Strickland, A. J. Social identity and preferences. American Economic Review 100, 1913-1928 (2010). URL http://www.aeaweb.org/articles.php?doi=10.1257/aer.100.4.1913.
- [8] Bandura, A. Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review* **84**, 191–215 (1977).
- [9] Jensen, R. & Oster, E. The power of TV: Cable television and women's status in India. *Quarterly Journal of Economics* **124**, 1057–1094 (2009). URL http://qje.oxfordjournals.org/content/124/3/1057.abstract.
- [10] La Ferrara, E., Chong, A. & Duryea, S. Soap operas and fertility: Evidence from Brazil. *American Economic Journal: Applied Economics* 4, 1-31 (2012). URL http://www.aeaweb.org/articles.php?doi=10.1257/app.4.4.1.
- [11] Kosse, F., Deckers, T., Pinger, P., Schildberg-Hörisch, H. & Falk, A. The formation of prosociality: Causal evidence on the role of social environment. *Journal of Political Economy* **128**, 434–467 (2020).

- [12] House, B. R. How do social norms influence prosocial development? *Current Opinion in Psychology* **20**, 87–91 (2018). URL http://dx.doi.org/10.1016/j.copsyc.2017.08.011.
- [13] Gintis, H., Bowles, S., Boyd, R. & Fehr, E. Explaining altruistic behavior in humans. *Evolution and human Behavior* **24**, 153–172 (2003).
- [14] Henrich, J. et al. Costly punishment across human societies. Science 312, 1767-1770 (2006). URL http://science.sciencemag.org/content/312/5781/1767.
- [15] Rand, D. G., Greene, J. D. & Nowak, M. A. Spontaneous giving and calculated greed. *Nature* **489**, 427–430 (2012).
- [16] Peysakhovich, A. & Rand, D. G. Habits of virtue: Creating norms of cooperation and defection in the laboratory. *Management Science* **62**, 631–647 (2016). URL https://doi.org/10.1287/mnsc.2015.2168.
- [17] Greene, J. Moral Tribes: Emotion, Reason, and the Gap Between Us and Them (Penguin Books, 2014).
- [18] Fehr, E. & Schmidt, K. M. A theory of fairness, competition and cooperation. *Quarterly Journal of Economics* **114**, 817–868 (1999).
- [19] Engel, C. Dictator Games: A Meta Study. *Experimental Economics* **14**, 583–610 (2011).
- [20] Cappelen, A. W. & Tungodden, B. (eds.) *The Economics of Fairness* (Edwar Elgar, 2019).
- [21] Kluger, J. The moral dilemma of coronavirus quarantines. Time (2020). URL https://time.com/5800379/coronavirus-quarantine-morality/.
- [22] Brandt, A. *et al.* The heroism of health workers in the coronavirus crisis. The New York Times (2020). URL https://www.nytimes.com/2020/03/26/opinion/letters/coronavirus-health-care.html.
- [23] European United Left/ Nordic Green Left. Grassroots solidarity in times of corona crisis. European United Left/ Nordic Green Left (2020). URL https://www.guengl.eu/grassroots-solidarity-in-times-of-corona-crisis/.
- [24] Rawls, J. *The Law of Peoples* (Harvard University Press, 2001).

- [25] Singer, P. *The Expanding Circle: Ethics, Evolution, and Moral Progress* (Princeton University Press, Princeton, NJ, 2011).
- [26] Cappelen, A. W., Moene, K. O., Sørensen, E. Ø. & Tungodden, B. Needs versus entitlements: An international fairness experiment. *Journal of the European Economic Association* 11, 574–598 (2013). URL http://dx.doi.org/10.1111/jeea.12000.
- [27] Bradley, J. In scramble for coronavirus supplies, rich countries push poor aside. The New York Times (2020). URL https://www.nytimes.com/2020/04/09/world/coronavirus-equipment-rich-poor.html.
- [28] Goodman, P. S., Thomas, K., Wee, S.-L. & Gettleman, J. A new front for nationalism: The global battle against a virus. The New York Times (2020). URL https://www.nytimes.com/2020/04/10/business/coronavirus-vaccine-nationalism.html.
- [29] Vallée, S. Coronavirus has revealed the EU's fatal flaw: the lack of solidarity. The Guardian (2020). URL https://www.theguardian.com/commentisfree/2020/apr/28/eu-coronavirus-fund-share-crisis-soul-european-parliament-fiscal.
- [30] Wood, J. China is sending medical experts and supplies to help italy fight coronavirus. World Economic Forum (2020). URL https://www.weforum.org/agenda/2020/03/coronavirus-covid-19-italy-china-supplies/.
- [31] Kupferschmidt, K. 'A completely new culture of doing research.' Coronavirus outbreak changes how scientists communicate. Science (2020). URL https://www.sciencemag.org/news/2020/02/completely-new-culture-doing-research-coronavirus-outbreak-changes-how-scientists.
- [32] World Health Organization. Public statement for collaboration on COVID-19 vaccine development. World Health Organization (2020). URL https://www.who.int/news-room/detail/13-04-2020-public-statement-for-collaboration-on-covid-19-vaccine-development.
- [33] Cappelen, A. W., Drange Hole, A., Sørensen, E. Ø. & Tungodden, B. The pluralism of fairness ideals: An experimental approach. *American Economic Review* **97**, 818–827 (2007).

- [34] Almås, I., Cappelen, A. W. & Tungodden, B. Cutthroat capitalism versus cuddly socialism: Are Americans more meritocratic and efficiency-seeking than Scandinavians? *Journal of Political Economy* (Forthcoming).
- [35] Pinsker, J. The pandemic will cleave America in two. The Atlantic (2020). URL https://www.theatlantic.com/family/archive/2020/04/two-pandemics-us-coronavirus-inequality/609622/.
- [36] Dworkin, R. What is equality? Part 1: Equality of welfare. *Philosophy and Public Affairs* **10**, 185–246 (1981).
- [37] Mollerstrom, J., Reme, B.-A. & Sørensen, E. Ø. Luck, choice and responsibility: An experimental study of fairness views. *Journal of Public Economics* **131**, 33–40 (2015).
- [38] World Health Organization. Coronavirus disease (COVID-19) advice for the public. World Health Organization (2020).
- [39] Bauer, M., Cassar, A., Chytilová, J. & Henrich, J. War's enduring effects on the development of egalitarian motivations in in-group biases. *Psychological Science* **25**, 47–57 (2014).
- [40] Bauer, M. et al. Can war foster cooperation? *Journal of Economic Perspectives* **30**, 249–274 (2016).
- [41] Voors, M. J. *et al.* Violent conflict and behavior: A field experiment in Burundi. *American Economic Review* **102**, 941–64 (2012).
- [42] Fisman, R., Jakiela, P. & Kariv, S. How did distributional preferences change during the Great Recession? *Journal of Public Economics* **128**, 84–95 (2015).
- [43] Barr, A., Miller, L. & Ubeda, P. Moral consequences of becoming unemployed. *Proceedings of the National Academy of Sciences* **113**, 4676–4681 (2016). URL https://www.pnas.org/content/113/17/4676.
- [44] Giuliano, P. & Spilimbergo, A. Growing up in a recession. *The Review of Economic Studies* **81**, 787–817 (2014).
- [45] Babcock, L., Loewenstein, G., Issacharoff, S. & Camerer, C. Biased judgement of fairness in bargaining. *American Economic Review* **85**, 1337–1343 (1995).
- [46] Konow, J. Fair shares: Accountability and cognitive dissonance in allocation decisions. *American Economic Review* **90**, 1072–1091 (2000).

- [47] Lerner, M. J. The belief in a just world. In *The Belief in a just World*, 9–30 (Springer, 1980).
- [48] Tirole, J. & Bénabou, R. Belief in just world and redistributive politics. *Quarterly Journal of Economics* **121**, 699–746 (2006).
- [49] Romano, J. P. & Wolf, M. Exact and approximate stepdown methods for multiple hypothesis testing. *Journal of the American Statistical Association* **100**, 94–108 (2005).
- [50] Romano, J. P. & Wolf, M. Efficient computation of adjusted *p*-values for resampling-based stepdown multiple testing. *Statistics & Probability Letters* **113**, 38–40 (2016).
- [51] Cappelen, A. W., Falch, R. & Tungodden, B. United in the midst of crisis? Experimental evidence on how the coronavirus changes our moral perspectives. AEA RCT Registry, March 31 (2020).
- [52] Dong, E., Du, H. & Gardner, L. An interactive web-based dashboard to track COVID-19 in real time. Lancet Infectious Diseases 20, 533-534 (2020). URL http://www.sciencedirect.com/science/article/ pii/S1473309920301201.

Acknowledgements

The experiments reported in this paper were conducted by The Choice Lab at the Centre for Experimental Research on Fairness, Inequality and Rationality (FAIR) at NHH Norwegian School of Economics. We are grateful to Kevin Delaney, Michael J. Sandel, Robert M. Sapolsky, Hallgeir Sjåstad, and Gus Wezerek for great comments and suggestions. Funding for the experiments was provided by the European Research Council Project FAIR No. 788443, and the Research Council of Norway through its Centres of Excellence Scheme, FAIR project No 262675. The funders had no role in study design, data collection and analysis, decision to publish or preparation of the manuscript. No other funding bodies were involved.

Code and data

Data and code are available in the Github repository available at https://github.com/FAIR-NHH/mmnyt.

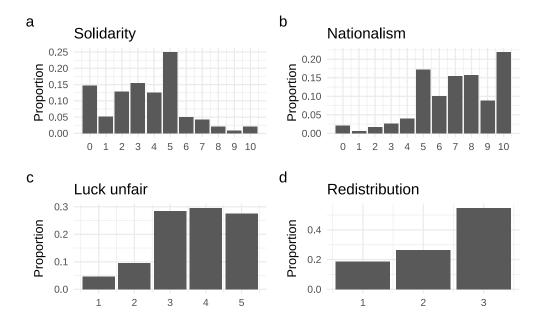


Figure 1: Distribution of outcomes

Note: Pooled population-weighted proportions of respondents that chose each possible alternative for our main outcome variables.

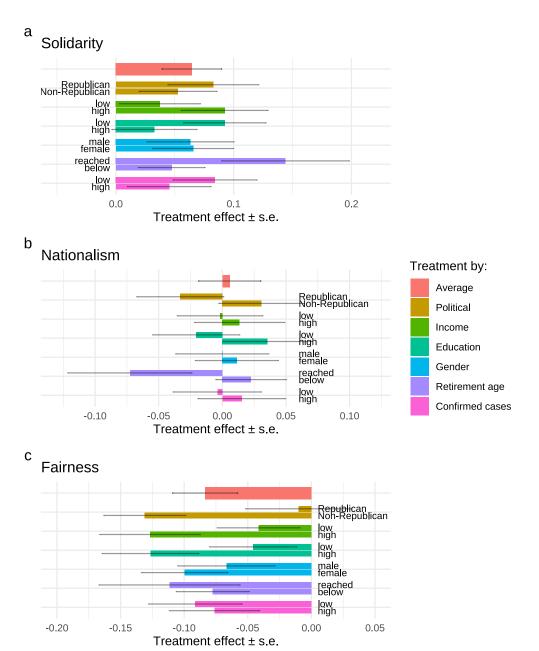


Figure 2: Solidarity, nationalism, and fairness

Note: This figure illustrates the effect of the COVID-19 reminder on the responses to the solidarity, nationalism, fairness questions. The outcomes are standardized with the population-weighted standard deviation. High and low levels of household income, education, and confirmed cases are defined by being above or at/below the weighted median in the sample. The estimated effects and sandwich standard errors are based on population-weighted linear regressions including control variables for the indicated groups and other basic demographics. See Tables S2–S5 in the Supplementary Information for complete regression specifications.

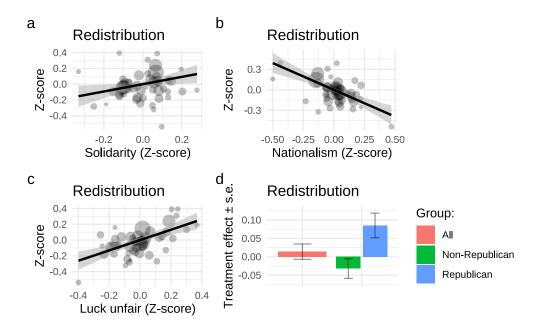


Figure 3: Effect of COVID-19 reminder on attitude to redistribution

Note: Panels a—c show state-level correlations between support for redistribution and each of our three main moral view variables, all standardized by the population-weighted means and standard deviations. The size of the state marker indicates the state population. Panel d shows the treatment effect of the COVID-19 reminder on redistribution; pooled and broken down by political affiliation. The estimated effects and sandwich standard errors are based on population-weighted linear regressions, including the same control variables as in Figure 2. See Table S6 in the Supplementary Information for the complete regression specifications.

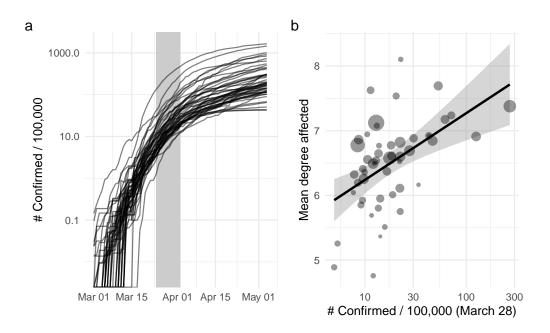


Figure 4: COVID-19 exposure

Note: Panel a shows, shaded in grey, the survey period and the number of confirmed cases per capita in each state as aggregated from the Johns Hopkins database [52]. Panel b shows the mean degree to which survey participants who receive the COVID-19 reminder report that they consider their local community to be affected (on a 0–10 scale) compared with the number of confirmed cases in the middle of the survey period. The size of the state marker indicates the state population.

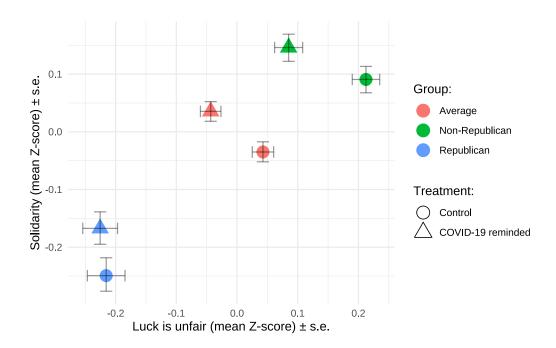


Figure 5: Political differences in treatment effect

Note: For the Republican, the non-Republican, and the overall sample, the markers indicate the population-weighted averages of the fairness and solidarity measures for the control group and the treatment group. The outcomes have been standardized with population-weighted means and standard deviations.

Supplementary information for Solidarity and Fairness in Times of Crisis

Alexander W. Cappelen¹ Ranveig Falch¹ Erik Ø. Sørensen¹
Bertil Tungodden^{1†*}

May 14, 2020

Contents

A	Onli	ne Appendix: Additional analysis	2
	A. 1	Variable definitions	2
	A.2	Supplementary figure	4
	A.3	Supplementary tables	5
	A.4	Multiple hypothesis testing	20
В	Onli	ne Appendix: Instructions	26
	B.1	COVID-19 reminder	26
	B.2	Survey questions	26
	B.3	Background questions	28
C	Onli	ne Appendix: Pre-specified analysis	31

^{*}¹FAIR, Department of Economics, Norwegian School of Economics, Bergen, Norway. †e-mail: bertil.tungodden@nhh.no.

A Online Appendix: Additional analysis

Data and code are available in the Github repository available at https://github.com/FAIR-NHH/mmnyt.

A.1 Variable definitions

This section provides the variable definitions used in the main analysis. The survey data are collected on discrete scales and we assign these numerical values and treat the elicited preferences and beliefs questions as numerical and cardinal. All standardized variables are standardized by the population weighted means and standard deviations.

Treatment variable

• COVID-19 reminder is an indicator for being reminded of the coronavirus crisis.

Main outcome variables

- *Solidarity:* "Should you give priority to solving your own problems or should you give priority to solving your society's problems?" Answer on a scale from 0–10, where 0 means "absolute priority to solving my own problems" and 10 means "absolute priority to solving my society's problems" (standardized).
- *Nationalism:* "Should your country's leaders give priority to solving global problems or should they give priority to solving your country's problems?" Answer on a scale from 0–10, where 0 means "absolute priority to solving my own problems" and 10 means "absolute priority to solving my society's problems" (standardized).
- Luck unfair: "It is unfair if luck determines people's economic situation." Extent of agreement with the statement on a scale from 1-5, where 1 means "Strongly disagree" and 5 means "Strongly agree" (standardized).

Policy variables

• *Redistribution:* "In the US, the government should aim to reduce economic differences." Extent of agreement with the statement on a scale from 1-3, where 1 means "Generally disagree" and 3 means "Generally agree" (standardized).

• *Health care*: "Is it the federal government's responsibility to make sure all Americans have health care coverage?" Indicator for the participant answering Yes on a scale of No, government is not responsible/Yes, government is responsible (standardized).

Control variables

- *Republican* is an indicator for the participant having answered that he or she would have voted 'Republican' if there was an election tomorrow. Alternatives were Republican/Democratic/Other/Prefer not to answer. Participants who preferred not to answer this question are not included (877 respondents).
- *High inc*. is an indicator for having a yearly household income before taxes above the population weighted median in the sample.
- High educ. is an indicator for having completed at least a bachelor degree.
- Female is an indicator for being female.
- Retirement age is an indicator for being at or above retirement age (defined as 66 years old).
- *High confirmed* is an indicator for being from a state with above the population weighted median number of confirmed cases of coronavirus infected persons per capita per March 28th (midpoint date of data collection).
- *Child* is an indicator for having a child below 18 years old in the household, for which the participant is a parent or a legal guardian.
- *Living alone* is an indicator for living alone.
- *Urban* in an indicator for living in an urban or a suburban area.
- Northeast, Midwest, West and South are US region indicators.

Additional outcome variables

• *Luck belief:* "Luck is an important determinant of people's economic situation." Extent of agreement with the statement on a scale from 1-5, where 1 means "Strongly disagree" and 5 means "Strongly agree" (standardized).

- Compassion: "Compassion for those who are suffering is the most crucial virtue."
 Extent of agreement with the statement on a scale from 1-5, where 1 means "Strongly disagree" and 5 means "Strongly agree" (standardized).
- *No borders:* "I wish the world did not have nations or borders and we were all part of one big group." Extent of agreement with the statement on a scale from 1-5, where 1 means "Strongly disagree" and 5 means "Strongly agree" (standardized).

A.2 Supplementary figure

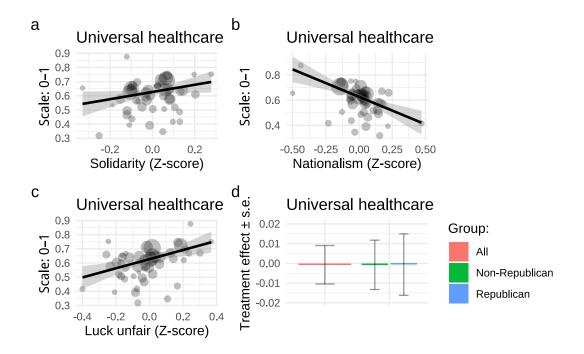


Figure 1: Effect of COVID-19 reminder on support for universal health care

Note: Panels a–c show state-level correlations between support for universal health care and each of our three main moral view variables, all standardized by the population weighted means and standard deviations. The size of the state marker indicates the state population. Panel d shows the treatment effect of the COVID-19 reminder on support for universal health care; pooled and broken down by political affiliation. The estimated effects and sandwich standard errors are based on population weighted linear regressions including control variables for the indicated groups and other basic demographics. See Table S7 for the complete regression specifications.

A.3 Supplementary tables

Table S1: Descriptive statistics

	Control	Treated	Full sample
Politics			
Republican (share)	0.369	0.373	0.370
Democratic (share)	0.430	0.404	0.415
Other (share)	0.102	0.112	0.107
Prefer not to answer (share)	0.100	0.118	0.108
Income (USD)			
Average	70900	68400	69600
Median	57500	57500	57500
Above median (share)	0.400	0.378	0.388
Education (share)			
Bachelor or more	0.420	0.418	0.419
Female (share)	0.540	0.549	0.545
Age			
Median (year)	48	48	48
Retirement age (share)	0.186	0.184	0.185
Child (share)	0.240	0.251	0.246
Living alone (share)	0.216	0.215	0.216
Urban (share)	0.755	0.750	0.753
Region (share)			
Northeast	0.204	0.200	0.201
Midwest	0.225	0.231	0.228
West	0.222	0.225	0.224
South	0.349	0.346	0.347
Confirmed cases			
Median (per 100000)	17.5	17.5	17.5
High confirmed (share)	0.526	0.528	0.527

Note: The table displays descriptive statistics for the control sample column 1, for the treated sample in column 2 and for the full sample in column 3 (not population weighted). The descriptive statistics for the sample are based on self-reported data, except for data on confirmed cases which is based on John Hopkins database as per March 28, 2020. The income variable is yearly household income in USD before taxes reported in 23 income groups, where we impute the midpoint in each group for calculating the average. For the highest income group, open to the right, we impute 1.5 times the lower boundary.

Table S2: Effect of COVID-19 reminder, main outcomes

	Solie	darity	Natio	nalism	Luck	unfair
	(1)	(2)	(3)	(4)	(5)	(6)
COVID-19 reminder	0.070*** (0.024)	0.065** (0.025)	0.017 (0.024)	0.006 (0.024)	-0.086*** (0.024)	-0.084*** (0.026)
Republican		-0.307*** (0.026)		0.554*** (0.025)		-0.339*** (0.027)
High inc.		-0.007 (0.028)		0.044 (0.027)		-0.140*** (0.028)
High educ.		0.079*** (0.027)		-0.083*** (0.026)		0.020 (0.027)
Female		0.103*** (0.025)		0.050** (0.025)		0.072*** (0.026)
Retirement age		-0.114*** (0.032)		0.209*** (0.029)		-0.142*** (0.033)
High confirmed		-0.039 (0.028)		0.020 (0.027)		-0.008 (0.029)
Child		-0.088*** (0.031)		-0.001 (0.031)		0.129*** (0.032)
Living alone		-0.017 (0.035)		-0.042 (0.034)		0.018 (0.034)
Urban		0.024 (0.031)		-0.043 (0.029)		0.077** (0.031)
Northeast		0.023 (0.043)		0.003 (0.041)		0.128*** (0.043)
Midwest		0.034 (0.037)		0.061* (0.036)		-0.042 (0.039)
South		-0.033 (0.034)		0.042 (0.033)		0.046 (0.035)
Constant	-0.035** (0.017)	0.041 (0.048)	-0.008 (0.017)	-0.243*** (0.047)	0.043** (0.018)	0.102** (0.048)
Observations R^2	8116 0.001	7239 0.034	8116 0.000	7239 0.093	8116 0.002	7239 0.050

Note: The table reports linear regressions of the effect of the COVID-19 reminder on *Solidarity, Nationalism* and *Luck unfair* with and without control variables. *Solidarity, Nationalism, Luck unfair, COVID-19 reminder* and the control variables are defined in Appendix A.1. Robust standard errors in parentheses: * p < 0.10, ** p < 0.05, *** p < 0.01.

Table S3: Heterogeneity analysis, solidarity

			Solic	larity		
	(1)	(2)	(3)	(4)	(5)	(6)
COVID-19 reminder	0.053 (0.033)	0.037 (0.034)	0.093*** (0.035)		0.047* (0.028)	0.084** (0.036)
Republican × COVID-19 reminder	0.030 (0.051)					
High inc. × COVID-19 reminder		0.055 (0.050)				
High educ. × COVID-19 reminder			-0.060 (0.050)			
Female × COVID-19 reminder				0.002 (0.050)		
Retirement age × COVID-19 reminder					0.097 (0.061)	
High confirmed × COVID-19 reminder						-0.039 (0.050)
Constant	0.047 (0.049)	0.056 (0.049)	0.028 (0.049)	0.042 (0.049)	0.050 (0.048)	0.032 (0.049)
Linear combination (Reminder + Interaction)		0.092** (0.037)	0.033 (0.036)		0.144*** (0.054)	0.045 (0.036)
Observations R^2	7239 0.034	7239 0.034	7239 0.034	7239 0.034	7239 0.034	7239 0.034

Note: The table extends the analysis reported in Table S2 by including interactions between *COVID-19 reminder* and the control variables. *Solidarity*, *COVID-19 reminder* and the control variables are defined in Appendix A.1. Robust standard errors in parentheses: * p < 0.10, ** p < 0.05, *** p < 0.01.

Table S4: Heterogeneity analysis, nationalism

			Natio	nalism		
	(1)	(2)	(3)	(4)	(5)	(6)
COVID-19 reminder	0.031 (0.034)	-0.002 (0.034)	-0.021 (0.034)	-0.000 (0.037)	0.023 (0.028)	-0.004 (0.035)
Republican × COVID-19 reminder	-0.064 (0.048)					
High inc. × COVID-19 reminder		0.015 (0.049)				
High educ. × COVID-19 reminder			0.056 (0.049)			
Female × COVID-19 reminder				0.012 (0.049)		
Retirement age × COVID-19 reminder					-0.095* (0.056)	
High confirmed × COVID-19 reminder						0.019 (0.049)
Constant	-0.255*** (0.048)	-0.239*** (0.048)	-0.230*** (0.048)	-0.240*** (0.048)	-0.252*** (0.047)	-0.239*** (0.048)
Linear combination (Reminder+ Interaction)	-0.033 (0.034)	0.014 (0.035)	0.036 (0.035)	0.011 (0.033)	-0.073 (0.049)	0.015 (0.034)
Observations R^2	7239 0.093	7239 0.093	7239 0.093	7239 0.093	7239 0.093	7239 0.093

Note: The table extends the analysis reported in Table S2 by including interactions between *COVID-19 reminder* and the control variables. *Nationalism*, *COVID-19 reminder* and the control variables are defined in Appendix A.1. Robust standard errors in parentheses: *p < 0.10, **p < 0.05, **** p < 0.01.

Table S5: Heterogeneity analysis, luck unfair

			Luck	unfair		
	(1)	(2)	(3)	(4)	(5)	(6)
COVID-19	-0.131***	-0.041	-0.046	-0.067*	-0.078***	-0.091**
reminder	(0.032)	(0.032)	(0.034)	(0.038)	(0.029)	(0.037)
Republican ×	0.121**					
COVID-19 reminder	(0.053)					
High inc. ×		-0.085*				
COVID-19 reminder		(0.051)				
High educ. ×			-0.081			
COVID-19 reminder			(0.051)			
Female ×				-0.033		
COVID-19 reminder				(0.051)		
Retirement age ×					-0.034	
COVID-19 reminder					(0.062)	
High confirmed ×						0.015
COVID-19 reminder						(0.051)
Constant	0.124**	0.080	0.084*	0.094*	0.099**	0.106**
	(0.049)	(0.050)	(0.049)	(0.050)	(0.049)	(0.050)
Linear combination	-0.010	-0.127***	-0.126***	-0.100***	-0.111**	-0.076**
(Reminder + Interaction)	(0.042)	(0.039)	(0.038)	(0.034)	(0.055)	(0.035)
Observations	7239	7239	7239	7239	7239	7239
R^2	0.051	0.051	0.051	0.050	0.050	0.050

Note: The table extends the analysis reported in Table S2 by including interactions between *COVID-19 reminder* and the control variables. *Luck unfair*, *COVID-19 reminder* and the control variables are defined in Appendix A.1. Robust standard errors in parentheses: *p < 0.10, **p < 0.05, **** p < 0.01.

Table S6: Regression analysis, redistribution/moral views

Solidarity									
	(1)	(2)	(3)	(4)	(5)	(9)	(7)	(8)	(6)
	0.134*** (0.012)	0.131*** (0.012)	0.075*** (0.012)						
Nationalism				-0.198*** (0.012)	-0.192^{***} (0.012)	-0.085*** (0.012)			
Luck unfair							$0.321^{***} (0.012)$	0.317*** (0.012)	$0.245^{***} (0.012)$
Republican			-0.911*** (0.025)			-0.887*** (0.026)			-0.852^{***} (0.025)
High inc.			-0.109*** (0.025)			-0.106*** (0.025)			-0.074*** (0.025)
High educ.			-0.047* (0.025)			-0.048* (0.025)			-0.046* (0.024)
Female			-0.011 (0.023)			0.000 (0.023)			-0.022 (0.022)
Retirement age			-0.205*** (0.031)			-0.196^{***} (0.031)			-0.179*** (0.030)
High confirmed			0.124 (0.112)			0.129 (0.111)			$0.161 \\ (0.1111)$
Child			$0.115^{***} (0.029)$			0.108^{***} (0.029)			0.077^{***} (0.028)
Living alone			0.005 (0.029)			0.001 (0.029)			0.000 (0.028)
Urban			0.060** (0.028)			0.060** (0.028)			$0.046* \\ (0.027)$
Constant	0.000 (0.012)	-0.242^{**} (0.101)	0.262^{***} (0.092)	0.000 (0.012)	-0.234^{**} (0.097)	$0.245^{***} (0.092)$	$0.000 \\ (0.011)$	-0.217^{**} (0.102)	0.254^{***} (0.092)
State fixed effects	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Observations <i>R</i> ²	8116 0.018	8116 0.034	7239 0.245	8116 0.039	8116 0.053	7239 0.246	8116 0.103	8116 0.116	7239 0.295

1, 4 and 7 are without control variables, columns 2, 5 and 7 include state fixed effects, and columns 3, 6 and 9 include control variables Note: The table reports linear regressions of the associations between Redistribution and Solidarity, Nationalism and Luck unfair. Columns and state fixed effects. Redistribution, Solidarity, Nationalism and Luck unfair and control variables are defined in Appendix A.1. Robust standard errors in parentheses: * $p < 0.10, \, \ast \ast \, p < 0.05, \, \ast \ast \ast \, p < 0.01.$

Table S7: Regression analysis, health care/moral views

					Health care				
	(1)	(2)	(3)	(4)	(5)	(9)	(5)	(8)	(6)
Solidarity	0.110*** (0.012)	0.107*** (0.012)	0.035***						
Nationalism				-0.211*** (0.012)	-0.204*** (0.012)	-0.074*** (0.012)			
Luck unfair							0.238*** (0.012)	0.232*** (0.012)	0.148*** (0.011)
Republican			-0.988*** (0.025)			-0.958*** (0.025)			-0.950*** (0.025)
High inc.			-0.081*** (0.024)			-0.078*** (0.024)			-0.060** (0.024)
High educ.			0.028 (0.024)			0.025 (0.023)			0.029 (0.023)
Female			0.013 (0.022)			0.020 (0.022)			0.006 (0.022)
Retirement age			-0.185*** (0.027)			-0.173*** (0.027)			-0.168*** (0.027)
High confirmed			0.311^{***} (0.103)			0.317*** (0.102)			0.334*** (0.103)
Child			$0.058** \\ (0.028)$			0.055^{*} (0.028)			$0.036 \\ (0.028)$
Living alone			-0.037 (0.029)			-0.041 (0.029)			-0.040 (0.028)
Urban			0.100^{***} (0.027)			0.098*** (0.027)			0.090*** (0.027)
Constant	-0.000 (0.012)	-0.487*** (0.100)	0.020 (0.084)	-0.000 (0.012)	-0.477*** (0.097)	$0.002 \\ (0.085)$	-0.000 (0.012)	-0.469*** (0.101)	$0.014 \\ (0.085)$
State fixed effects	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Observations R ²	8116 0.012	8116 0.041	7239 0.284	8116 0.045	8116 0.071	7239 0.288	8116 0.057	8116 0.083	7239 0.304

Note: The table reports linear regressions of the associations between Health care and Solidarity, Nationalism and Luck unfair. Columns 1, 4 and 7 are without control variables, columns 2, 5 and 7 include state fixed effects, and columns 3, 6 and 9 include control variables and state fixed effects. Health care, Solidarity, Nationalism and Luck unfair and control variables are defined in Appendix A.1. Robust standard errors in parentheses: * p < 0.10, ** p < 0.05, *** p < 0.01.

Table S8: Regression analysis, redistribution/moral views, republicans

				R	Redistribution	u			
	(1)	(2)	(3)	(4)	(5)	(9)	(7)	(8)	(6)
Solidarity	0.124*** (0.022)	0.117*** (0.022)	0.102*** (0.021)						
Nationalism				-0.193*** (0.024)	-0.184^{***} (0.023)	-0.148^{***} (0.023)			
Luck unfair							$0.327^{***} (0.019)$	0.314^{***} (0.019)	0.284^{***} (0.019)
High inc.			-0.216^{***} (0.043)			-0.212^{***} (0.043)			-0.178*** (0.042)
High educ.			-0.181^{***} (0.044)			-0.184^{***} (0.044)			-0.160^{***} (0.042)
Female			-0.102** (0.040)			-0.091** (0.040)			-0.107*** (0.039)
Retirement age			-0.378*** (0.048)			-0.357*** (0.048)			-0.355*** (0.047)
High confirmed			0.062 (0.172)			0.060 (0.170)			$0.180 \\ (0.174)$
Child			$0.333^{***} \\ (0.051)$			$0.322^{***} (0.051)$			$0.268*** \\ (0.049)$
Living alone			0.039 (0.054)			0.028 (0.054)			0.018 (0.052)
Urban			0.100** (0.045)			$0.096** \\ (0.045)$			$0.085* \\ (0.043)$
Constant	-0.575*** (0.021)	-0.751*** (0.123)	-0.595*** (0.123)	-0.529*** (0.022)	-0.704^{***} (0.124)	-0.564^{***} (0.125)	-0.529*** (0.021)	-0.729*** (0.126)	-0.572^{***} (0.127)
State fixed effects	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Observations R^2	$3003 \\ 0.012$	$3003 \\ 0.054$	$3003 \\ 0.120$	$3003 \\ 0.025$	$3003 \\ 0.064$	$\frac{3003}{0.125}$	$3003 \\ 0.104$	$3003 \\ 0.136$	$3003 \\ 0.186$

cans. Columns 1, 4 and 7 are without control variables, columns 2, 5 and 7 include state fixed effects, and columns 3, 6 and 9 include control Note: The table reports linear regressions of the associations between Redistribution and Solidarity, Nationalism and Luck unfair for republivariables and state fixed effects. Redistribution, Solidarity, Nationalism and Luck unfair and control variables are defined in Appendix A.1. Robust standard errors in parentheses: *p < 0.10, **p < 0.05, *** p < 0.01.

Table S9: Regression analysis, redistribution/moral views, non-republicans

				R	Redistribution	u			
	(1)	(2)	(3)	(4)	(5)	(9)	(7)	(8)	(6)
Solidarity	0.046*** (0.014)	0.046^{***} (0.014)	0.043*** (0.014)						
Nationalism				-0.046^{***} (0.014)	-0.044^{***} (0.014)	-0.043*** (0.014)			
Luck unfair							0.199*** (0.015)	0.200^{***} (0.015)	0.199^{***} (0.015)
High inc.			-0.051* (0.030)			-0.048 (0.030)			-0.021 (0.029)
High educ.			0.031 (0.029)			0.031 (0.028)			0.020 (0.028)
Female			0.043 (0.026)			0.051* (0.026)			$0.030 \\ (0.025)$
Retirement age			-0.052 (0.038)			-0.048 (0.038)			-0.029 (0.037)
High confirmed			0.131 (0.141)			0.137 (0.139)			0.114 (0.136)
Child			-0.049 (0.032)			-0.054^{*} (0.032)			-0.069** (0.032)
Living alone			-0.051 (0.033)			-0.053 (0.033)			-0.050 (0.032)
Urban			0.006 (0.033)			0.007 (0.033)			-0.006 (0.031)
Constant	$0.361^{***} (0.013)$	0.317** (0.128)	0.326** (0.129)	$0.357^{***} (0.014)$	0.311^{**} (0.126)	$0.315^{**} (0.127)$	0.336** (0.014)	$0.320^{***} (0.124)$	$0.341^{***} (0.125)$
State fixed effects	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Observations <i>R</i> ²	4236 0.004	4236 0.014	4236 0.017	4236 0.003	4236 0.013	4236 0.017	4236 0.061	4236 0.071	4236 0.073

Note: The table reports linear regressions of the associations between Redistribution and Solidarity, Nationalism and Luck unfair for non-republicans. Columns 1, 4 and 7 are without control variables, columns 2, 5 and 7 include state fixed effects, and columns 3, 6 and 9 include control variables and state fixed effects. Redistribution, Solidarity, Nationalism and Luck unfair and control variables are defined in Appendix A.1. Participants who preferred not to answer this question are not included (877 respondents). Robust standard errors in parentheses: * p < 0.10, ** p < 0.05, *** p < 0.01.

Table S10: Regression analysis, health care/moral views, republicans

(2) (0.032) (0.021) (0.021) (0.021) (0.068) (0.068) (0.068)			Ш	Health care				
0.036* 0.032 (0.021) (0.021) d d d A No Yes	(1) (2)	(3)	(4)	(5)	(9)	(7)	(8)	(6)
d d O.645*** -1.121*** O.020) (0.068) No Yes	0.032	0.019 (0.020)						
d d O.645*** -1.121*** O.645*** O.050 O.0		·	-0.122^{***} (0.023)	-0.112^{***} (0.023)	-0.082*** (0.023)			
d -0.645*** -1.121*** -0.645*** -0.645*** -0.645*** -0.645*** -0.645*** -0.645***						$0.196^{***} (0.018)$	0.188*** (0.017)	$0.165^{***} (0.017)$
d -0.645*** -1.121*** (0.020) (0.068) No Yes	0)	-0.114^{***} (0.039)			-0.109*** (0.039)			-0.089** (0.039)
d -(-645*** -1.121*** -] (0.020) (0.068) (No Yes	0)	-0.076* (0.040)			-0.077* (0.040)			-0.063 (0.039)
d C C C C C C C C C C C C C C C C C C C	0)	-0.035 (0.037)			-0.032 (0.037)			-0.041 (0.037)
d C C C C C C C C C C C C C C C C C C C	0)	0.346*** (0.040)			-0.328*** (0.040)			-0.326*** (0.039)
-0.645*** -1.121*** -1 (0.020) (0.068) (No Yes	0.4	0.435*** (0.129)			0.435^{***} (0.128)			0.505*** (0.130)
-0.645*** -1.121*** -1 (0.020) (0.068) (No Yes	0.2	243*** 0.049)			0.238*** (0.049)			0.207*** (0.048)
-0.645*** -1.121*** -] (0.020) (0.068) (No Yes	0)	0.001 (0.050)			-0.002 (0.050)			-0.008 (0.050)
-0.645*** -1.121*** -1 (0.020) (0.068) (No Yes	0.0	0.096** (0.039)			0.092** (0.039)			0.085** (0.039)
No Yes	-1.121*** -]	(6.079)	-0.607*** (0.021)	-1.082** (0.068)	-1.040*** (0.080)	-0.609*** (0.019)	-1.098*** (0.074)	-1.043*** (0.085)
3003 3003	Yes	Yes	No	Yes	Yes	No	Yes	Yes
0.001 0.042	3003 0.042	3003 0.090	3003 0.012	3003 0.051	3003 0.095	3003 0.047	3003 0.082	3003 0.121

for republicans. Columns 1, 4 and 7 are without control variables, columns 2, 5 and 7 include state fixed effects, and columns 3, 6 Note: The table reports linear regressions of the associations between Health care and Solidarity, Nationalism and Luck unfair and 9 include control variables and state fixed effects. Health care, Solidarity, Nationalism and Luck unfair and control variables are defined in Appendix A.1. Robust standard errors in parentheses: * p < 0.10, ** p < 0.05, *** p < 0.01.

Table S11: Regression analysis, health care/moral views, non-republicans

					Health care	e			
	(1)	(2)	(3)	(4)	(5)	(9)	(7)	(8)	(6)
Solidarity	0.039***	0.039*** (0.014)	0.034**						
Nationalism				-0.062*** - (0.014)	0.063*** (0.014)	-0.061^{***} (0.014)			
Luck unfair							0.128*** (0.015)	0.127*** (0.015)	0.124^{***} (0.015)
High inc.			-0.076** (0.030)			-0.073** (0.030)			-0.058* (0.030)
High educ.			0.094*** (0.029)			0.091^{***} (0.029)			0.088*** (0.028)
Female			$0.036 \\ (0.027)$			0.045^{*} (0.027)			0.029 (0.027)
Retirement age			-0.039 (0.037)			-0.032 (0.037)			-0.025 (0.037)
High confirmed			0.140 (0.163)			$0.150 \\ (0.164)$			0.129 (0.162)
Child			-0.075** (0.034)			-0.078** (0.034)			-0.089*** (0.034)
Living alone			-0.088** (0.035)			-0.091^{**} (0.035)			-0.087** (0.035)
Urban			0.090* (0.038)			$0.090^{**} (0.038)$			0.083** (0.038)
Constant	0.392*** (0.014)	0.243° (0.145)	$0.190 \\ (0.147)$	0.384^{***} (0.014)	$0.227 \\ (0.146)$	$0.170 \\ (0.148)$	$0.377^{***} (0.014)$	0.249* (0.143)	$0.201 \\ (0.146)$
State fixed effects	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Observations R^2	4236 0.002	4236 0.020	4236 0.027	4236 0.006	4236 0.024	4236 0.031	4236 0.023	4236 0.040	4236 0.047

Note: The table reports linear regressions of the associations between Health care and Solidarity, Nationalism and Luck unfair for non-republicans. Columns 1, 4 and 7 are without control variables, columns 2, 5 and 7 include state fixed effects, and columns 3, 6 and 9 include control variables and state fixed effects. Health care, Solidarity, Nationalism and Luck unfair and control variables are defined in Appendix A.1. Participants who preferred not to answer this question are not included (877 respondents). Robust standard errors in parentheses: * p < 0.10, ** p < 0.05, *** p < 0.01.

Table S12: Effect of COVID-19 reminder, policy outcomes

	Redist	ribution	Heal	th care
	(1)	(2)	(3)	(4)
COVID-19 reminder	0.005 (0.024)	0.014 (0.023)	-0.017 (0.024)	
Republican		-0.939*** (0.025)		-1.016*** (0.024)
High inc.		-0.104*** (0.025)		-0.069*** (0.024)
High educ.		-0.041 (0.025)		0.032 (0.023)
Female		-0.006 (0.023)		0.008 (0.022)
Retirement age		-0.214*** (0.031)		-0.188*** (0.027)
High confirmed		-0.047* (0.026)		0.040 (0.025)
Child		0.109*** (0.029)		0.057** (0.028)
Living alone		0.004 (0.029)		-0.038 (0.029)
Urban		0.071*** (0.027)		0.123*** (0.026)
Northeast		0.104*** (0.039)		0.050 (0.038)
Midwest		-0.022 (0.035)		-0.030 (0.034)
South		-0.032 (0.031)		-0.039 (0.030)
Constant	-0.002 (0.017)	0.396*** (0.041)	0.009 (0.017)	0.321*** (0.041)
Observations R^2	8116 0.000	7239 0.232	8116 0.000	7239 0.272

Note: The table reports linear regressions of the effect of the COVID-19 reminder on *Redistribution* and *Health care* with and without control variables. *Redistribution*, *Health care*, *COVID-19 reminder* and the control variables are defined in Appendix A.1. Robust standard errors in parentheses: * p < 0.10, ** p < 0.05, *** p < 0.01.

Table S13: Heterogeneity analysis, redistribution

			Redisti	ribution		
	(1)	(2)	(3)	(4)	(5)	(6)
COVID-19 reminder	-0.032 (0.026)	0.042 (0.028)	0.014 (0.030)	0.012 (0.034)	0.000 (0.025)	-0.025 (0.033)
Republican × COVID-19 reminder	0.117** (0.049)					
High inc. × COVID-19 reminder		-0.056 (0.046)				
High educ. × COVID-19 reminder			-0.001 (0.046)			
Female × COVID-19 reminder				0.003 (0.045)		
Retirement Age × COVID-19 reminder					0.077 (0.059)	
High confirmed × COVID-19 reminder						0.077* (0.045)
Constant	0.418*** (0.041)	0.382*** (0.042)	0.396*** (0.042)	0.397*** (0.043)	0.403*** (0.041)	0.415*** (0.043)
Linear combination (Reminder+ Interaction)	0.085** (0.041)	-0.014 (0.036)	0.014 (0.034)	0.016 (0.030)	0.078 (0.054)	0.052* (0.031)
Observations R^2	7239 0.233	7239 0.232	7239 0.232	7239 0.232	7239 0.232	7239 0.232

Note: The table extends the analysis reported in Table S12 by including interactions between *COVID-19 reminder* and the control variables. *Redistribution, COVID-19 reminder* and the control variables are defined in Appendix A.1. Robust standard errors in parentheses: * p < 0.10, ** p < 0.05, *** p < 0.01.

Table S14: Heterogeneity analysis, Health care

			Healt	h care		
	(1)	(2)	(3)	(4)	(5)	(6)
COVID-19 reminder	-0.002 (0.027)	-0.005 (0.028)	0.015 (0.030)	-0.016 (0.032)	-0.011 (0.025)	-0.055* (0.031)
Republican × COVID-19 reminder	0.000 (0.046)					
High inc. × COVID-19 reminder		0.007 (0.044)				
High educ. × COVID-19 reminder			-0.035 (0.044)			
Female × COVID-19 reminder				0.028 (0.044)		
Retirement Age × COVID-19 reminder					0.056 (0.052)	
High confirmed × COVID-19 reminder						0.105** (0.044)
Constant	0.321*** (0.042)	0.323*** (0.042)	0.313*** (0.042)	0.328*** (0.043)	0.326*** (0.042)	0.346*** (0.042)
Linear combination (Reminder+ Interaction)	-0.001 (0.037)	0.002 (0.034)	-0.020 (0.032)	0.012 (0.030)	0.045 (0.046)	0.050 (0.031)
Observations R^2	7239 0.272	7239 0.272	7239 0.272	7239 0.272	7239 0.273	7239 0.273

Note: The table extends the analysis reported in Table S12 by including interactions between *COVID-19 reminder* and the control variables. *Health care*, *COVID-19 reminder* and the control variables are defined in Appendix A.1. Robust standard errors in parentheses: * p < 0.10, ** p < 0.05, *** p < 0.01.

A.4 Multiple hypothesis testing

We here report the p-values adjusted for multiple hypothesis testing. We calculate unadjusted p-values as bootstrap p-values and compute p-values adjusted for stepdown multiple testing following the algorithm proposed by Romano and Wolf [1, 2]. Bootstrapping is done with 9999 replications.

In addition to our key outcome variables *Solidarity*, *Nationalism* and *Luck unfair*, we asked three other questions relating to people's moral views. We provide p-values adjusted for testing the effect of the COVID-19 reminder on all six outcomes S15. In Appendix C we also show that all main results are robust to including the additional questions as part of indexes.

The multiple hypothesis adjustment in S15 is based on the following OLS regression specification

$$u_i = \alpha + \beta_1 \text{Covid19reminder}_i + \gamma \mathbf{X}_i + \epsilon_i$$

where u_i is the standardized answer to each of the following respective moral questions (based on the full sample): *Solidarity*, *Nationalism*, *Luck unfair*, *Luck belief*, *Compassion* and *No borders*, which are defined in Appendix A.1, \mathbf{X}_i is a vector of the control variables listed in Appendix A.1, and ϵ_i is an error term.

Table S15: Multiple hypothesis adjustments: Average treatment effects

	Difference		Romano-Wolf p-value
Main analysis			
Solidarity	0.065	0.010	0.043
Nationalism	0.006	0.824	0.919
Luck unfair	-0.084	0.001	0.006
Additional variables	5		
Luck belief	-0.010	0.718	0.919
Compassion	0.041	0.119	0.373
No borders	-0.020	0.420	0.801

Note: Column 1 reports the difference between the treatment and the control group (in standard deviations). Column 2 reports the raw p-values and column 3 reports the Romano-Wolf adjusted p-values for the family of all six outcomes (main + additional outcome variables).

We provide multiple hypothesis adjustments focusing on the subgroup interactions of the main outcome variables S16–S18. The multiple hypothesis adjustments are based on the following OLS regression specification

$$u_i = \alpha + \beta_1 \text{Covid19reminder}_i + \beta_2 \text{Covid19reminder}_i \times \text{Subgroup} + \gamma \mathbf{X}_i + \epsilon_i$$

where u_i is the respective dependent variable, $Covid 19 reminder_i$ is COVID-19 reminder as defined in Appendix A.1, $Covid 19 reminder_i \times Subgroup$ are interactions between $COVID-19 \ reminder$ and the respective control variables, \mathbf{X}_i is a vector of the control variables listed in Appendix A.1, and ϵ_i is an error term.

Table S16: Multiple hypothesis adjustments: Subgroup interactions, Solidarity

	Interaction		Romano-Wolf p-value
Republicans vs. non-republicans	0.030	0.565	0.821
High inc. vs not	0.055	0.271	0.723
High educ. vs not	-0.060	0.232	0.723
Females vs. males	0.002	0.964	0.964
Retirement age vs not	0.097	0.115	0.511
High confirmed vs not	-0.039	0.439	0.821

Note: The dependent variable is *Solidarity*, defined in Appendix A.1. Column 1 reports the estimated subgroup differences in treatment effect (in standard deviations). Column 2 reports the raw p-values and column 3 reports the Romano-Wolf adjusted p-values for the family of all six interactions.

Table S17: Multiple hypothesis adjustments: Subgroup interactions, Nationalism

	Interaction		Romano-Wolf p-value
Republicans vs. non-republicans	-0.064	0.181	0.632
High inc. vs not	0.015	0.757	0.971
High educ. vs not	0.056	0.258	0.682
Females vs. males	0.012	0.816	0.971
Retirement age vs not	-0.095	0.089	0.434
High confirmed vs not	0.019	0.691	0.971

Note: The dependent variable is *Nationalism*, defined in Appendix A.1. Column 1 reports the estimated subgroup differences in treatment effect (in standard deviations). Column 2 reports the raw p-values and column 3 reports the Romano-Wolf adjusted p-values for the family of all six interactions.

Table S18: Multiple hypothesis adjustments: Subgroup interactions, Luck unfair

	Interaction	Raw p-value	Romano-Wolf p-value
Republicans vs. non-republicans	0.121	0.025	0.106
High inc. vs not	-0.085	0.096	0.381
High educ. vs not	-0.081	0.135	0.392
Females vs. males	-0.033	0.499	0.880
Retirement age vs not	-0.034	0.577	0.880
High confirmed vs not	0.015	0.759	0.880

Note: The dependent variable is *Luck unfair*, defined in Appendix A.1. Column 1 reports the estimated subgroup differences in treatment effect (in standard deviations). Column 2 reports the raw p-values and column 3 reports the Romano-Wolf adjusted p-values for the family of all six interactions.

We provide multiple hypothesis adjustments focusing on the subgroup interactions of the outcome variables measuring policy preferences S19–S20.

Table S19: Multiple hypothesis adjustments: Subgroup interactions, Redistribution

	Interaction		Romano-Wolf p-value
Republicans vs. non-republicans	0.117	0.017	0.092
High inc. vs not	-0.056	0.216	0.565
High educ. vs not	-0.001	0.988	0.997
Females vs. males	0.003	0.944	0.997
Retirement age vs. not	0.077	0.194	0.565
High confirmed vs. not	0.077	0.086	0.378

Note: The dependent variable is *Redistribution*, defined in Appendix A.1. Column 1 reports the estimated subgroup differences in treatment effect (in standard deviations). Column 2 reports the raw p-values and column 3 reports the Romano-Wolf adjusted p-values for the family of all six interactions.

Table S20: Multiple hypothesis adjustments: Subgroup interactions, Health care

	Interaction	Raw p-value	Romano-Wolf p-value
Republicans vs. non-republicans	0.000	0.995	0.995
High inc. vs not	0.007	0.875	0.983
High educ. vs not	-0.035	0.426	0.885
Females vs. males	0.028	0.527	0.890
Retirement age vs. not	0.056	0.269	0.797
High confirmed vs. not	0.105	0.017	0.095

Note: The dependent variable is *Health care*, defined in Appendix A.1. Column 1 reports the estimated subgroup differences in treatment effect (in standard deviations). Column 2 reports the raw p-values and column 3 reports the Romano-Wolf adjusted p-values for the family of all six interactions.

References

- [1] Romano, J. P. & Wolf, M. Exact and approximate stepdown methods for multiple hypothesis testing. *Journal of the American Statistical Association* **100**, 94–108 (2005).
- [2] Romano, J. P. & Wolf, M. Efficient computation of adjusted *p*-values for resampling-based stepdown multiple testing. *Statistics & Probability Letters* **113**, 38–40 (2016).

B Online Appendix: Instructions

This section provides the instructions for the experiment.

B.1 COVID-19 reminder

Question 1:

To what extent has your local community been affected by the current coronavirus crisis?

Use this scale where 0 means "not at all affected" and 10 means "extremely affected" 0 1 2 3 4 5 6 7 8 9 10

Question 2:

For how long do you expect the current coronavirus crisis to last (in weeks)? (Drop-down menu of number of weeks, 0-52 weeks, More than a year)

B.2 Survey questions

Question 3 (Fairness):

To what extent do you agree with the following statement:

"It is unfair if luck determines people's economic situation."

Scale of Strongly disagree/ Somewhat disagree/ Neither agree nor disagree/ Somewhat agree/ Strongly agree.

Question 4:

To what extent do you agree with the following statement:

"Luck is an important determinant of people's economic situation."

Scale of Strongly disagree/ Somewhat disagree/ Neither agree nor disagree/ Somewhat agree/ Strongly agree.

Question 5 (Solidarity):

Should you give priority to solving your own problems or should you give priority to

solving your society's problems?

Use this scale where 0 means "absolute priority to solving my own problems" and 10 means "absolute priority to solving my society's problems."

012345678910

Question 6:

To what extent do you agree with the following statement:

"Compassion for those who are suffering is the most crucial virtue."

Scale of Strongly disagree/ Somewhat disagree/ Neither agree nor disagree/ Somewhat agree/ Strongly agree.

Question 7 (Nationalism):

Should your country's leaders give priority to solving global problems or should they give priority to solving your country's problems?

Use this scale where 0 means "absolute priority to solving global problems" and 10 means "absolute priority to solving my country's problems."

012345678910

Question 8:

To what extent do you agree with the following statement:

"I wish the world did not have nations or borders and we were all part of one big group." Scale of Strongly disagree/ Somewhat disagree/ Neither agree nor disagree/ Somewhat agree/ Strongly agree.

Question 9:

To what extent do you agree with the following statement:

"In the US, the government should aim to reduce economic differences."

Scale of Generally disagree/ Neither agree nor disagree/ Generally agree.

Question 10:

Is it the federal government's responsibility to make sure all Americans have health care coverage?

No, government is not responsible Yes, government is responsible

Compared to the implementation of the questions, we have flipped the scales on questions 3-6 and 8-9 in the above instructions to simplify the presentation of the analysis. Also, outside of this set of questions, we asked some additional questions as part of the survey. These will be presented in separate papers and the above presentation and the background questions which follow, focus on the instructions which are relevant for the present paper.

B.3 Background questions

- What is your date of birth?¹
- What is your gender?
- Please insert your zip code:²
- In which industries do you, or any member of your immediate household, work?
- What is the highest degree or level of school you have completed?
 - Education through Grade 12 (Grade 4 or less/ Grade 5 to 8/ Grade 9 to 11/ Grade 12 (no diploma))
 - High School Graduate (Regular High School Diploma/GED or alternative credential)
 - College or Some College (Some college credit, but less than 1 year/ 1 or more years of college credit, no degree/ Associate's degree (AA, AS, etc.)/Bachelor's degree (BA, BS, etc.)
 - After Bachelor's Degree (Master's Degree (MA, MS, MBA, etc.)/ Professional degree (MD, DDS, JD, etc.)/ Doctorate degree (PhD, EdD, etc.)
- Are you of Hispanic, Latino or Spanish origin? (Yes/No/Prefer not to answer)

¹We only have access to age in years.

²We only have access to state-level information.

- What is your race? Select all that apply. (White/Black or African American/Native American or Alaskan Native/ Asian/ Pacific Islander/ Other race/ Prefer not to answer)
- Please indicate your annual household income before taxes. (Less than \$5,000/\$5,000-\$9,999/\$10,000-\$14,999/\$15,000-\$19,999/\$20,000-\$24,999/\$25,000-\$29,999/\$30,000-\$34,999/\$35,000-\$39,999/\$40,000-\$44,999/\$45,000-\$49,999/\$50,000-\$54,999/\$55,000-\$59,999/\$60,000-\$64,999/\$65,000-\$69,999/\$70,000-\$74,999/\$75,000-\$79,999/\$80,000-\$84,999/\$85,000-\$89,999/\$90,000-\$94,999/\$95,000-\$99,999/\$100,000-\$124,999/\$125,000-\$149,999/\$150,000-\$199,999/\$200,000-\$249,999/\$250,000 or more/ Prefer not to answer)
- What is your marital status? (Single, never married/ Living with partner/ Married/ Widowed/ Divorced or separated)
- How much of your household's grocery shopping do you, yourself, do? (All of it/ Almost all of it/ About half of it/ Less than half of it/ None)
- What is your current employment status? (Employed full-time/ Employed part-time/ Self employed/ Unemployed but looking for a job/ Unemployed and not looking for a job or long-term sick or disabled/ Full-time parent, homemaker/ Retired/ Student or pupil/ Military/ Prefer not to answer)
- Which of the following best describes your living situation? (Own a house/ Own a condo or co-op/ Rent/ Live with parents or relatives/ Other/ Prefer not to answer)
- How many people are employed by the company that you own, operate, or work for? (1-10/ 11-20/ 21-50/ 51-100/ 101-500/ 501-1000/ More than 1000/ Not currently employed or not in workforce/ I am retired/ I am homemaker or student/ Don't know)
- How many people are living or staying at your current address? (Include yourself and any other adults or children who are currently living or staying at this address for at least two months)
- How many children under the age of 18 are living in your household? Please reference only the children for which you are the parent or legal guardian.

- Please provide us with the following information about the children under the age of 18 in your household. Please reference only the children for which you are the parent or legal guardian.
- How would you describe the area in which you live? (Urban/ Suburban/ Rural)
- Which political party would you vote for if there was an election tomorrow?
 - Republican
 - Democratic
 - Other
 - Prefer not to answer

C Online Appendix: Pre-specified analysis

This section provides the pre-specified analysis. We focus on the analysis which is relevant for the present paper, but note that there are other questions that are part of the survey. The pre-specified analysis for these additional questions will be presented in separate papers.

- Hypothesis 1, that the coronavirus crisis makes people less accepting of inequalities due to luck, Table S21.
- Hypothesis 2, and that the coronavirus crisis makes people agree more that luck is important in determining people's economic situation, Table S21.
- Hypothesis 3, that the coronavirus crisis makes people support more redistribution in society, Table S22.
- Hypothesis 4, that the coronavirus crisis makes people less selfish, Table S23.
- Hypothesis 5, that the coronavirus crisis makes people more nationalistic, Table S24.

Heterogeneity analysis in Tables S25–S32.

Table S21: Effect of COVID-19 reminder, hypotheses 1 and 2

	Luck	unfair	Luck	belief	Index of st	td. outcomes
	(1)	(2)	(3)	(4)	(5)	(6)
COVID-19 reminder	-0.094*** (0.025)	-0.093*** (0.028)	-0.023 (0.026)	-0.011 (0.030)	-0.103*** (0.033)	-0.092** (0.038)
Republican		-0.350*** (0.030)		-0.196*** (0.032)		-0.478*** (0.041)
High inc.		-0.133*** (0.031)		0.050 (0.033)		-0.077* (0.042)
High educ.		0.029 (0.030)		0.137*** (0.033)		0.141*** (0.041)
Female		0.091*** (0.028)		-0.248*** (0.031)		-0.127*** (0.039)
Age		-0.008*** (0.001)		-0.008*** (0.001)		-0.014*** (0.001)
Confirmed cases		0.464 (0.373)		0.044 (0.420)		0.452 (0.508)
Child		0.094*** (0.036)		-0.037 (0.039)		0.053 (0.049)
Living alone		0.039 (0.038)		0.089** (0.041)		0.110** (0.052)
Urban		0.062* (0.034)		0.043 (0.036)		0.092** (0.046)
Northeast		0.108** (0.051)		0.144*** (0.056)		0.218*** (0.070)
Midwest		-0.035 (0.042)		-0.004 (0.045)		-0.034 (0.057)
South		0.056 (0.039)		-0.061 (0.042)		-0.001 (0.052)
Constant	3.714*** (0.018)	4.100*** (0.065)	2.866*** (0.019)	3.357*** (0.072)	0.048** (0.024)	0.804*** (0.090)
Observations R^2	8116 0.002	7239 0.060	8116 0.000	7239 0.045	8116 0.001	7239 0.071

Note: The table reports linear regressions of the effect of the COVID-19 reminder on Luck unfair, Luck belief and Index of std. outcomes with and without control variables. Luck unfair and Luck belief are non-standardized versions of the respective variables defined in Appendix A.1. Index of std. outcomes is the combination of the standardized versions of Luck unfair and Luck belief (standardized by the population weighted means and standard deviations). COVID-19 reminder and the control variables are defined in Appendix A.1. Age is the participant's age in years. Confirmed cases is the number of confirmed cases of coronavirus infected persons per capita*100 in the state of the participant on March 26th. Robust standard errors in parentheses: * p < 0.10, ** p < 0.05, *** p < 0.01.

32

Table S22: Effect of COVID-19 reminder, hypothesis 3

	Redist	ribution	Healt	th care	Index of	std. outcomes
	(1)	(2)	(3)	(4)	(5)	(6)
COVID-19 reminder	0.012 (0.017)	0.011 (0.018)	-0.010 (0.011)	-0.000 (0.011)	-0.005 (0.039)	0.013 (0.037)
Republican		-0.717*** (0.020)		-0.483*** (0.012)		-1.923*** (0.041)
High inc.		-0.069*** (0.020)		-0.025** (0.012)		-0.140*** (0.042)
High educ.		-0.028 (0.019)		0.018 (0.011)		0.001 (0.041)
Female		0.002 (0.018)		0.008 (0.011)		0.020 (0.038)
Age		-0.005*** (0.001)		-0.003*** (0.000)		-0.012*** (0.001)
Confirmed cases		0.577** (0.234)		0.263* (0.143)		1.288*** (0.495)
Child		0.069*** (0.022)		0.016 (0.014)		0.123** (0.048)
Living alone		0.011 (0.023)		-0.012 (0.014)		-0.011 (0.048)
Urban		0.039* (0.021)		0.053*** (0.013)		0.160*** (0.044)
Northeast		0.016 (0.032)		0.020 (0.019)		0.061 (0.068)
Midwest		-0.019 (0.027)		-0.004 (0.016)		-0.033 (0.056)
South		-0.026 (0.024)		-0.012 (0.014)		-0.059 (0.051)
Constant	2.346*** (0.012)	2.835*** (0.040)	0.619*** (0.008)	0.895*** (0.025)	-0.038 (0.028)	1.163*** (0.084)
Observations R^2	8116 0.000	7239 0.234	8116 0.000	7239 0.276	8116 0.000	7239 0.330

Note: The table reports linear regressions of the effect of the COVID-19 reminder on *Redistribution*, *Health care* and *Index of std. outcomes* with and without control variables. *Redistribution* and *Health care* are non-standardized versions of the respective variables defined in Appendix A.1. *Index of std. outcomes* is the combination of the standardized versions of *Redistribution* and *Health care* (standardized by the population weighted means and standard deviations). *COVID-19 reminder* and the control variables are defined in Appendix A.1. *Age* and *Confirmed cases* are defined in Table S21. Robust standard errors in parentheses: * p < 0.10, ** p < 0.05, *** p < 0.01.

Table S23: Effect of COVID-19 reminder, hypothesis 4

	Solid	darity	Comp	passion	Index of	std. outcomes
	(1)	(2)	(3)	(4)	(5)	(6)
COVID-19 reminder	0.170*** (0.052)	0.150** (0.058)	0.030 (0.019)	0.036 (0.022)	0.107*** (0.033)	0.105*** (0.037)
Republican		-0.672*** (0.061)		-0.263*** (0.023)		-0.588*** (0.038)
High inc.		0.017 (0.065)		-0.014 (0.025)		-0.009 (0.042)
High educ.		0.194*** (0.062)		-0.008 (0.024)		0.074* (0.040)
Female		0.253*** (0.059)		0.167*** (0.023)		0.299*** (0.037)
Age		-0.012*** (0.002)		0.002*** (0.001)		-0.002** (0.001)
Confirmed cases		0.177 (0.846)		0.242 (0.314)		0.351 (0.538)
Child		-0.274*** (0.074)		0.021 (0.029)		-0.094** (0.047)
Living alone		-0.013 (0.082)		-0.083*** (0.032)		-0.100** (0.051)
Urban		0.017 (0.071)		0.027 (0.027)		0.038 (0.044)
Northeast		-0.014 (0.108)		0.043 (0.042)		0.043 (0.071)
Midwest		0.075 (0.086)		0.024 (0.033)		0.059 (0.054)
South		-0.086 (0.078)		0.084*** (0.030)		0.058 (0.049)
Constant	3.475*** (0.036)	4.137*** (0.142)	4.024*** (0.014)	3.888*** (0.054)	-0.057** (0.023)	0.073 (0.087)
Observations R^2	8116 0.001	7239 0.038	8116 0.000	7239 0.035	8116 0.001	7239 0.055

Note: The table reports linear regressions of the effect of the COVID-19 reminder on Solidarity, Compassion and Index of std. outcomes with and without control variables. Solidarity and Compassion are non-standardized versions of the respective variables defined in Appendix A.1. Index of std. outcomes is the combination of the standardized versions of Solidarity and Compassion (standardized by the population weighted means and standard deviations). COVID-19 reminder and the control variables are defined in Appendix A.1. Age and Confirmed cases are defined in Table S21. Robust standard errors in parentheses: *p < 0.10, *p < 0.05, *p < 0.01.

Table S24: Effect of COVID-19 reminder, hypothesis 5

	Glob	al first	No b	orders	Index of	std. outcomes
	(1)	(2)	(3)	(4)	(5)	(6)
COVID-19 reminder	-0.023 (0.053)	-0.012 (0.057)	-0.032 (0.030)	-0.026 (0.032)	-0.033 (0.035)	-0.024 (0.037)
Republican		-1.232*** (0.058)		-0.975*** (0.034)		-1.244*** (0.038)
High inc.		-0.030 (0.064)		-0.072** (0.036)		-0.066 (0.041)
High educ.		0.221*** (0.062)		-0.010 (0.035)		0.086** (0.039)
Female		-0.086 (0.058)		-0.162*** (0.032)		-0.157*** (0.037)
Age		-0.025*** (0.002)		-0.007*** (0.001)		-0.016*** (0.001)
Confirmed cases		1.111 (0.820)		0.862* (0.460)		1.108** (0.519)
Child		-0.155** (0.074)		0.155*** (0.042)		0.050 (0.047)
Living alone		0.159** (0.079)		0.026 (0.041)		0.086* (0.049)
Urban		0.024 (0.068)		0.070* (0.037)		0.062 (0.043)
Northeast		-0.106 (0.103)		-0.037 (0.058)		-0.072 (0.066)
Midwest		-0.112 (0.083)		-0.105** (0.048)		-0.125** (0.054)
South		-0.091 (0.078)		-0.085* (0.044)		-0.102** (0.050)
Constant	2.889*** (0.037)	4.550*** (0.144)	2.673*** (0.021)	3.484*** (0.076)	-0.039 (0.025)	1.262*** (0.088)
Observations R^2	8116 0.000	7239 0.114	8116 0.000	7239 0.159	8116 0.000	7239 0.205

Note: The table reports linear regressions of the effect of the COVID-19 reminder on Global first, No borders and Index of std. outcomes with and without control variables. Global first is Nationalism as defined in Appendix A.1 with a flipped scale (non-standardized). No borders is the non-standardized version of the respective variable defined in Appendix A.1. Index of std. outcomes is the combination of the standardized versions of Global first and No borders (standardized by the population weighted means and standard deviations). COVID-19 reminder and the control variables are defined in Appendix A.1. Age and Confirmed cases are defined in Table S21. Robust standard errors in parentheses: * p < 0.10, ** p < 0.05, *** p < 0.01.

Table S25: Heterogeneity, Luck unfair

Luck unfair						
(1)	(2)	(3)	(4)	(5)		
-0.146***	-0.046	-0.051	-0.074*	-0.086***		
(0.036)	(0.036)	(0.038)	(0.043)	(0.032)		
0.135** (0.059)						
	-0.095* (0.057)					
		-0.090 (0.057)				
			-0.038 (0.057)			
				-0.038 (0.070)		
-0.445***	-0.378***	-0.380***	-0.379***	-0.379***		
(0.043)	(0.030)	(0.030)	(0.030)	(0.030)		
-0.159***	-0.110**	-0.157***	-0.157***	-0.157***		
(0.031)	(0.043)	(0.032)	(0.032)	(0.032)		
0.024 (0.031)	$0.021 \\ (0.031)$	$0.066 \\ (0.042)$	0.022 (0.031)	0.022 (0.031)		
0.081***	0.081***	0.081***	0.099**	0.081***		
(0.029)	(0.029)	(0.029)	(0.041)	(0.029)		
-0.158***	-0.157***	-0.158***	-0.159***	-0.140***		
(0.036)	(0.036)	(0.036)	(0.036)	(0.053)		
$0.441 \\ (0.375)$	0.452 (0.375)	$0.456 \\ (0.375)$	0.459 (0.375)	0.454 (0.375)		
0.142***	0.143***	0.143***	0.143***	0.142***		
(0.036)	(0.036)	(0.036)	(0.036)	(0.036)		
0.018	0.021	0.021	0.020	$0.020 \\ (0.038)$		
(0.038)	(0.038)	(0.038)	(0.038)			
0.083**	0.084**	0.083**	0.083**	0.084**		
(0.034)	(0.034)	(0.034)	(0.034)	(0.034)		
0.107**	0.103**	0.104**	0.103**	0.104**		
(0.051)	(0.051)	(0.051)	(0.051)	(0.051)		
-0.047	-0.048 (0.042)	-0.049	-0.050	-0.049		
(0.042)		(0.042)	(0.043)	(0.043)		
$0.053 \\ (0.039)$	$0.054 \\ (0.039)$	$0.053 \\ (0.039)$	$0.052 \\ (0.039)$	$0.052 \\ (0.039)$		
3.792***	3.742***	3.747***	3.758***	3.764***		
(0.054)	(0.055)	(0.055)	(0.056)	(0.054)		
-0.011	-0.141***	-0.141***	-0.112***	-0.125**		
(0.047)	(0.044)	(0.042)	(0.038)	(0.062)		
7239	7239	7239	7239	7239		
0.051	0.051	0.051	0.051	0.051		
	-0.146*** (0.036) 0.135** (0.059) -0.445*** (0.043) -0.159*** (0.031) 0.024 (0.031) 0.081*** (0.029) -0.158*** (0.036) 0.441 (0.375) 0.142*** (0.036) 0.018 (0.038) 0.083** (0.034) 0.107** (0.051) -0.047 (0.042) 0.053 (0.039) 3.792*** (0.054) -0.011 (0.047) 7239	(1) (2) -0.146*** -0.046 (0.036) (0.036) 0.135** (0.059) -0.095* (0.057) -0.095* (0.057) -0.159*** -0.110** (0.031) (0.031) 0.024 (0.031) 0.081*** (0.029) -0.158*** -0.157*** (0.036) (0.036) 0.441 (0.452 (0.375) (0.375) 0.142*** (0.375) 0.142*** (0.375) 0.142*** (0.375) 0.142*** (0.38) 0.083 (0.036) 0.018 (0.038) 0.083** (0.038) 0.084** (0.034) (0.034) 0.107** (0.034) (0.051) (0.051) -0.047 (0.042) 0.053 (0.054) (0.042) (0.042) 0.053 (0.039) 3.792*** (0.054) (0.054) (0.055) -0.011 (0.041) 7239 7239	(1) (2) (3) -0.146*** -0.046 -0.051 (0.036) (0.036) (0.038) 0.135** (0.059) -0.095* (0.057) -0.090 (0.057) -0.159*** -0.110** -0.157*** (0.031) (0.043) (0.032) 0.024 0.021 0.066 (0.031) (0.031) (0.042) 0.081*** 0.081*** (0.029) (0.029) (0.029) -0.158*** -0.157*** -0.158*** (0.036) (0.036) (0.036) 0.441 0.452 0.456 (0.375) (0.375) (0.375) 0.142** 0.143*** 0.143*** (0.036) (0.036) (0.036) 0.441 0.452 0.456 (0.375) (0.375) (0.375) 0.142** 0.143*** 0.143*** (0.036) (0.036) (0.036) 0.018 0.021 0.021 (0.038) (0.036) (0.036) 0.018 0.021 0.021 (0.038) (0.038) (0.038) 0.083** 0.084** 0.083** (0.034) (0.034) (0.034) 0.107** 0.103** 0.104** (0.034) (0.034) (0.034) 0.107** 0.103** 0.104** (0.051) (0.051) (0.051) -0.047 -0.048 -0.049 (0.042) (0.042) (0.042) 0.053 (0.039) (0.039) 3.792** 3.742** 3.747*** (0.054) (0.055) -0.011 -0.141*** -0.141*** (0.047) (0.044) (0.042) 7239 7239 7239	(1) (2) (3) (4) -0.146*** -0.046 -0.051 -0.074* (0.036) (0.036) (0.038) (0.043) 0.135** (0.059) -0.095* (0.057) -0.090 (0.057) -0.038 (0.057) -0.059* (0.057) -0.038 (0.057) -0.038 (0.057) -0.038 (0.057) -0.038 (0.057) -0.038 (0.057) -0.038 (0.057) -0.038 (0.057) -0.038 (0.057) -0.038 (0.057) -0.038 (0.057) -0.038 (0.030) (0.030) (0.030) -0.159*** -0.110** -0.157*** -0.157*** (0.031) (0.043) (0.032) (0.032) 0.024 0.021 0.066 0.022 (0.031) (0.031) (0.042) (0.031) 0.081*** 0.081*** 0.081*** 0.099** (0.029) (0.029) (0.029) (0.041) -0.158*** -0.157*** -0.158*** -0.159*** (0.036) (0.036) (0.036) (0.036) 0.441 0.452 0.456 0.459 (0.375) (0.375) (0.375) (0.375) 0.142*** 0.143*** 0.143*** 0.143*** (0.036) (0.036) (0.036) (0.036) 0.018 0.021 0.021 0.020 (0.038) (0.038) (0.038) (0.038) 0.083** 0.084** 0.083** 0.083** (0.034) (0.034) (0.034) (0.034) 0.0107** 0.103** 0.104** 0.103** (0.051) (0.051) (0.051) (0.051) -0.047 -0.048 -0.049 -0.050 (0.042) (0.042) (0.042) (0.043) 0.053 0.054 0.053 0.052 (0.039) (0.039) (0.039) (0.039) 3.792*** 3.742*** 3.747*** 3.758*** (0.054) (0.055) (0.055) (0.056) -0.011 -0.141*** -0.141*** -0.112*** (0.047) (0.044) (0.042) (0.038) 7239 7239 7239 7239		

Note: The table extends the analysis reported in Table S21 by including interactions between *COVID-19 reminder* and the control variables. *Luck unfair* is the non-standardized version of the respective variable defined in Appendix A.1. *COVID-19 reminder* and the control variables are defined in Appendix A.1. *Confirmed cases* is defined in Table S21. Robust standard errors in parentheses: * p < 0.10, ** p < 0.05, *** p < 0.01.

Table S26: Heterogeneity, Luck belief

	Luck belief					
	(1)	(2)	(3)	(4)	(5)	
COVID-19 reminder	-0.034 (0.040)	-0.001 (0.039)	-0.038 (0.040)	0.046 (0.046)	-0.024 (0.035)	
Republican × COVID-19 reminder	0.058 (0.062)	(0.02)	(0.0.0)	(0.0.0)	(0.022)	
High inc. × COVID-19 reminder		-0.020 (0.062)				
High educ. × COVID-19 reminder			$0.058 \\ (0.062)$			
Female × COVID-19 reminder				-0.111* (0.062)		
Retirement age × COVID-19 reminder					$0.072 \\ (0.072)$	
Republican	-0.259***	-0.230***	-0.229***	-0.230***	-0.229***	
	(0.045)	(0.032)	(0.032)	(0.032)	(0.032)	
High inc.	0.022	0.032	0.023	0.022	0.022	
	(0.034)	(0.046)	(0.034)	(0.034)	(0.034)	
High educ.	0.130***	0.129***	0.101**	0.130***	0.130***	
	(0.033)	(0.033)	(0.046)	(0.033)	(0.033)	
Female	-0.259***	-0.259***	-0.259***	-0.204***	-0.259***	
	(0.031)	(0.031)	(0.031)	(0.044)	(0.031)	
Retirement age	-0.119***	-0.119***	-0.120***	-0.120***	-0.155***	
	(0.038)	(0.038)	(0.038)	(0.038)	(0.054)	
Confirmed cases	$0.030 \\ (0.423)$	$0.036 \\ (0.423)$	$0.036 \\ (0.423)$	$0.049 \\ (0.422)$	0.037 (0.423)	
Child	0.027 (0.039)	0.027 (0.039)	0.027 (0.039)	$0.029 \\ (0.039)$	$0.028 \\ (0.039)$	
Living alone	0.066 (0.041)	$0.067 \\ (0.041)$	$0.066 \\ (0.041)$	$0.066 \\ (0.041)$	0.066 (0.041)	
Urban	0.069*	0.069*	0.069*	0.068*	0.069*	
	(0.036)	(0.036)	(0.036)	(0.036)	(0.036)	
Northeast	0.141**	0.139**	0.139**	0.137**	0.139**	
	(0.056)	(0.056)	(0.056)	(0.056)	(0.056)	
Midwest	-0.019	-0.019	-0.020	-0.021	-0.021	
	(0.045)	(0.045)	(0.045)	(0.045)	(0.045)	
South	-0.064	-0.064	-0.065	-0.065	-0.065	
	(0.042)	(0.042)	(0.042)	(0.042)	(0.042)	
Constant	2.993***	2.977***	2.995***	2.955***	2.988***	
	(0.059)	(0.059)	(0.058)	(0.060)	(0.058)	
Linear combination (Reminder + Interaction)	0.024	-0.021	0.020	-0.066	0.048	
	(0.047)	(0.047)	(0.047)	(0.041)	(0.063)	
Observations R ²	7239	7239	7239	7239	7239	
	0.034	0.034	0.034	0.034	0.034	
-						

Note: The table extends the analysis reported in Table S21 by including interactions between *COVID-19 reminder* and the control variables. *Luck belief* is the non-standardized version of the respective variable defined in Appendix A.1. *COVID-19 reminder* and the control variables are defined in Appendix A.1. *Confirmed cases* is defined in Table S21. Robust standard errors in parentheses: *p < 0.10, **p < 0.05, ***p < 0.01.

Table S27: Heterogeneity, Redistribution

	Redistribution					
	(1)	(2)	(3)	(4)	(5)	
COVID-19 reminder	-0.024	0.032	0.011	0.011	0.001	
	(0.020)	(0.022)	(0.023)	(0.026)	(0.019)	
Republican × COVID-19 reminder	0.090** (0.038)					
High inc. × COVID-19 reminder		-0.042 (0.035)				
High educ. × COVID-19 reminder			$0.000 \\ (0.035)$			
Female × COVID-19 reminder				-0.000 (0.035)		
Retirement age × COVID-19 reminder					0.059 (0.046)	
Republican	-0.774***	-0.729***	-0.729***	-0.729***	-0.729***	
	(0.027)	(0.019)	(0.019)	(0.019)	(0.019)	
High inc.	-0.083***	-0.061**	-0.082***	-0.082***	-0.082***	
	(0.020)	(0.026)	(0.020)	(0.020)	(0.020)	
High educ.	-0.031	-0.032*	-0.032	-0.032*	-0.032*	
	(0.019)	(0.019)	(0.026)	(0.019)	(0.019)	
Female	-0.004	-0.004	-0.004	-0.004	-0.004	
	(0.018)	(0.018)	(0.018)	(0.025)	(0.018)	
Retirement age	-0.166***	-0.166***	-0.167***	-0.167***	-0.195***	
	(0.024)	(0.024)	(0.024)	(0.024)	(0.032)	
Confirmed cases	0.560**	0.568**	0.569**	0.569**	0.570**	
	(0.231)	(0.232)	(0.232)	(0.232)	(0.232)	
Child	0.082***	0.083***	0.083***	0.083***	0.083***	
	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)	
Living alone	$0.001 \\ (0.023)$	$0.002 \\ (0.023)$	0.002 (0.023)	0.002 (0.023)	$0.002 \\ (0.023)$	
Urban	0.049**	0.050**	0.050**	0.050**	0.049**	
	(0.021)	(0.021)	(0.021)	(0.021)	(0.021)	
Northeast	0.016 (0.032)	0.013 (0.032)	0.013 (0.032)	0.013 (0.032)	0.013 (0.032)	
Midwest	-0.026	-0.026	-0.027	-0.027	-0.028	
	(0.027)	(0.027)	(0.027)	(0.027)	(0.027)	
South	-0.029	-0.029	-0.030	-0.030	-0.030	
	(0.024)	(0.024)	(0.024)	(0.024)	(0.024)	
Constant	2.676***	2.648***	2.659***	2.659***	2.664***	
	(0.032)	(0.033)	(0.033)	(0.033)	(0.032)	
Linear combination (Reminder + Interaction)	0.066**	-0.010	0.011	0.011	0.059	
	(0.032)	(0.028)	(0.027)	(0.023)	(0.042)	
Observations R ²	7239	7239	7239	7239	7239	
	0.233	0.232	0.232	0.232	0.232	

Note: The table extends the analysis reported in Table S22 by including interactions between *COVID-19 reminder* and the control variables. *Redistribution* is the non-standardized version of the respective variable defined in Appendix A.1. *COVID-19 reminder* and the control variables are defined in Appendix A.1. *Confirmed cases* is defined in Table S21. Robust standard errors in parentheses: * p < 0.10, ** p < 0.05, *** p < 0.01.

Table S28: Heterogeneity, Health care

	Health care					
	(1)	(2)	(3)	(4)	(5)	
COVID-19 reminder	-0.000	-0.002	0.008	-0.007	-0.006	
	(0.013)	(0.013)	(0.014)	(0.016)	(0.012)	
Republican × COVID-19 reminder	-0.001 (0.022)					
High inc. × COVID-19 reminder		$0.003 \\ (0.021)$				
High educ. × COVID-19 reminder			-0.017 (0.021)			
Female × COVID-19 reminder				0.014 (0.021)		
Retirement age × COVID-19 reminder					0.028 (0.025)	
Republican	-0.491***	-0.491***	-0.491***	-0.491***	-0.491***	
	(0.016)	(0.012)	(0.012)	(0.012)	(0.012)	
High inc.	-0.033***	-0.034**	-0.033***	-0.033***	-0.033***	
	(0.012)	(0.016)	(0.012)	(0.012)	(0.012)	
High educ.	0.015	0.015	0.024	0.015	0.015	
	(0.011)	(0.011)	(0.016)	(0.011)	(0.011)	
Female	0.004 (0.011)	$0.004 \\ (0.011)$	$0.004 \\ (0.011)$	-0.002 (0.015)	0.004 (0.011)	
Retirement age	-0.091***	-0.091***	-0.091***	-0.091***	-0.104***	
	(0.013)	(0.013)	(0.013)	(0.013)	(0.018)	
Confirmed cases	0.259*	0.259*	0.259*	0.257*	0.259*	
	(0.143)	(0.143)	(0.143)	(0.143)	(0.143)	
Child	0.027**	0.027**	0.027**	0.027*	0.027**	
	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	
Living alone	-0.018	-0.018	-0.018	-0.018	-0.018	
	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	
Urban	0.060***	0.060***	0.060***	0.060***	0.060***	
	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	
Northeast	0.018	0.018	0.018	0.018	0.018	
	(0.019)	(0.019)	(0.019)	(0.019)	(0.019)	
Midwest	-0.009	-0.009	-0.009	-0.009	-0.009	
	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)	
South	-0.014	-0.014	-0.014	-0.014	-0.014	
	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	
Constant	0.783***	0.784***	0.779***	0.786***	0.786***	
	(0.020)	(0.020)	(0.020)	(0.021)	(0.020)	
Linear combination (Reminder + Interaction)	-0.001	0.001	-0.010	0.006	0.023	
	(0.018)	(0.016)	(0.016)	(0.014)	(0.022)	
Observations R ²	7239	7239	7239	7239	7239	
	0.272	0.272	0.273	0.272	0.273	

Note: The table extends the analysis reported in Table S22 by including interactions between *COVID-19 reminder* and the control variables. *Health care* is the non-standardized version of the respective variable defined in Appendix A.1. *COVID-19 reminder* and the control variables are defined in Appendix A.1. *Confirmed cases* is defined in Table S21. Robust standard errors in parentheses: * p < 0.10, ** p < 0.05, *** p < 0.01.

Table S29: Heterogeneity, Solidarity

	Solidarity					
	(1)	(2)	(3)	(4)	(5)	
COVID-19 reminder	0.122	0.086	0.214***	0.149*	0.111*	
	(0.077)	(0.080)	(0.081)	(0.086)	(0.066)	
Republican × COVID-19 reminder	0.070 (0.118)					
High inc. × COVID-19 reminder		0.129 (0.117)				
High educ. × COVID-19 reminder			-0.137 (0.117)			
Female × COVID-19 reminder				0.002 (0.117)		
Retirement age × COVID-19 reminder					0.220 (0.142)	
Republican	-0.748***	-0.714***	-0.715***	-0.713***	-0.712***	
	(0.083)	(0.060)	(0.060)	(0.060)	(0.060)	
High inc.	-0.020	-0.083	-0.019	-0.019	-0.021	
	(0.065)	(0.086)	(0.065)	(0.065)	(0.065)	
High educ.	0.184***	0.184***	0.250***	0.183***	0.184***	
	(0.062)	(0.062)	(0.084)	(0.062)	(0.062)	
Female	0.238***	0.238***	0.238***	0.237***	0.239***	
	(0.059)	(0.059)	(0.059)	(0.082)	(0.059)	
Retirement age	-0.266***	-0.268***	-0.266***	-0.267***	-0.375***	
	(0.075)	(0.074)	(0.075)	(0.075)	(0.100)	
Confirmed cases	0.156	0.167	0.165	0.163	0.165	
	(0.848)	(0.847)	(0.847)	(0.848)	(0.848)	
Child	-0.207***	-0.207***	-0.206***	-0.207***	-0.205***	
	(0.073)	(0.073)	(0.073)	(0.073)	(0.073)	
Living alone	-0.042	-0.043	-0.041	-0.042	-0.041	
	(0.082)	(0.082)	(0.082)	(0.082)	(0.082)	
Urban	0.049 (0.071)	0.049 (0.071)	$0.048 \\ (0.071)$	0.049 (0.071)	0.049 (0.071)	
Northeast	-0.019	-0.020	-0.019	-0.021	-0.022	
	(0.108)	(0.108)	(0.108)	(0.108)	(0.108)	
Midwest	0.054	0.051	0.054	0.053	0.051	
	(0.086)	(0.086)	(0.086)	(0.086)	(0.086)	
South	-0.092	-0.095	-0.092	-0.093	-0.094	
	(0.078)	(0.078)	(0.078)	(0.078)	(0.078)	
Constant	3.657***	3.679***	3.613***	3.645***	3.664***	
	(0.112)	(0.114)	(0.112)	(0.113)	(0.111)	
Linear combination (Reminder + Interaction)	0.192**	0.215**	0.077	0.151*	0.331***	
	(0.090)	(0.086)	(0.084)	(0.080)	(0.126)	
Observations R^2	7239	7239	7239	7239	7239	
	0.034	0.034	0.034	0.034	0.034	

Note: The table extends the analysis reported in Table S23 by including interactions between *COVID-19 reminder* and the control variables. *Solidarity* is the non-standardized version of the respective variable defined in Appendix A.1. *COVID-19 reminder* and the control variables are defined in Appendix A.1. *Confirmed cases* is defined in Table S21. Robust standard errors in parentheses: * p < 0.10, ** p < 0.05, *** p < 0.01.

Table S30: Heterogeneity, Compassion

	Compassion						
	(1)	(2)	(3)	(4)	(5)		
COVID-19 reminder	0.019	0.007	0.041	0.031	0.006		
	(0.029)	(0.030)	(0.031)	(0.034)	(0.025)		
Republican × COVID-19 reminder	0.042 (0.046)						
High inc. × COVID-19 reminder		0.059 (0.045)					
High educ. × COVID-19 reminder			-0.011 (0.045)				
Female × COVID-19 reminder				$0.010 \\ (0.045)$			
Retirement age × COVID-19 reminder					0.169*** (0.054)		
Constant	4.006***	4.014***	3.996***	4.001***	4.014***		
	(0.042)	(0.043)	(0.042)	(0.043)	(0.042)		
Republican	-0.273***	-0.252***	-0.252***	-0.252***	-0.251***		
	(0.032)	(0.023)	(0.023)	(0.023)	(0.023)		
High inc.	-0.007	-0.036	-0.006	-0.006	-0.008		
	(0.025)	(0.033)	(0.025)	(0.025)	(0.025)		
High educ.	-0.005	-0.006	-0.001	-0.006	-0.005		
	(0.024)	(0.024)	(0.033)	(0.024)	(0.024)		
Female	0.170***	0.170***	0.170***	0.165***	0.171***		
	(0.023)	(0.023)	(0.023)	(0.031)	(0.023)		
Retirement age	$0.005 \\ (0.028)$	$0.004 \\ (0.028)$	$0.004 \\ (0.028)$	$0.004 \\ (0.028)$	-0.079** (0.040)		
Confirmed cases	0.238	0.245	0.243	0.242	0.245		
	(0.314)	(0.314)	(0.314)	(0.314)	(0.314)		
Child	-0.002	-0.003	-0.002	-0.002	-0.001		
	(0.028)	(0.029)	(0.029)	(0.029)	(0.029)		
Living alone	-0.077**	-0.077**	-0.076**	-0.076**	-0.076**		
	(0.032)	(0.032)	(0.032)	(0.032)	(0.032)		
Urban	0.019	0.019	0.019	0.019	0.018		
	(0.027)	(0.027)	(0.027)	(0.027)	(0.027)		
Northeast	0.045 (0.042)	0.044 (0.042)	0.044 (0.042)	0.044 (0.042)	0.043 (0.042)		
Midwest	0.029 (0.032)	0.027 (0.032)	$0.028 \\ (0.032)$	$0.028 \\ (0.032)$	$0.026 \\ (0.032)$		
South	0.085***	0.083***	0.085***	0.085***	0.083***		
	(0.030)	(0.030)	(0.030)	(0.030)	(0.030)		
Linear combination (Reminder + Interaction)	0.062*	0.066*	0.030	0.041	0.175***		
	(0.035)	(0.034)	(0.033)	(0.030)	(0.047)		
Observations R ²	7239	7239	7239	7239	7239		
	0.033	0.033	0.033	0.033	0.034		

Note: The table extends the analysis reported in Table S23 by including interactions between *COVID-19 reminder* and the control variables. *Compassion* is the non-standardized version of the respective variable defined in Appendix A.1. *COVID-19 reminder* and the control variables are defined in Appendix A.1. *Confirmed cases* is defined in Table S21. Robust standard errors in parentheses: * p < 0.10, ** p < 0.05, *** p < 0.01.

Table S31: Heterogeneity, Global first

	Global first					
	(1)	(2)	(3)	(4)	(5)	
COVID-19 reminder	-0.072	0.004	0.049	0.003	-0.053	
	(0.080)	(0.080)	(0.081)	(0.087)	(0.066)	
Republican × COVID-19 reminder	0.151 (0.114)					
High inc. × COVID-19 reminder		-0.035 (0.116)				
High educ. × COVID-19 reminder			-0.133 (0.116)			
Female × COVID-19 reminder				-0.032 (0.117)		
Retirement age × COVID-19 reminder					0.225* (0.133)	
Republican	-1.396***	-1.321***	-1.323***	-1.321***	-1.320***	
	(0.080)	(0.058)	(0.058)	(0.058)	(0.058)	
High inc.	-0.109*	-0.089	-0.107*	-0.107*	-0.109*	
	(0.065)	(0.086)	(0.065)	(0.065)	(0.065)	
High educ.	0.200***	0.197***	0.263***	0.198***	0.199***	
	(0.063)	(0.063)	(0.084)	(0.063)	(0.063)	
Female	-0.118**	-0.118**	-0.118**	-0.103	-0.117**	
	(0.059)	(0.059)	(0.059)	(0.081)	(0.059)	
Retirement age	-0.498***	-0.498***	-0.499***	-0.499***	-0.610***	
	(0.070)	(0.070)	(0.070)	(0.070)	(0.094)	
Confirmed cases	1.068	1.082	1.085	1.087	1.086	
	(0.826)	(0.827)	(0.826)	(0.826)	(0.826)	
Child	-0.001 (0.073)	-0.001 (0.073)	-0.000 (0.073)	-0.000 (0.073)	0.001 (0.073)	
Living alone	0.096	0.098	0.098	0.098	0.098	
	(0.080)	(0.080)	(0.080)	(0.080)	(0.080)	
Urban	0.093	0.094	0.093	0.093	0.093	
	(0.069)	(0.069)	(0.069)	(0.069)	(0.069)	
Northeast	-0.116	-0.121	-0.119	-0.121	-0.122	
	(0.103)	(0.103)	(0.103)	(0.103)	(0.103)	
Midwest	-0.156*	-0.157*	-0.157*	-0.158*	-0.160*	
	(0.085)	(0.084)	(0.085)	(0.084)	(0.084)	
South	-0.103	-0.104	-0.103	-0.105	-0.106	
	(0.079)	(0.079)	(0.079)	(0.079)	(0.079)	
Constant	3.527***	3.490***	3.469***	3.492***	3.520***	
	(0.113)	(0.114)	(0.114)	(0.114)	(0.111)	
Linear combination (Reminder + Interaction)	0.078	-0.031	-0.084	-0.029	0.172	
	(0.081)	(0.084)	(0.083)	(0.078)	(0.116)	
Observations R^2	7239	7239	7239	7239	7239	
	0.093	0.093	0.093	0.093	0.093	

Note: The table extends the analysis reported in Table S24 by including interactions between *COVID-19 reminder* and the control variables. *Global first* is the flipped and non-standardized version of *Nationalism* as defined in Appendix A.1. *COVID-19 reminder* and the control variables are defined in Appendix A.1. *Confirmed cases* is defined in Table S21. Robust standard errors in parentheses: * p < 0.10, ** p < 0.05, *** p < 0.01.

Table S32: Heterogeneity, No borders

]	No borders	S	
	(1)	(2)	(3)	(4)	(5)
COVID-19 reminder	-0.053	-0.022	-0.039	-0.040	-0.070*
	(0.042)	(0.040)	(0.043)	(0.050)	(0.037)
Republican × COVID-19 reminder	0.069 (0.065)				
High inc. × COVID-19 reminder		-0.009 (0.065)			
High educ. × COVID-19 reminder			$0.028 \\ (0.065)$		
Female × COVID-19 reminder				0.027 (0.065)	
Retirement age × COVID-19 reminder					0.249*** (0.075)
Republican	-1.035***	-1.001***	-1.000***	-1.001***	-0.999***
	(0.046)	(0.034)	(0.034)	(0.034)	(0.033)
High inc.	-0.096***	-0.091*	-0.095***	-0.095***	-0.097***
	(0.036)	(0.047)	(0.036)	(0.036)	(0.035)
High educ.	-0.016	-0.017	-0.031	-0.017	-0.016
	(0.035)	(0.035)	(0.047)	(0.035)	(0.035)
Female	-0.172***	-0.172***	-0.172***	-0.186***	-0.171***
	(0.032)	(0.032)	(0.032)	(0.045)	(0.032)
Retirement age	-0.179***	-0.180***	-0.180***	-0.180***	-0.302***
	(0.039)	(0.039)	(0.039)	(0.039)	(0.054)
Confirmed cases	0.845*	0.852*	0.852*	0.849*	0.855*
	(0.462)	(0.462)	(0.462)	(0.462)	(0.463)
Child	0.196***	0.196***	0.196***	0.196***	0.198***
	(0.042)	(0.042)	(0.042)	(0.042)	(0.042)
Living alone	0.007 (0.041)	$0.008 \\ (0.041)$	$0.008 \\ (0.041)$	0.008 (0.041)	0.008 (0.041)
Urban	0.090**	0.090**	0.090**	0.090**	0.090**
	(0.037)	(0.037)	(0.037)	(0.037)	(0.037)
Northeast	-0.040	-0.042	-0.042	-0.041	-0.043
	(0.058)	(0.058)	(0.058)	(0.058)	(0.058)
Midwest	-0.117**	-0.118**	-0.118**	-0.118**	-0.121**
	(0.048)	(0.048)	(0.048)	(0.048)	(0.048)
South	-0.089**	-0.089**	-0.090**	-0.089**	-0.091**
	(0.044)	(0.044)	(0.044)	(0.044)	(0.044)
Constant	3.183***	3.168***	3.176***	3.176***	3.192***
	(0.060)	(0.061)	(0.060)	(0.062)	(0.060)
Linear combination (Reminder + Interaction)	0.016	-0.030	-0.011	-0.013	0.179***
	(0.050)	(0.051)	(0.049)	(0.041)	(0.065)
Observations R ²	7239	7239	7239	7239	7239
	0.153	0.153	0.153	0.153	0.154

Note: The table extends the analysis reported in Table S24 by including interactions between *COVID-19 reminder* and the control variables. *No borders* is the non-standardized version of the respective variable defined in Appendix A.1. *COVID-19 reminder* and the control variables are defined in Appendix A.1. *Confirmed cases* is defined in Table S21. Robust standard errors in parentheses: * p < 0.10, ** p < 0.05, *** p < 0.01.

Issued in the series Discussion Papers 2019

2019

- 01/19 January, Aline Bütikofer, Christopher Cronin, Meghan Skira, "Employment Effects of Healthcare Policy: Evidence from the 2007 FDA Black Box Warning on Antidepressants"
- **02/19** February, **Ingar Haaland** and Cristopher Roth "Beliefs About Racial Discrimination and Support for Pro-Black Policies"
- **03/19** February, **Astrid Kunze** and Xingfei Liu, "Universal Childcare for the Youngest and the Maternal Labour Supply"
- **04/19** February, **Ingvild Almas, Alexander W. Cappelen, Bertil Tungodden**. "Cutthroat capitalism versus cuddly socialism: Are Americans more meritocratic and efficiency-seeking than Scandinavians?"
- **05/19** February, **Chang Koo Chi**, Kyoung Jin Choi. "Performance Measurement in Agency Models"
- 06/19 March, Alexander W. Cappelen, Ranveig Falch and Bertil Tungodden.
 "The Boy Crisis: Experimental Evidence on the Acceptance of Males Falling Behind"
- **07/19** March, Frode Skjeret, **Frode Steen** and **Timothy G.A Wyndham**. "Paywalls and the demand for online news"
- **08/19** April, **Ola. H. Grytten** and Viktoriia Koilo. "The Financial Instability Hypothesis and the Financial Crisis in Eastern European Emerging Economies"
- **09/19** April, **Alexander W. Cappelen**, Johanna Mollerstrom, Bjørn-Atle Reme and **Bertil Tungodden.** "A Meritocratic Origin of Egalitarian Behavior"
- **10/19** April, **Fanny Landaud**. "From Employment to Engagement? Stable Jobs, Temporary Jobs, and Cohabiting Relationships"
- **11/19** May, **Ola Honningdal Grytten** and Viktoriia Koilo. "Evidence of the Environmental Kuznets Curve in Emerging Eastern European Economies"

- **12/19** June, Rune Midjord, Tomás Rodríguez Barraquer, and **Justin Valasek.** "Robust Information Aggregation Through Voting"
- 13/19 June, Eva M. Berger, Henning Hermes, Guenther Koenig, Felix Schmidt, and Daniel Schunk. "Self-regulation Training and Job Search Behavior: A Natural Field Experiment Within an Active Labor Market Program"
- 14/19 June, Henning Hermes, Martin Huschens, Franz Rothlauf and Daniel Schunk. "Motivating Low-Achievers—Relative Performance Feedback in Primary Schools"
- 15/19 August, Viktoriia Koilo and Ola Honningdal Grytten. "The Blue Maritime C luster Crisis Financial Instability and Supply Chain Management Effects"
- **16/19** September, Jonas Andersson, **Fred Schroyen** and Gaute Torsvik. "The impact of international tax information exchange agreements on the use of tax amnesty: evidence from Norway"
- 17/19 September, Ingrid Kristine Folgerø, **Torfinn Harding** and Benjamin S. Westby. "Going Fast or Going Green? Evidence from Environmental Speed Limits in Norway"
- 18/19 September. Julie Riise, Barton Willage and Alexander Willén. "Can Female Doctors Cure the Gender STEMM Gap? Evidence from Randomly Assigned General Practitioners"
- 19/19 September, Aline Bütikofer, Katrine V. Løken and Alexander Willén. "Building Bridges and Widening Gaps: Efficiency Gains and Equity Concerns of Labor Market Expansions"
- **20/19** September, Richard Friberg, **Frode Steen** and **Simen A. Ulsaker**. "Humpshaped cross-price effects and the extensive margin in cross-border shopping"
- **21/19** July, Mai Nguyen-Ones, and **Frode Steen.** "Market Power in Retail Gasoline Markets"
- **22/19** October, Tunç Durmaz and **Fred Schroyen.** "Evaluating Carbon Capture and Storage in a Climate Model with Endogenous Technical Change"
- 23/19 November, Henning Hermes and Daniel Schunk. "If You Could Read My Mind An Experimental Beauty-Contest Game With Children"

24/19 December, **Vincent Somville.** "Having a Daughter Reduces Male Violence Against a Partner"

2020

- **01/20** January, **Laura Khoury**, Clément Brébion and Simon Briole. "Entitled to Leave: the impact of Unenployment Insurance Eligibility on Employment Duration and Job Quality"
- **02/20** January, Thomas Buser, **Alexander Cappelen**, Uri Gneezy, Moshe Hoffman and **Bertil Tungodden**. "Competitiveness, gender and handedness: a large-sample intercultural study"
- **03/20** February, **Patrick Bennett**, Chiara Ravetti and Po Yin Wong. "Losing in a Boom: Long-term Consequences of a Local Economic Shock for Female Labour Market Outcomes"
- **04/20** April, Øivind A. Nilsen. "The Labor Market in Norway: 2000-2018"
- **05/20** April, **Simen A. Ulsaker**. "Exclusionary contracts and incentives to innovate"
- 06/20 May, Alexander W. Cappelen, Ranveig Falch, Erik Ø. Sørensen and Bertil Tungodden. "Solidarity and Fairness in Times of Crisis"





NORGES HANDELSHØYSKOLE

Norwegian School of Economics

Helleveien 30 NO-5045 Bergen Norway

T +47 55 95 90 00 E nhh.postmottak@nhh.no W www.nhh.no