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**Never waste a “good” crisis! Priming the economic aspect of
crises fosters social capital build-up and prosociality**

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Never waste a “good” crisis! Priming the economic aspect of crises fosters social capital build-up and prosociality*

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Abstract

Do crises make people more prosocial? And what role does communication play in promoting such attitudes and behavior? These answers matter for post-crisis economic recovery as social capital has been linked to growth. We leverage the incidence of Covid-19 –a multifaceted global crisis– and using a representative panel of US residents, surveyed in April and October 2020, we explore how a) pandemic-induced economic and health anxiety map to prosocial inclinations and behavior, and b) whether communication (and what types) can foster social capital formation. We find that *individual* exposure to the economic and health consequences of the pandemic had no effect on prosocial inclinations and social capital; but perceived economic vulnerability reduced trust in government and respect for authority and increased preferences for redistribution. Yet information about the *aggregate* economic consequences of Covid-19 fosters social capital build-up (e.g., altruism, giving, patience) and prosocial preferences. In contrast, information about the health costs of the pandemic has the *opposite effect*: it greatly reduces interpersonal trust. These information effects also map into policy preferences beyond the Covid-19 crisis. Our findings are consistent with cultural accounts on the determinants of Americans’ prosocial inclinations and preferences.

Keywords: crisis, information, altruism, trust, prosociality, social capital, economic vulnerability, risk preferences, patience, pandemic

JEL: C90, D64, D83, D84, D91, P16, Z13

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I INTRODUCTION

How do major, global shocks like a pandemic affect an economy’s social capital? In this paper, we address this question with a survey experiment. The question is important because social capital is one of the mechanisms through which such shocks can have enduring or scarring effects upon an economy. Thus, the time path of recovery from a pandemic-like shock will depend in part on whether the shock influences the economy’s social capital. For this purpose, we take social capital to consist of the prosocial beliefs/inclinations towards trust and cooperation in economic and social interactions and the individual preferences for risk taking and patience that encourage innovation, investment and coordination. Our survey experiment is also designed to address a further question: can a government’s communication strategy during a pandemic mediate any influence on social capital? Towards this end, we examine a basic feature of a communication strategy: its provision of information. In particular, does information on the economic as compared with the health aspects of a pandemic have any and/or different effects on social capital?

There is evidence that major economic shocks like the Great Depression and the 2008 financial crisis have enduring or scarring effects through their influence on individual preferences towards risk taking or redistribution (see e.g. [Aksoy et al. 2020](#); [Bogliacino et al. 2021b](#); [Giuliano and Spilimbergo 2014](#)). There is also evidence that the economic shocks diminish prosocial beliefs/inclinations. For example, economic shocks are associated with more selfish responses (e.g., [Margalit 2013](#); [Fisman et al. 2015](#); [Colantone and Stanig 2018](#)), decreased sense of solidarity post-crises ([Sambanis et al. 2018](#)) and decreases in social capital ([Gurieva and Melnikov 2016](#)). However, there are some studies where economic and political crises have been associated with constant or possibly increasing interpersonal trust ([Ervasti et al. 2019](#)). A pandemic is, however, unlike these crises because it not only has an economic dimension, it has an independent and major health one: people die in unusually high numbers as a direct consequence of a pandemic.

There is some evidence regarding how local natural disasters that similarly combine health and economic attributes affect social capital. For example, [Whitt and Wilson \(2007\)](#) and [Cassar et al. \(2017\)](#) find that people act more cooperatively after natural disasters, like Hurricane Katrina, and [Gualtieri et al. \(2019\)](#) find strengthened preferences for redistribution. Against this, there is evidence of negative reciprocity in areas affected by earthquakes ([Fleming et al. 2014](#)). Relatedly, [Bogliacino et al. \(2021b\)](#) suggest that people affected perform worse in terms of cognitive functioning, are more risk loving, and are more prone to punish others (negative reciprocity) after natural disasters. To the best of our knowledge, however, we are the first to examine how a global shock with both major health and economic dimensions, like a pandemic, affects social capital.

We leverage the occurrence and evolution of the Covid-19 pandemic –a major global health and economic crisis– during the course of six months to explore how respondents’ experience of and information about the consequences of such crisis can alter prosocial attitudes and behavior. Our survey experiment uses a representative panel of US respondents who were surveyed in April and October 2020 ($N = 2,462$, unique $N = 1,231$). They were asked on each occasion about their own exposure to the pandemic and a set of questions related to their prosociality in interactions and their willingness to take risks and be patient. The panel was randomly divided into three groups in each wave. One treatment group was primed by information on predicted COVID deaths by end of the year and the other treatment group by information on the predicted average loss in income by end of year; the control group listened to a short piece of music instead in the corresponding interval.

Our methodological design embeds two important novelties in the study of the effects of major global shocks –such as the current pandemic– on prosocial inclinations and behavior. First, to our knowledge, this is among the very first studies exploiting a panel of (the same) individuals surveyed twice: during the first and the second waves of the pandemic. Second, our survey includes an experimental process to directly elicit preferences for prosociality. In addition, our design also enables us to test whether both personal exposure to and/or

the general experience of the pandemic affects social capital and whether the provision of different kinds of information affects social capital. The design also builds-in a possible robustness check. We ask several questions related to people’s policy preferences because in so far as we find evidence of changes in the beliefs/inclinations that we associate with social capital, then we expect these changes to be associated with changes in those policy preferences that are also likely to draw on these beliefs/inclinations.

We find no effect on social capital from personal exposure to the pandemic, but the general exposure to (mostly) the economic consequences of the unfolding pandemic is associated with a (very modest) increase in preferences for redistribution and reduced respect for authority and trust in government. In this respect, our findings are partially consistent with those that have been found for major, global economic shocks like the Great Depression and the 2008 financial crisis –with one major exception, as we do not find an effect on risk-taking behavior. We also find that information provision has a significant effect on social capital and prosocial behavior. In particular, information on the economic losses boosts generosity in charitable donations and patience. However, in marked contrast, information on health losses reduces generalized interpersonal trust. Consistent with these information effects on social capital, economic information is associated with an increase in (elicited) preferences for prosociality and support for a universal basic income whereas health information reduces support climate change mitigation policies.

Thus, we contribute to two strands of the literature. First, we support the general finding with respect to the possible scarring effects of major, global shocks. Second, we contribute to the literature on government communication strategies because we find that highlighting the economic costs of the pandemic has a positive effect on social capital, whereas an emphasis on its health aspects has a negative one. The latter contribution is, to the best of our knowledge, an entirely new insight; adding a new twist, so to speak, to the aphorism that “it’s the economy stupid.”

In the next section, we set out our research design and methods. Section III presents

and discusses the results, while Section [IV](#) discusses the possible underlying mechanisms and concludes the paper.

II RESEARCH DESIGN AND METHODS

Recruitment of panel: We recruited US-based participants via Prolific Academic, a web-based panel with over 100,000 active participants. We collected the panel data over 6 months. The first wave of the survey experiment was undertaken online between 17 and 21 April 2020 and the second was between 28th of October and 3rd of November 2020. There is some attrition from the sample over time. We were able to recruit 1,231 of 2,216 total respondents in the second wave.¹ Table [1](#) compares summary statistics for the sample to people who appeared in wave one only. Across all demographics variables there are no substantial differences between the two groups. The attrition rate is likely due to respondents dropping out of the Prolific Academic panel over time or becoming inactive on the platform.

Sampling: We created a total of 170 subgroups weighted based on age, gender, region and work status. To generate samples, we used the US Current Population Survey ([US Census Bureau 2018](#)). Our subjects were representative in terms of age, gender, region and work status in the US. There were a few subgroups for which we did not completely fill our quotas. This was due to not enough participants over the age of 60 being registered on Prolific. In the main analyses, we use weights to ensure representativeness on these four dimensions.

Information treatment: The two information treatment groups received one of two information prompts (health-related or economic information), while the control group heard a piece of instrumental music. One information treatment group was informed about the projected number of Covid-19-related deaths in the next three months from the month they took the survey (in April and then in November), as predicted by the Institute for Health Met-

¹Attrition rates of this magnitude are common for similar online panels of participants.

rics and Evaluation (IHME) (IHME 2020a,b). The other group received the IMF-predicted average income losses by the end of the year 2020 (IMF 2020). Both sets of estimates were published in the week preceding our field work and were considered by media and experts the most informed projections at the time. The control group simply listened to twenty seconds of instrumental music. The exact wording of our information treatments is described in the Appendix. Also in the Appendix (see Figure 1 and Table 14) we present covariate balance tests across the two treatment and the control groups. Reassuringly, we do not find any imbalance among the three groups.

Identification: We use a within estimator; deriving co-movements of y around its individual-specific mean with x around its individual-specific mean (Wooldridge 2006).² Since $T = 2$ in our panel, our fixed effects method is identical to a first-difference model. To identify the causal effects of the information treatments on respondents’ preferences over the different variables, we run the following regression:

$$\Delta Y_{it} = \beta_0 + \beta_1 \Delta Treatment_{it} + \gamma \Delta X_{it} + \alpha_s + I_{it} + \lambda_t + \eta_{it} \quad (1)$$

where Y_{it} is the outcome variable and treatment is whether an individual was assigned to receive one of the treatments,³ β_1 captures the causal effect of receiving a treatment (income or health) in either of the waves on the changes in outcome. It takes the value 1 if respondents received a health treatment in one of the waves and 2 if respondents received an income loss treatment in one of the waves. X is a vector of individual characteristics, including gender, ethnicity, income, education, political affiliation and ideology, α_i are state fixed effects, I are individual fixed effects and λ_t is a wave dummy. We cluster the standard errors by state s . The wave dummy controls for any unobservable variation between the two waves of our panel

²We implement it using **Stata**’s command **xtreg, fe**, a specification which is econometrically identical with the first-differences model we present in equation below when $T = 2$.

³As is standard with fixed effects estimators, our treatment variable identifies both within and between-subject variation.

as the crisis unfolded. Therefore we are able to control for any unobserved heterogeneity between the two waves. We are also able to account for within-individual variation given the nature of our panel data.

As means of robustness check, we also explore a specification where we only focus on the treatment in wave 2 by effectively setting all treatments in wave 1 equal to 0 (i.e. just like the control). This is presented in Table 3. In this case, we exploit *only between-subjects* variation as far as the treatment effects are concerned.⁴ That is, we estimate the following model:

$$\Delta Y_{it} = \beta_0 + \beta_1 Treatment_{i,t=2} + \gamma \Delta X_{it} + \alpha_s + I_{it} + \lambda_t + \epsilon_{it} \quad (2)$$

Finally, there are some outcome variables which we only measure in wave 2, such as the variables measuring the elicited preferences for prosociality (WTP) and for policy (e.g., UBI). Namely, we estimate the following specification:

$$Y_i = \beta_0 + \beta_1 Treatment_i + \gamma \Delta X_{it} + \alpha_s + I_i + \xi_{it} \quad (3)$$

where now Y_i are elicited prosocial and policy preferences while the remaining variables are defined as above. Notice that we still take the first-differences for all the control variables (e.g., self-perceived econ vulnerability, health anxiety over Covid-19, beliefs about seriousness of Covid-19 in comparison to flu etc) that we measured in both waves.

Outcome variables: We ask respondents a series of questions on social capital. In specific, we measure preferences on (i) interpersonal trust, (ii) trust in federal government, (iii) altruism (charity giving), (iv) patience and (v) risk taking. We have additional measures on (vi) respect for authority, (vii) inequality and (viii) trust in federal government. We also elicit

⁴But note that we still exploit the panel nature of our data to difference-out any variation in both observable and unobservable attributes by taking the first-differences of the control variables (X_{it}) and by including individual fixed effects (I_{it}).

prosocial behavior using willingness to pay type questions and norm elicitation mechanism (see for an extended discussion of the methods, [Hargreaves Heap et al. 2020](#)). To do so, we ask respondents about (1) their willingness to pay for a treatment which would reduce their own mortality risk from Covid-19, (2) their willingness to pay for the same treatment if it *also* reduced the likelihood of spreading the virus to others and (3) elicited value of life where respondents play the role of a social planner with stakes in the decision to save more lives.⁵ The difference between the first two measures is equivalent to the value they place on the positive externalities of the treatment and captures prosociality. The difference between the first and third measures also captures prosociality isolating positive externalities.

In addition to the behavioral outcomes, we also ask respondents about their policy preferences on universal basic income (UBI) and climate change in wave 2 to see if changes in values and preferences are reflected in policy preferences. We present a detailed description of main outcome variables and their measurement in Table 1 below.

⁵In particular, our subjects make a sequence of [Holt and Laury \(2002\)](#) like binary choices between outcomes that contain a pair of deaths per 1m and average household income losses in the US. A selfish person will infer that their personal chances have changed with society's and answer accordingly, but a prosocial person will in addition take account of how not only their, but also other people's chances of death have also changed with each option.

Table 1: Summary Statistics

	Wave 1 (all)	Wave 2
<i>Panel A: Participants</i>	2,493	1,231
Mean age	44.01	48.25
Female	52.7%	55.6%
Earning under \$20,000	14.3%	14.9%
Earning \$20,000-50,000	29.8%	29.6%
Earning \$50,000-100,000	33.3%	32.8%
Earning more than \$100,000	22.6%	22.7%
<hr/>		
<i>Panel B: Main outcome variables</i>	Full panel	
	Mean	Std. Dev.
Interpersonal trust	0.433	(.496)
Altruism	129.420	(189.230)
Patience	5.999	(2.471)
Risk taking	4.010	(2.378)
Respect for authority	4.294	(2.670)
Prosociality 1	1.90e	(1.002)
Prosociality 2	-.000	(1.001)
UBI	3.355	(1.493)
Climate change	0.774	(.418)
<i>Observations (total N)</i>	2,462	

III RESULTS

We present two main sets of results. First, we focus on outcomes relating to social capital (interpersonal trust, altruism, patience and risk-taking) and explore the effects of changing pandemic-related anxiety and receipt of information treatments (T1 and T2). Second, we perform a series of robustness checks to see whether the results are robust across different specifications and measurements. Namely, we check between-treatment effects, elicited measurement of prosociality and policy preferences (climate change and universal basic income).

All social capital outcome variables are measured in both waves and capture the changes between two waves in panel tables. Elicited measurements of prosociality and questions on policy preferences reflect wave 2 results only. All panel specifications incorporate state and individual fixed effects and include controls such as income, education, ethnicity, party affiliation, presidential vote and ideology. We present additional results in Appendix Section [A](#). In Appendix Section [B](#), we address concerns of robustness for each main outcome variable using different specifications.

III.A Social capital

We focus on the first set of our results on the effect of pandemic-induced economic and generalized anxiety on social capital. We measure self-perceived economic vulnerability in both waves by asking respondents how much their income was affected as a result of the Covid-19 pandemic. We measure health anxiety by asking respondents' level of concern about health consequences of Covid-19 for themselves and their family (both waves) and economic anxiety by asking their level of concern about general economic consequences of Covid-19 (only in wave 2). We also ask respondents about their beliefs about the seriousness of Covid-19 in comparison to the flu in both waves.

Table [2](#), below, displays panel results on four outcomes which constitute elements of social capital, in a broader sense, and are linked with prosocial behavior: (1) interpersonal

trust, (2) altruism (elicited via a ‘donation game’), (3) patience, and (4) risk taking. We find that personal exposure to the (economic and health) consequences of the pandemic has no effect on social capital and prosocial behavior. Changes in the (i) pandemic-induced self-perceived economic vulnerability, (ii) health anxiety for oneself and family and (iii) beliefs about the seriousness of Covid-19 in comparison to flu do not seem to have a substantial impact on social capital and prosociality, other than heightened health anxiety having a modest negative effect on interpersonal trust (effect marginally fails to be significant at the 5% level; $p < 0.06$). The unfolding of the pandemic between the two waves of our panel (April and October 2020), captured by the wave dummy, does not have a significant impact on social capital either.

Additionally, individuals’ personal experience of the economic (and to a lesser degree health) fallout of the pandemic, as it evolved over time, has led to other important changes in their attitudes and behavior; we find a sizeable decrease in respect for authority (Appendix Table 7), a stronger preference for income equality (Appendix Table 8) and a decrease in trust in federal government (Appendix Table 9). The absence of direct effects of the pandemic experience on prosociality is particularly interesting with respect to risk-taking behavior as it contrasts an earlier body of literature suggesting that crises (especially economic ones) tend to make people more risk averse and less prone to risk taking (see e.g. [Bogliacino et al. 2021a](#)). In that sense the absence of such effects, as the pandemic unfolded, probably highlights that this is yet another respect in which the Covid-19 crisis is not just another case of ‘business as usual’ (for a related discussion, see also [Hargreaves Heap et al. 2020](#)).

Table 2: Panel Results on Social Capital

DV	(1) Interpersonal Trust	(2) Altruism	(3) Patience	(4) Risk Taking
Covid deaths treat	-0.0444** (0.0222)	9.801 (9.549)	0.0595 (0.118)	-0.0792 (0.117)
Income loss treat	-0.00618 (0.0203)	19.98** (9.411)	0.227** (0.114)	-0.0860 (0.110)
Wave dummy	0.0114 (0.0260)	-4.986 (10.96)	-0.122 (0.156)	-0.0515 (0.192)
Belief about seriousness	0.0246 (0.0239)	10.44 (10.30)	0.0807 (0.117)	-0.111 (0.170)
Health anxiety	-0.0364* (0.0200)	2.898 (8.282)	0.0290 (0.103)	-0.0130 (0.125)
Self-perceived econ vulnerability	-0.00437 (0.00632)	0.0731 (3.072)	-0.00581 (0.0333)	0.00395 (0.0319)
Observations	2,079	2,151	2,242	2,243
R-squared	0.045	0.083	0.017	0.029
Number of unique.id	1,161	1,187	1,205	1,205
Region FE	✓	✓	✓	✓
Individual FE	✓	✓	✓	✓
Controls	✓	✓	✓	✓
Clustered SE	✓	✓	✓	✓

Notes: Variables capture changes between wave 1 and 2 unless otherwise specified. Controls include income, education, ethnicity, party, presidential vote and ideology. Cluster robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

But while *experiencing* the pandemic unfolding only seemed to have modest effects on behavior and attitudes, it is possible that communication regarding its economic and health consequences did have an amplifying effect. We do so next, where we zoom into the effect of information communication on prosocial attitudes and social capital build-up. Table 2 presents the effects of our two treatments (T1 and T2) on social capital outcomes. It is crucial to note that information effects come from the two waves, that is – the panel exploits those cases where respondents received T1 in one of the waves and control in the other or they received T2 in one of the waves and control in the other. We find that priming the economy causes a very strong response in terms of heightening prosocial attitudes while priming the health consequences seems to do the opposite. As can be seen from Models 1-4 in Table 2, receiving information about economic consequences increases altruism (charitable giving) and patience ($p < 0.05$), while communicating the health aspect of the crisis decreases interpersonal trust ($p < 0.05$). One might wonder if these information effects generalize to other time periods. Peyton et al. (2021) inquire about the generalizability of online experiments conducted during the Covid-19 pandemic and find strong evidence that these experiments replicated in terms of sign and significance (but at reduced magnitudes).

III.B Robustness checks and policy preferences

Our first robustness check relates to disentangling the source of variation (between or within subjects) that is primarily driving the treatment effects we documented above. This is because our FE estimator, as detailed in Table 2, simultaneously exploits variation in (and identifies the effects of) the information provided both within and between subjects. It is thus reasonable to explore whether the treatments effects we found are due to variation in treatment within or between subjects. In other words, what part –if any– of this effect is due to the persistence of information treatment effects over the period of six months between the two waves of our survey experiment and what part is due to variation between subjects in

wave 2?⁶ To achieve this goal, we first set all treatments in wave 1 equal to 0; in other words, as shown in equation 2, we exploit variation in information treatment *only* between-subjects in wave 2. Thus we identify between-subject treatment effects in wave 2. We present these results in Table 3.⁷ The magnitude of the treatment effects is larger but the sign and level of significance does not change when treatment effects only identify between-subjects variation as can be seen from Models 1-4 in Table 3.

If there have been these changes in social capital variables then we might expect to find evidence of preference changes in other areas where individual preferences have a significant social preference component. We test for whether there is evidence of two such preference changes in response to information: preferences over saving lives and policy preferences. To this end, we elicit prosociality by asking respondents willingness to pay (WTP) and (Holt and Laury style) value of life type questions.⁸ In Table 4 we present regression results with elicited prosociality behavior as the outcome variable. Variable *Prosociality* is constructed taking the difference between the first willingness to pay question, which only takes selfish preferences into account, and the second WTP-question that allows for prosocial preferences. *Prosociality 2* is constructed by taking the difference between the first WTP-style question and the third one (the Holt and Laury (2002) style elicitation). It is important to note that these WTP-style elicitation questions were only asked in wave 2, therefore we do not report panel results. Reassuringly, our main findings are primarily driven by between-subject variation in treatment assignment (see Table 3) and, hence, our exploration of prosocial preferences is informative. Table 4 demonstrates that changes in outcomes we documented

⁶Coppock (2017) puts similar information treatments into test and finds that persuasive treatments are likely to persist after 10 days, albeit at approximately half their original magnitudes.

⁷Note that we still exploit the panel structure of our data, that is, we still account for within-subject variation across the two waves for a series of observable (and unobservable) characteristics by taking first-differences across waves and utilizing individual fixed effects.

⁸We ask respondents about (1) their willingness to pay for a treatment which would reduce their own mortality risk from Covid-19, (2) their willingness to pay for the same treatment if it *also* reduced the likelihood of spreading the virus to others and (3) elicited value of life where respondents play the role of a social planner with stakes in the decision to save more lives (following a Holt and Laury (2002) type of elicitation procedure). The exact wording and frame of all these elicitation procedures is detailed in the Appendix, section D.1.

above is explained by our treatments heightening subjects' social preferences and this result is robust to two measurements of prosociality through different specifications ($p < 0.05$).

Table 3: Robustness 1: Panel Results with Between-Subjects Variation in Treatment

DV	(1) Interpersonal trust	(2) Altruism	(3) Patience	(4) Risk Taking
Covid deaths treat	-0.0879** (0.0349)	16.07 (15.81)	0.281 (0.175)	-0.194 (0.175)
Income loss treat	-0.0413 (0.0315)	29.92** (14.40)	0.449*** (0.157)	0.0584 (0.152)
Wave dummy	0.0454 (0.0328)	-15.60 (13.51)	-0.332* (0.177)	0.0206 (0.199)
Belief about seriousness	0.0219 (0.0226)	8.370 (10.42)	0.0944 (0.120)	-0.176 (0.152)
Health anxiety	-0.0323 (0.0224)	2.006 (8.627)	-0.0125 (0.107)	0.0324 (0.121)
Self-perceived econ vulnerability	-0.00305 (0.00630)	-1.416 (3.466)	-0.0151 (0.0351)	-0.00805 (0.0362)
Observations	2,079	2,151	2,242	2,243
R-squared	0.050	0.085	0.023	0.018
Number of unique_id	1,161	1,187	1,205	1,205
Region FE	✓	✓	✓	✓
Individual FE	✓	✓	✓	✓
Controls	✓	✓	✓	✓
Clustered SE	✓	✓	✓	✓

Notes: Variables capture changes between wave 1 and 2 unless otherwise specified. We set all treatments in wave 1 equal to 0 to capture between-subjects variation in treatment in wave 2. Controls include income, education, ethnicity, party, presidential vote and ideology. Cluster robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 4: Robustness 2: Elicited Prosocial Behavior via WTP

DV	(1) Prosociality	(2) Prosociality	(3) Prosociality 2	(4) Prosociality 2
Covid deaths treat	0.102 (0.0858)	0.120 (0.0879)	0.0235 (0.106)	0.0315 (0.103)
Income loss treat	0.133** (0.0521)	0.143** (0.0541)	0.152** (0.0756)	0.160** (0.0778)
Belief about seriousness		-0.0238 (0.0557)		0.0219 (0.0948)
Health anxiety		0.157*** (0.0518)		0.0382 (0.0534)
Economic anxiety		-0.00419 (0.0354)		-0.145** (0.0618)
Self-perceived econ vulnerability	-0.0186 (0.0194)	-0.0167 (0.0187)	-0.0117 (0.0253)	-0.0115 (0.0258)
Observations	1,059	1,057	710	709
R-squared	0.078	0.082	0.137	0.145
Wave	2	2	2	2
State FE	✓	✓	✓	✓
Controls	✓	✓	✓	✓
Clustered SE	✓	✓	✓	✓

Notes: Variables capture changes between wave 1 and 2 unless otherwise specified. Controls include income, education, ethnicity, party, presidential vote and ideology. Columns (3) and (4) contain fewer observations because the [Holt and Laury \(2002\)](#) social planner-style elicitation mechanism requires that subjects switch at most once between the two options for them to admit a preference representation. As is common in these type of elicitation exercises, about a quarter of subjects usually fails to exhibit a consistent social preference ordering; we are thus unable to assign a life valuation to those subjects and, as a result, we cannot compute the corresponding figures. Cluster robust standard errors in parentheses.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Our final set of robustness check tries to identify whether this change in prosocial behavior and attitudes maps into policy preferences. We ask two policy questions: support for universal basic income (UBI) and support for policies tackling climate change. Does this increase in prosociality induce people to express support for policies to tackle climate change or provide a Universal Basic Income (UBI)? We check whether and how these results on the positive effect of communication about the economy during the pandemic vis-à-vis the negative effects of health-related communication translate into policy preferences. We display those results in Table 5. Interestingly, information about economic losses seems to increase support for UBI, while information about Covid-19-related deaths has the opposite effect regarding support for policies to tackle climate change. Both of these results are robust to different specifications and are significant at $p < 0.05$. Communicating the economic consequences seems to heighten prosocial attitudes like patience and altruism, and thus respondents are more likely to support policies that might make up for income loss, such as UBI.

There is an additional interesting feature in these results that might help shed some light on the reasons behind such changes in policy preferences. Notice that individually-experienced economic anxiety (due to Covid-19) has the *opposite sign* from the ‘income loss’ information treatment and is negatively associated with support for pro-redistributive (and climate action) policies. We speculate that while personal economic anxiety was found to trigger a selfish or ego-tropic response (see e.g., Margalit 2019; Fisman et al. 2015; Colantone and Stanig 2018), our ‘income loss’ treatment reminds subjects of the *aggregate and universal* nature of the economic shock they are experiencing (akin to a recession).⁹ This, in turn, can trigger pro-redistributive preferences in a fashion similar to that found in Giuliano and Spilimbergo (2014). Indeed, the effect of information appears to completely offset the selfish reaction due to personal economic anxiety. Put differently, it alerts people to the fact that this is a collective calamity –a message of the sort of ‘we are all into this together’– since

⁹Recall that our treatment vignette provided information about the average loss of income per household, thus highlighting the universal nature of the shock.

everyone will be affected on aggregate. As a result, it cancels the ego-tropic response triggered by individual economic anxiety. Interestingly, health-related anxiety has the opposite effect both in comparison with the economic one, but also in relation to the effects of the health information treatment.

Table 5: Policy Preferences

DV	(1) UBI	(2) Climate change
Covid deaths treat	0.104 (0.0784)	-0.0426* (0.0249)
Income loss treat	0.153** (0.0762)	-0.000775 (0.0261)
Belief about seriousness	0.122 (0.0853)	0.0789*** (0.0223)
Health anxiety	0.0944** (0.0414)	0.0599*** (0.0179)
Economic anxiety	-0.155*** (0.0551)	-0.0362** (0.0171)
Perceived econ vulnerability	-0.0218 (0.0270)	-0.00587 (0.00667)
Observations	1,000	1,009
R-squared	0.608	0.564
Wave	2	2
State FE	✓	✓
Controls	✓	✓
Clustered SE	✓	✓

Notes: Controls include income, education, ethnicity, party, presidential vote and ideology. All specifications include weights. Cluster robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

IV DISCUSSION AND CONCLUSIONS

All four sets of our results carry important implications for policy and offer us some hints about the likely mechanisms in place. We have found that direct experience of the pandemic had little effect on social capital and prosociality –we only found that perceived economic vulnerability (and to a lesser extent health anxiety) due to the pandemic had some modest effects on reducing trust in government and respect for authority. The absence of clear effects on social capital, especially as far as risk-taking behavior is concerned, partly contrasts previous findings on the scarring effects of crises. In turn, this might suggest that the pandemic is a wholly novel experience. Nevertheless we do find that information provision about the *aggregate* (health and economic) consequences of the pandemic has important effects on social capital and prosocial attitudes. What is even more interesting is the stark dichotomy between the effect that information about the economic fallout of the pandemic (compared to the public health one) has, and the possible reasons behind such patterns; information about the economy seems to have a positive effect on social capital build-up in direct contrast with information about the public health component of the pandemic.

In trying to understand the mechanism behind this finding, we hypothesize that information about the economic consequences of the pandemic is more likely to be deemed as ‘actionable’ or ‘useful’ particularly for those individuals who are driven by their conviction that they are ‘masters of their own destiny’; a Tocquevillian type of optimism that they can change things to the better and that they are responsible for doing their best to make it that way. This, in turn, motivates those people who firmly believe that their actions are consequential for economic outcomes, to ‘roll-up their sleeves’ and come together in rebuilding their economy. We find some suggestive evidence in support of this claim that is consistent with the widely-held ‘popular wisdom’ of forward-looking Americans (so often described as having an ‘optimistic spirit’) who deeply believe that they can make a difference through their own actions. It is exactly those people, who believe that they hold the future into their

own hands, to whom information about the economy appears to have the strongest impact –reinforcing their prosocial attitudes and altruistic behavior (see Table 6).¹⁰

In contrast, information about Covid-19-related deaths is likely viewed under the prism of ‘bygones are bygones’; certainly there is nothing that can be done to reverse the loss of life. This type of information can hardly ignite a spree of optimism, especially among those people who believe that they cannot influence at all the likelihood of spreading Covid-19 through their own behavior and actions. If anything such information might generate a feeling of helplessness and impotency since averting this calamity was out of their personal control. Indeed, we do find some suggestive evidence (see again Table 6) consistent with this narrative; the negative effect of death information treatment on interpersonal trust is driven primarily by those individuals who do not think their own actions can affect the spread of the disease. That is, unlike those who believe that they can alter their economic fate and thus get motivated to ‘make things better’ when they receive information about the economy, those subjects who feel impotent to protecting themselves (and others) from the spread of the virus become more pessimistic when informed about the pandemic’s death toll. In turn, this pessimism can make them less trusting of others in light of the collective failure (and inability) to save more lives, perhaps due to some peoples’ reluctance to follow pandemic-related restrictions.

Further exploration of the mechanisms taking place also points to the facet that such inclinations also map into prosocial (other-regarding) preferences. Our second robustness check suggests that our information treatment effects are driven by changes in respondents’ prosocial values which are revealed via a willingness to pay for saving lives elicitation exercise. This means that these effects are likely to be very effective and persist over time even as the pandemic is gradually subsiding. This is because information of this type appears to feed directly into subjects’ other-regarding preferences. What is somewhat surprising is that,

¹⁰Following standard convention, we proxy this cultural attribute by exploiting the question about peoples’ belief on whether economic success is mostly due to luck or own effort. Since we included this question only in our second wave, our exploratory analysis is restricted in this wave. Fortunately, as we have shown in Tables 3 our main results are mostly driven by between-subject treatment variation in wave 2.

Table 6: Mechanism: The Role of ‘Own-effort vs. Luck’ and ‘Impotence vs. Control’

DV	(1) Altruism	(2) Altruism	(3) Risk- taking	(4) Risk- taking	(5) Interpersonal trust	(6) Interpersonal trust
	Subgroup: Own Effort	Subgroup: Luck	Subgroup: Own Effort	Subgroup: Luck	Subgroup: Impotent	Subgroup: Own Control
Covid deaths treat	-0.474 (22.77)	16.88 (21.72)	-0.266 (0.325)	0.196 (0.351)	-0.172** (0.0743)	0.0434 (0.0536)
Income loss treat	44.51** (21.35)	-7.761 (23.59)	-0.0854 (0.246)	0.126 (0.339)	-0.119 (0.0758)	0.0243 (0.0347)
Belief about seriousness	-10.45 (13.82)	0.280 (13.97)	-0.566** (0.230)	-0.269 (0.229)	0.0275 (0.0393)	0.0302 (0.0351)
Health anxiety	19.42** (7.834)	-0.128 (12.22)	-0.239 (0.228)	0.0914 (0.180)	-0.0833* (0.0456)	-0.0324 (0.0321)
Economic anxiety	4.331 (12.77)	-2.761 (12.68)	-0.196 (0.241)	0.0108 (0.184)	0.0371 (0.0332)	0.0109 (0.0310)
Perceived econ vulnerability	-1.407 (5.294)	0.751 (7.207)	-0.0107 (0.122)	-0.0190 (0.0779)	0.0113 (0.0163)	-0.0213* (0.0114)
Observations	505	528	514	559	340	693
R-squared	0.193	0.240	0.199	0.172	0.221	0.176
Region FE	✓	✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓	✓
Clustered SE	✓	✓	✓	✓	✓	✓

Notes: Regression results reported by subgroup. In columns 1-4 we use an identical subgroup split. Controls include income, education, ethnicity, party, presidential vote and ideology. Cluster robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

again, only information regarding the economic costs of the pandemic seems to activate such preferences.

Finally, we have been able to link these changes in prosocial inclinations, preferences and behavior with support for key policies that are pitched to play a role in the post-pandemic world such as the introduction of universal basic income (UBI). In other words, heightened other-regarding preferences also map into stronger, concrete support for pro-redistributive policies. In fact, Biden’s election and the agenda that his administration is pursuing in the first hundred days lends further external validity to our findings.

Overall our findings have important implications on the communication strategies policy makers should choose and the issues that they need to focus in the post-pandemic recovery era. More generally, our results highlight that despite the visible scarring effects of global (economic and health) crises, bringing out the universal (aggregate) nature of such calamities may foster social capital build-up and prosocial behavior and preferences. To the extent that, in the aftermath of major global shocks, prosocial inclinations and social capital are useful for the post-crisis recovery efforts, our findings suggest the importance of emphasizing this type of collective experience. They also highlight the key role of culture in understanding how information interacts with prosocial preferences in order to shape policy outcomes.

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A ADDITIONAL RESULTS

Table 7: Panel: Respect for Authority

	(1)	(2)	(3)	(4)	(5)	(6)
DV: Respect for authority 0-10, 10 = high respect						
Covid death treat	0.0819 (0.125)	0.0669 (0.125)	0.0394 (0.126)	-0.0120 (0.131)	0.0128 (0.131)	0.0601 (0.126)
Income loss treat	0.0722 (0.132)	0.0534 (0.132)	0.0550 (0.133)	-0.00652 (0.148)	-0.0187 (0.145)	0.0405 (0.132)
Wave dummy		0.117 (0.0853)	0.109 (0.0869)	0.135 (0.0981)	0.498** (0.206)	0.465** (0.192)
Belief about seriousness					-0.0900 (0.137)	-0.127 (0.139)
Health anxiety					-0.280* (0.148)	-0.234* (0.140)
Perceived econ vulnerability	-0.0701* (0.0360)	-0.0979** (0.0392)	-0.0983** (0.0396)	-0.0937** (0.0403)	-0.0946** (0.0402)	-0.101** (0.0396)
Observations	2,226	2,226	2,226	2,226	2,224	2,224
R-squared	0.008	0.015	0.039	0.046	0.052	0.044
# of unique.id	1,204	1,204	1,204	1,204	1,203	1,203
Wave Dummy		✓	✓	✓	✓	✓
State FE			✓	✓	✓	✓
Individual FE	✓	✓	✓	✓	✓	✓
Clustered SE	✓	✓	✓	✓	✓	✓
Weights				✓	✓	
Controls	✓	✓	✓	✓	✓	✓

Notes: Controls include income, education, ethnicity, party, presidential vote and ideology.
Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 8: Panel: Inequality

	(1)	(2)	(3)	(4)	(5)
DV: Incomes equal 0-10, 0 = make incomes more equal					
Covid deaths treat	0.0456 (0.120)	0.0501 (0.120)	0.0727 (0.122)	0.0386 (0.119)	0.0412 (0.119)
Income loss treat	-0.0369 (0.125)	-0.0390 (0.125)	-0.0419 (0.127)	-0.0187 (0.129)	-0.0194 (0.128)
Wave dummy		-0.181** (0.0788)	-0.182** (0.0803)	-0.185** (0.0780)	-0.0552 (0.208)
Belief about seriousness					-0.135 (0.156)
Health anxiety					-0.00243 (0.130)
Self-perceived econ vulnerability	-0.0876** (0.0365)	-0.0512 (0.0405)	-0.0611 (0.0412)	-0.0539 (0.0396)	-0.0537 (0.0396)
Observations	2,157	2,157	2,157	2,157	2,157
R-squared	0.055	0.059	0.071	0.068	0.070
# of unique ID	1,178	1,178	1,178	1,178	1,178
Wave Dummy		✓	✓	✓	✓
State FE			✓	✓	✓
Individual FE	✓	✓	✓	✓	✓
Clustered SE	✓	✓	✓	✓	✓
Weights				✓	✓
Controls	✓	✓	✓	✓	✓

Notes: Controls include income, education, ethnicity, party, presidential vote, ideology, altruism and trust in federal government. Cluster robust standard errors in parentheses. A negative coefficient reveals a preference for making incomes more equal. *** p<0.01, ** p<0.05, * p<0.1

Table 9: Panel: Trust in federal government

	(1)	(2)	(3)	(4)	(5)
DV: Trust in fed gov't (1-5)					
5 = more trust					
Covid deaths treat	0.0159 (0.0338)	0.0187 (0.0336)	0.0223 (0.0339)	0.0180 (0.0370)	0.0189 (0.0370)
Income loss treat	-0.00870 (0.0349)	-0.00896 (0.0343)	-0.0162 (0.0346)	-0.0178 (0.0356)	-0.0183 (0.0354)
Wave dummy		-0.100*** (0.0210)	-0.0962*** (0.0214)	-0.104*** (0.0223)	-0.117** (0.0556)
Belief about seriousness					0.0748** (0.0437)
Health anxiety					-0.0585 (0.0360)
Self-perceived econ vulnerability	-0.0188** (0.00939)	0.00162 (0.0102)	0.00139 (0.0103)	0.00646 (0.0112)	0.00632 (0.0111)
Observations	2,208	2,208	2,208	2,208	2,208
R-squared	0.017	0.036	0.062	0.067	0.072
# of unique_id	1,188	1,188	1,188	1,188	1,188
Wave Dummy		✓	✓	✓	✓
State FE			✓	✓	✓
Individual FE	✓	✓	✓	✓	✓
Clustered SE	✓	✓	✓	✓	✓
Weights				✓	✓
Controls	✓	✓	✓	✓	✓

Notes: Controls include income, education, ethnicity, party, presidential vote and ideology. Cluster robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

B FURTHER ROBUSTNESS CHECKS

Table 10: Panel: Interpersonal trust

	(1)	(2)	(3)	(4)	(5)	(6)
DV: Interpersonal trust 0-1, 1 = high trust						
Covid deaths treat	-0.0411* (0.0220)	-0.0410* (0.0219)	-0.0452** (0.0222)	-0.0466** (0.0235)	-0.0455* (0.0234)	-0.0444** (0.0222)
Income loss treat	-0.00425 (0.0204)	-0.00421 (0.0204)	-0.00569 (0.0204)	-0.00251 (0.0240)	-0.00262 (0.0240)	-0.00618 (0.0203)
Wave dummy		-0.00245 (0.0134)	-0.000895 (0.0137)	-0.00651 (0.0159)	0.00353 (0.0253)	0.0114 (0.0260)
Belief about seriousness					0.0228 (0.0227)	0.0246 (0.0239)
Health anxiety					-0.0325 (0.0226)	-0.0364* (0.0203)
Self-perceived econ vulnerability	-0.00540 (0.00552)	-0.00489 (0.00619)	-0.00426 (0.00636)	-0.00337 (0.00631)	-0.00344 (0.00629)	-0.00437 (0.00632)
Observations	2,079	2,079	2,079	2,079	2,077	2,077
R-squared	0.044	0.044	0.061	0.069	0.072	0.064
# of unique_id	1,161	1,161	1,161	1,161	1,160	1,160
Wave Dummy		✓	✓	✓	✓	✓
State FE			✓	✓	✓	✓
Individual FE	✓	✓	✓	✓	✓	✓
Clustered SE	✓	✓	✓	✓	✓	✓
Weights				✓	✓	
Controls	✓	✓	✓	✓	✓	✓

Notes: Controls include income, education, ethnicity, party, presidential vote and ideology. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 11: Panel: Altruism

	(1)	(2)	(3)	(4)	(5)
DV: Altruism					
0-1000, 1000 = more giving					
Covid deaths treat	10.06 (9.49)	9.81 (9.53)	8.32 (10.06)	9.80 (9.55)	8.22 (10.095)
Income loss treat	20.04** (9.46)	20.02** (9.46)	19.45** (9.57)	19.98** (9.41)	19.40** (9.51)
Wave dummy		7.43 (6.71)	9.30 (7.43)	-4.99 (10.97)	-0.09 (11.38)
Belief about seriousness				10.44 (10.30)	7.38 (10.52)
Health anxiety				2.90 (8.28)	2.65 (8.58)
Self-perceived econ vulnerability	1.56 (2.70)	0.036 (3.07)	-1.38 (3.46)	0.07 (3.07)	-1.38 (3.47)
Observations	2,153	2,153	2,153	2,151	2,151
R-squared	0.080	0.081	0.083	0.084	0.083
# of unique_id	1,188	1,188	1,188	1,187	1,187
Wave Dummy		✓	✓	✓	✓
State FE		✓	✓	✓	✓
Individual FE	✓	✓	✓	✓	✓
Clustered SE	✓	✓	✓	✓	✓
Weights			✓	✓	
Controls	✓	✓	✓	✓	✓

Notes: Controls include income, education, ethnicity, party, presidential vote and ideology. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 12: Panel: Patience

	(1)	(2)	(3)	(4)	(5)
DV: Patience 0-10, 10 = more patient					
Covid deaths treat	0.0594 (0.118)	0.0605 (0.118)	0.0814 (0.120)	-0.00638 (0.126)	0.0809 (0.121)
Income loss treat	0.229** (0.114)	0.220* (0.114)	0.218* (0.115)	0.176 (0.120)	0.227** (0.114)
Wave dummy		-0.0159 (0.0753)	-0.00968 (0.0770)	-0.0601 (0.177)	-0.0854 (0.162)
Belief about seriousness				0.0703 (0.124)	0.0700 (0.119)
Health anxiety				-0.0143 (0.110)	0.0114 (0.105)
Self-perceived econ vulnerability	-0.00994 (0.0297)	-0.00884 (0.0328)	-0.0164 (0.0337)	-0.0271 (0.0355)	-0.0163 (0.0338)
Observations	2,244	2,244	2,244	2,242	2,242
R-squared	0.017	0.024	0.032	0.035	0.032
Number of unique_id	1,206	1,206	1,206	1,205	1,205
Wave Dummy		✓	✓	✓	✓
State FE			✓	✓	✓
Individual FE	✓	✓	✓	✓	✓
Clustered SE	✓	✓	✓	✓	✓
Weights				✓	
Controls	✓	✓	✓	✓	✓

Notes: Controls include income, education, ethnicity, party, presidential vote and ideology. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 13: Panel: Risk Taking

	(1)	(2)	(3)	(4)	(5)	(6)
DV: Risk Taking 0-10, 10 = more willing						
Covid death treat	-0.0902 (0.116)	-0.0754 (0.115)	-0.0820 (0.117)	-0.143 (0.132)	-0.139 (0.132)	-0.0792 (0.117)
Income loss treat	-0.0636 (0.110)	-0.0692 (0.109)	-0.0847 (0.109)	-0.112 (0.116)	-0.113 (0.116)	-0.0860 (0.110)
Wave dummy		-0.167** (0.0713)	-0.169** (0.0726)	-0.150** (0.0730)	-0.000430 (0.178)	-0.0515 (0.192)
Belief about seriousness					-0.181 (0.155)	-0.111 (0.170)
Health anxiety					0.0215 (0.124)	-0.0130 (0.125)
Self-perceived econ vulnerability	-0.0326 (0.0285)	0.000745 (0.0311)	0.00434 (0.0319)	-0.00771 (0.0372)	-0.00745 (0.0371)	0.00395 (0.0319)
Observations	2,245	2,245	2,245	2,245	2,243	2,243
R-squared	0.007	0.021	0.029	0.038	0.040	0.029
# of unique_id	1,206	1,206	1,206	1,206	1,205	1,205
Wave Dummy		✓	✓	✓	✓	✓
State FE			✓	✓	✓	✓
Individual FE	✓	✓	✓	✓	✓	✓
Clustered SE	✓	✓	✓	✓	✓	✓
Weights				✓	✓	
Controls	✓	✓	✓	✓	✓	✓

Notes: Controls include income, education, ethnicity, party, presidential vote and ideology.
Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

C BALANCE CHECKS

In Figure 1 and Table 14 we display balance checks, based on regressions of treatment assignment on the covariates used throughout the analysis. As expected, we do not find any covariate imbalance between treatment and control groups.

Figure 1: Covariate balance between treatment and control groups

Table 14: Balance test

	Control-T1	Control-T2	T1-T2
Age	0.00164 (0.00109)	0.00073 (0.00106)	−0.00094 (0.00110)
Female	−0.01170 (0.03153)	−0.01603 (0.03074)	−0.00481 (0.03058)
Income	0.01194 (0.01575)	−0.00029 (0.01554)	−0.01135 (0.01521)
Party-Other	0.01141 (0.04917)	−0.00103 (0.04732)	−0.01168 (0.04645)
Party-Republican	0.02506 (0.06309)	−0.07034 (0.05845)	−0.09714 (0.05851)
Education	0.05389 (0.03807)	−0.01693 (0.03512)	−0.06870 (0.03567)
Voted Trump	−0.04008 (0.05383)	0.02763 (0.04825)	0.06796 (0.04932)
Ideology	−0.01187 (0.01004)	−0.00024 (0.00930)	0.01134 (0.00976)
Spanish, Hispanic or Latino	−0.01262 (0.06066)	0.02998 (0.05783)	0.04445 (0.05906)
Interpersonal trust	−0.01049 (0.03277)	−0.00981 (0.03213)	0.00544 (0.03250)
Altruism	−0.00004 (0.00008)	0.00004 (0.00008)	0.00007 (0.00008)
Patience	0.00181 (0.00616)	0.00557 (0.00615)	0.00565 (0.00621)
Risk taking	0.00660 (0.00668)	0.00745 (0.00652)	0.00070 (0.00647)
Respect for authority	−0.00824 (0.00692)	−0.00423 (0.00679)	0.00277 (0.00652)
Make incomes less equal	0.00953 (0.00687)	0.00707 (0.00672)	−0.00280 (0.00681)
Trust in federal government	−0.00826 (0.02401)	−0.02420 (0.02423)	−0.01916 (0.02420)
R ²	0.01110	0.00716	0.01102
Adj. R ²	−0.00326	−0.00679	−0.00301
Num. obs.	1119	1156	1145
RMSE	0.50101	0.50178	0.50071

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

D SURVEY INSTRUMENT

While the control group listened to music, the two information treatments (T1 and T2) took the following form:

wave 1

Information about Covid-19 deaths (T1): *The Washington-based Institute for Health Metrics and Evaluation (IHME) predicts that – with the current government guidance in place – about 68,841 people in the US will have died due to the coronavirus by August 4. This means that the number of Covid-19 deaths per one million people would be 210.*

Economic information (T2): *The International Monetary Fund (IMF) expects the US economy to shrink by 5.9% in 2020 compared with 2019. This estimated loss of 5.5% equates to a loss of around \$3848 per person in 2020 compared with 2019.*

wave 2

Information about Covid-19 deaths (T1): *The Washington-based Institute for Health Metrics and Evaluation (IHME) predicts that – with the current government guidance in place – about 323,338 people in the US will have died due to the coronavirus by the end of 2020. This means that the number of Covid-19 deaths per one million people would be 985.*

Economic information (T2): *The International Monetary Fund (IMF) expects the US economy to shrink by 4.3% in 2020 compared with 2019. This estimated loss of 4.3% equates to a loss of around \$2800 per person in 2020 compared with 2019.*

D.1 Part I.I – Willingness to pay elicitation and prosociality

Consider two hypothetical treatments for Covid-19 that must be taken when healthy: Treatment 1 and Treatment 2. When you take either treatment your chances of dying from Covid-19 over the next 3 months fall by the same amount: the survival rates improve by the equivalent of 5 people in 1 million. That is, if in a population of a million people everyone took the treatment, then, on average we expect that 5 people within that population will survive who would have died from Covid-19 over the next 3 months. But we cannot identify which 5 people.

Treatment 1 contributes to reducing your chances of death because it aids recovery if you get serious Covid-19 and are admitted to hospital. It does not affect your chances of getting Covid-19 or transmitting it to others.

Treatment 2 contributes to reducing your chances of death because it reduces the likelihood that you will become infected by Covid-19 and hence also that you will transmit the infection to others.

How much would you pay to receive treatment 1?

- \$0
- \$32.5
- \$65
- \$97.5
- \$130
- \$162.5
- \$195
- \$227.5
- \$260
- Above \$260

How much would you pay to receive treatment 2?

- \$0
- \$32.5
- \$65
- \$97.5
- \$130
- \$162.5
- \$195
- \$227.5
- \$260
- Above \$260

D.2 Part I.II – Preference elicitation in terms of trade-off between lives and economic loss

When the restrictions on personal movement are increased, coronavirus spreads more slowly and so causes less loss of life because there is less peak pressure on the healthcare system. However, increasing the restrictions on personal movement also tends to disrupt and lower economic activity and this is associated with loss of income and jobs and some psychological and health costs.

It is difficult to put numbers on these effects. Nevertheless, we present 8 decisions below and ask you in each case to choose between two options. Each option has a combination of ‘lives lost per 1 million of the population through Covid-19 over the next 3 months’ and ‘the average loss of household income due to measures to prevent transmission of Covid-19 over the next 3 months’. In each of the 8 decisions, click on the option that you think has the best combination.

		Option A		Option B	
		Lives lost per 1M of population	Average loss of disposable HH income	Lives lost per 1M of population	Average loss of disposable HH income
D1	320		\$4000	335	\$4150
D2	310		\$3850	325	\$3740
D3	247		\$3670	256	\$3500
D4	213		\$3500	219	\$3300
D5	200		\$3300	204	\$3100
D6	188		£3120	192	\$2820
D7	177		\$2350	180	\$2000
D8	165		\$1950	165	\$1800

D.3 Part II – Perceptions

Please answer the following questions about the spread of the coronavirus Covid-19.

P1 (Belief about seriousness): How serious do you think Covid-19 is compared to the seasonal flu?

- Not at all serious
- Not very serious
- Fairly serious
- Very serious
- Don't know

P2 (Health anxiety): How concerned are you for you and your family about Covid-19?

- Not at all concerned
- Not very concerned
- Fairly concerned
- Very concerned
- Don't know

P3 (Economic anxiety): How concerned are you about the economic implications of Covid-19?

- Not at all concerned

- Not very concerned
- Fairly concerned
- Very concerned
- Don't know

P4 (Following guidelines): How likely are you to follow government's guidance for reducing the spread of Covid-19?

- Very unlikely
- Fairly unlikely
- Neither likely nor unlikely
- Fairly likely
- Very likely
- Don't know

K1: How many people in the US would you estimate will have died in total due to coronavirus by the end of 2020?

K2: By what percentage would you estimate average income in the US will be lower in 2020 as compared to 2019?

D.3.1 Part III – Demographic questions

D1 (State): Which US state do you live in?

D2 (Ethnicity): Are you Spanish, Hispanic, or Latino?

- Yes
- No

D3 (Race): Below you will find a list of five race categories. Please choose one or more races that you consider yourself to be:

- White
- Black or African-American
- American Indian or Alaska Native
- Asian
- Native Hawaiian or other Pacific Islander
- Other group
- Prefer not to answer

D4 (Income): What is your household income before tax?

- Under \$10,000
- \$10,000 - \$20,000
- \$20,001 - \$30,000
- \$30,001 - \$40,000
- \$40,001 - \$50,000
- \$50,001 - \$60,000
- \$60,001 - \$80,000
- \$80,001 - \$100,000
- \$100,001 - \$150,000
- \$150,001 - \$200,000
- Above \$200,000
- Don't know
- Prefer not to answer

D5 (Party): Which party do you feel closest to?

- Democratic Party
- Republican Party
- Other
- Don't know

D6 (Presidential vote): Thinking about the 2016 Presidential Election, to your best recollection, whom did you vote for?

- Hillary Clinton
- Donald Trump
- Other candidate
- Didn't vote
- Don't know
- Prefer not to say

D6.1 (Presidential vote): Thinking about the recent 2020 Presidential Election, whom did you vote for?

- Joe Biden
- Donald Trump
- Other candidate
- Didn't vote
- Don't know
- Prefer not to say

D7 (Ideology): In politics people sometimes talk of left and right. Where would you place yourself on the following scale?

[Scale from 0 (Left) to 10 (Right)]

D8 (Inequality): Some people feel that government should make much greater efforts to make people's incomes more equal. Other people feel that government should be much less concerned about how equal people's incomes are. Where would you place yourself on this scale?

[Scale from 0 (Try to make incomes equal) to 10 (Be less concerned about equal incomes)]

D9 (Respect for Authority): Some people think that society would be a better place if

people had more respect for authority. Other people think society would be a better place if people questioned authority more often. Where would you place yourself on this scale?

[Scale from 0 (Question authority) to 10 (Respect authority)]

D10 (Luck vs. effort): To what extent do you believe that income differences arise from luck and to what extent from differences in effort and skills?

[Scale from 0 (From luck) to 10 (From effort and skills)]

D11 (Luck vs. effort 2): To what extent do you think it is acceptable for income differences to exist if they arise from luck?

[Scale from 0 (Not acceptable at all) to 10 (Completely acceptable)]

D12 (UBI): To what extent, if at all, would you support the government introducing a Universal Basic Income, where the government makes sure that everyone has an income, without a means test or requirement to work?

- Very supportive
- Supportive
- Neither supportive or unsupportive
- Unsupportive
- Very unsupportive
- Don't know

D13 (UBI): How, if at all, has your support for Universal Basic Income changed due to the economic impact of the Covid-19 pandemic?

- Much more supportive
- Somewhat more supportive
- Neither more or less supportive
- Somewhat less supportive
- Much less supportive
- Don't know

D14 (Climate change): Do you think that the federal government in Washington could be doing more to tackle climate change, or is it already doing as much as it reasonably can?

- Could be doing more
- Doing as much as it reasonably can
- Don't know

D15 (Climate change): To what extent, if at all, would you support the government introducing more extensive policies to tackle climate change?

- Very supportive
- Supportive
- Neither supportive or unsupportive
- Unsupportive
- Very unsupportive
- Don't know

D16 (News): During the last seven days, on average how much time (if any) have you spent per day following the news?

- None, no time at all
- Less than 1/2 hour
- 1/2 hour to 1 hour
- 1 to 2 hours
- More than 2 hours
- Don't know

D17 (Interpersonal trust): Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?

- Most people can be trusted
- Can't be too careful

- Don't know

D18 (Trust in federal government): How much of the time do you think you can trust the federal government in Washington to do what is right?

- Hardly ever
- Some of the time
- Most of the time
- Just about always
- Don't know

D19 (Trust in politicians): How much trust do you have in elected politicians in general?

- None at all
- A little
- Some
- Quite a bit
- A lot
- Don't know

D20 (Employment): Which of these best describes what you were doing last week?

- Working full time (30 or more hours per week)
- Working part time (8-29 hours a week)
- Working part time (less than 8 hours a week)
- On furlough (temporary leave)
- Unemployed and looking for work
- Full time university student
- Other full time student
- Retired
- Not in paid work for any other reason

- Other

D21 (Education): What is your highest level of educational attainment?

- College and above
- High school
- Elementary school
- formal education

D22 (Religion): How religious do you consider yourself to be?

- Very religious
- Fairly religious
- Not very religious
- Not religious at all
- Don't know
- Prefer not to say

D22.1 (Self-perceived econ vulnerability 0): During the next months, how likely or unlikely is it that you will not have enough money to cover your day to day living costs?

- Very unlikely
- Fairly unlikely
- Neither likely nor unlikely
- Fairly likely
- Very likely
- Don't know

D23 (Self-perceived econ vulnerability): Thinking about the past month, did you, as a result of the Covid-19 pandemic, earn less, about the same or more money than usual?

- Less than usual

- About the same
- More than usual
- Don't know

D24 (Health): How healthy have you felt in the last weeks?

[Scale from 0 (Not healthy at all) to 10 (Very healthy)]

D25 (Risk group): According to US government guidelines, those above the age of 65 and/or those with underlying health conditions are at an increased risk from Covid-19. Do you consider yourself to be in this group?

- Yes
- No
- Don't know
- Prefer not to say

D26 (Covid-19): How likely or unlikely do you think it is that you have had the coronavirus?

- Very unlikely
- Fairly unlikely
- Neither likely nor unlikely
- Fairly likely
- Very likely
- Don't know

D27 (Lockdown): How would you assess the government's introduction of lockdown measures?

- Too quick
- Fairly quick
- About right

- Fairly slow
- Too slow
- Don't know

D28 (Relaxation): How would you assess the government's relaxation of lockdown measures?

- Too quick
- Fairly quick
- About right
- Fairly slow
- Too slow
- Don't know

D29 (Severity): How would you assess the severity of the government's lockdown measures?

- Too severe
- Severe
- About right
- Relaxed
- Too relaxed
- Don't know

D30 (Competency): How competent would you assess the government's response to Covid-19?

- Very competent
- Competent
- Somewhat competent
- Incompetent
- Very incompetent

- Don't know

D31 (Transmission responsibility): To what extent do you think you can influence the likelihood of catching Covid-19 through your own behavior and actions?

- Not at all
- Somewhat
- Quite a bit
- A lot
- Don't know

D32 (Others following guidelines): Do you think other people are likely to comply with the government's guidance for reducing the spread of Covid-19?

- Very unlikely
- Fairly unlikely
- Neither likely nor unlikely
- Fairly likely
- Very likely
- Don't know

D33 (Risk-taking): Please tell us, in general, how willing or unwilling you are to take risks. Please use a scale from 0 to 10, where 0 means "completely unwilling to take risks" and a 10 means you are "very willing to take risks". You can also use any number between 0 and 10 to indicate where you fall on the scale.

[Scale from 0 (Completely unwilling to take risks) to 10 (Very willing to take risks)]

D34 (Patience): Are you generally an impatient person, or someone who always shows great patience? Please use a scale from 0 to 10 where 0 means "very impatient" and a 10 means you are "very patient". You can also use any numbers between 0 and 10 to indicate where you fall on the scale.

[Scale from 0 (Very impatient) to 10 (Very patient)]

D35 (Dictator giving): Imagine you were given \$10 to divide between yourself and another person in increments of \$1. Considering your current situation, how much of the \$10 would you keep for yourself and how much would you give to the other person? Please use the slider below to indicate how much you would give to the other person.

D36 (Altruism): Imagine you won \$1,000 in a lottery. Considering your current situation, how much would you donate to charity?

Feedback: Please let us know in the field below whether you have any feedback regarding the study. Were any of the questions or tasks unclear?