The Health of Democracies during the Pandemic: Results from a Randomized Survey Experiment

By MARCELLA ALSAN, LUCA BRAGHIERI, SARAH EICHMEYER, MINJEONG JOYCE KIM, STEFANIE STANTCHEVA AND DAVID Y. YANG*

There is a growing global concern about the health of democracies (Rubin, 2022). Although support for civil liberties had weakened prior to COVID-19 (see Figure 1) – the pandemic and the public health responses it elicited could possibly accelerate a trend towards autocracy (Repucci and Slipowitz, 2020). Anticipating this threat, during the first few months of the pandemic our team conducted in-depth survey experiments across several Western democratic countries to assess whether providing information on stringent measures used to contain the virus in East Asian countries (i.e., China and South Korea) would affect citizens' views regarding their willingness to curtail their own civil liberties.

We find that following an information treatment regarding the aggressive movement restrictions and privacy infringements taken by China and South Korea, respectively, as well as the potential for persistence of such policies, treated subjects: (i) displayed greater concerns over the erosion of civil liberties and the abuse of collected information; (ii) became less willing to give up the general rights and freedom of both self *and* others; and (iii) expressed higher reluctance to adopt policies that affected rights to movement and, to an even greater degree, privacy. However, we cannot reject the null of no effect of the treatment on views about sacrificing democratic rights and institutions more broadly. Our complementary longitudinal study demonstrated that respondents who lived in areas heavily affected by the pandemic were indeed more willing to sacrifice democratic procedures in the Spring of 2020 (Alsan et al., 2020*b*), though this willingness abated over time. These two findings – that support for democratic processes was unaffected by information regarding infringements on civil liberties, yet declined with increased exposure to health risks – suggest that the start of the COVID-19 crisis was a particularly vulnerable time for democracies.

I. The Survey

Our surveys were fielded between March 30th and April 18th, 2020 and covered over 8,000 respondents across five Western liberal democracies – France, Germany, Italy, the United Kingdom, and the United States.[1] The survey consisted of five modules covering demographics, health, experimental treatment, rights insecurity measures, and main outcomes modules. Questions were translated into five different languages by native speakers. Potential participants were first shown a consent form that did not mention the topic of the study so as to avoid attrition based on the survey topic. Respondents who reported being younger than 18 and respondents who reported not living in the country where the survey was administered were screened out.

The first module ("demographics") queried respondents on their demographic characteris-

* Alsan: Kennedy School of Government, Harvard University, 79 John F. Kennedy St., Rubenstein Bldg R403, Cambridge, MA 02138 (email: marcella_alsan@hks.harvard.edu); Braghieri: Department of Decision Sciences, Bocconi University, Via Roentgen, 1 (5th floor) 20136, Milano, Italy (email: luca.braghieri@unibocconi.it); Eichmeyer: Department of Economics, Bocconi University, Via Roentgen, 1 (5th floor) 20136, Milano, Italy (email: sarah.eichmeyer@unibocconi.it); Kim: Department of Economics, University of Michigan, 238 Lorch Hall, 611 Tappan Ave., Ann Arbor, MI 48109-1220 (email: joycekim@umich.edu); Stantcheva: Department of Economics, Harvard University, Littauer Center 232, Cambridge, MA 02138 (email: sstantcheva@fas.harvard.edu); Yang: Department of Economics, Harvard University, Littauer Center M-31, Cambridge, MA 02138 (email: davidyang@fas.harvard.edu). Funding provided by Harvard Kennedy School, the Harvard Economics Department, and Foundations of Human Behavior at Harvard. The study is approved by IRB at Harvard University (IRB-20-0495 and IRB20-0467) and registered at AEA-RCT registry (Alsan et al., 2020*a*).

[1] Although the survey also included China and South Korea, as will become clear we also used them in the treatment. The survey also included an information treatment about health insecurity and rights. We omit those results herein to maintain focus on the topic of civil liberties.

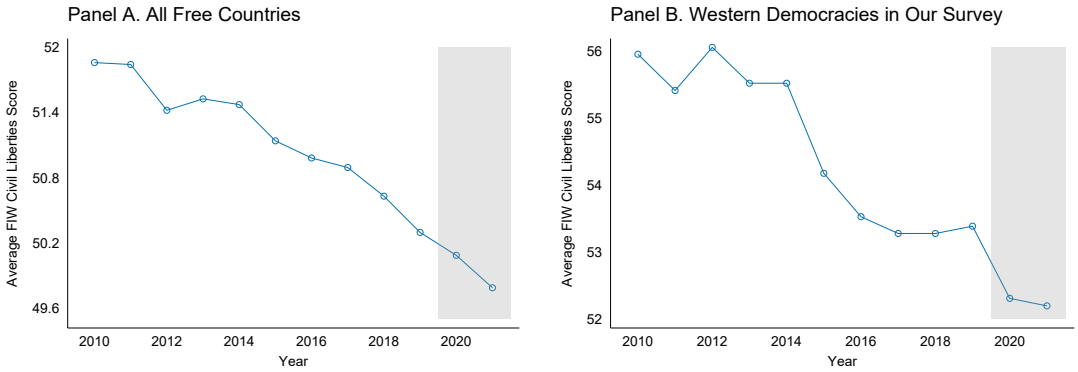

FIGURE 1. FREEDOM IN THE WORLD CIVIL LIBERTIES SCORE, 2010–2021

Notes: Figure plots the average Civil Liberties scores in 2010 to 2021 from Freedom in the World (FIW) survey. In Panel (a), the sample is restricted to all countries with more than one million population and categorized as Free in 2010 ($N = 57$). In Panel (b), the sample is restricted to five Western democracies in our survey (France, Germany, Italy, the United Kingdom, and the United States), and the average scores are weighted using 2010 population. Shaded area reflects 2020 to 2021, the period after the COVID-19 outbreak. A country is awarded 0 to 4 points for each of 15 Civil Liberties indicators, which take the form of questions; a score of 0 represents the smallest degree of freedom and 4 the greatest degree of freedom. The aggregate Civil Liberties scores are computed as the sum of all points awarded for the Civil Liberties indicators, on a scale of 0 to 60. The drop around 2015 in Panel (b) is in general driven by refugee crisis and terrorism in Europe and racism in the U.S. judicial system. Civil Liberties score and Free status data are from Freedom House (2022), and population data are from World Bank (2022).

tics including gender, citizenship status, ZIP or postal code, education, income, employment status, occupation, and household composition. At the end of the demographics module, participants were asked about their political affiliation, information sources they use to keep up-to-date with the pandemic and their trust of the media. Time and risk preferences were elicited using questions similar to the ones from the Global Preference Survey (Falk et al., 2018). The second module ("health") queried respondents on their medical history including a detailed list of medical conditions, whether anyone in the household required regular hospital care and questions regarding COVID-19 infection. These included the likelihood of becoming ill from COVID-19 in the subsequent month, the number (out of 100 of individuals in the participant's community) who would become ill from COVID-19 in the subsequent month, and the number of the respondent's acquaintances who had been infected with COVID-19.

II. The Experiment

Design – After the modules described above, participants were randomized into a treatment and a control group in equal proportions. Participants assigned to the treatment group were shown screens containing the information about some of the most drastic measures adopted by China and South Korea in order to contain the pandemic. It consisted of: (i) a graphical depiction of the epidemic curves in China and South Korea, highlighting the fact that the two countries seemed to have effectively contained the epidemic as per the date of our COVID-19 and Civil Liberties Survey; (ii) a description of some of the most drastic measures adopted by China and South Korea to curtail the pandemic - including providing detailed information about those who had been infected (South Korea) and forced state quarantine and house-to-house temperature checks (China) (see Figure 2); and (iii) a description of a set of concerns raised by a variety of parties (e.g., Human Rights Watch) about the possible long-term erosion of civil liberties resulting from policies adopted during the pandemic. The control group skipped the treatment section all together, and moved straight to the subsequent module.[2]

Outcomes – Following the treatment module, we elicited participants' perceptions of rights insecurity measures and our primary outcome measures. Rights insecurity measures involve the responses to two questions asking partic-

[2]The full treatment script can be found at `https://www.dropbox.com/s/h7jul8bdwsm681b/online_appendix.pdf?dl=0`.

Panel A. Measures Adopted by South Korea Panel B. Concerns regarding Erosion of Civil Liberties

FIGURE 2. EXAMPLES OF CIVIL LIBERTIES TREATMENT EXHIBITS

Notes: Figure shows examples of the exhibits presented in the civil liberties treatment. Panel (a) demonstrates examples of the strict-measures exhibits; and Panel (b) displays examples of the concerns-regarding-civil-liberties exhibits.

ipants how worried they were about: (i) information collected by the government to fight COVID-19 could be stored and used for other reasons later; and (ii) the rights, freedoms, and procedures that are forgone during a crisis like the current one will not be recovered after the crisis is over.

Primary outcomes included questions specifically designed by our team to elicit respondents' views of the trade-off between civil liberties and public health conditions. Rights we measured fell into four domains: generic rights and freedoms, privacy, procedural fairness (e.g., right to vote), free press and right to movement. We used three different structures of questions. The first was a likert scale about agreeing or disagreeing with a given statement. For instance, one of the statements reads: "I am willing to relax privacy protections and let the government access my personal data during a crisis like the current one, in order to allow the government to make timely and accurate decisions."

The second set of questions used a "lives saved" approach - asking how many lives (out of 100 that would otherwise die from COVID-19) would need to be saved for a respondent to support a given policy. Each policy that would involve some restriction on personal civil liberties. For instance, one question read: "During the epidemic, the government can track smartphone locations and social contact data of the citizens who tested positive for COVID-19."

The third type of question was taken from the World Value Survey (WVS) and asked participants to report whether they think governance should be delegated to experts, the extent to which they believe their country needs a strong national leader, and their overall support for democratic political systems. We also elicited a revealed-preference measure of privacy-related worries during the pandemic by asking participants whether they wanted to receive a link to download a contact tracing app.

To mitigate concerns about multiple hypothesis testing, the analysis of the in-depth survey summarizes the outcome variables in each family into an inverse-covariance-weighted index (Anderson, 2008), with variables re-oriented so they reflect attitudes and behaviors in a consistent direction.

III. Findings

We estimate the following equation for treatment effects:

$$Y_i = \alpha_{c(i)} + \alpha_{w(i)} + \alpha_{h(i)} + \theta \cdot T_i + X'_{ic(i)h(i)w(i)}\Omega + \mu_i$$

where Y_i represents an outcome for individual i, α_c indicates country fixed-effects, α_w indicates week fixed-effects, and α_h indicates a fixed-effect for the variable along which we stratified our randomization (based on whether a participant in the survey resided in a region that, by March 2020, had experienced many COVID-19 cases (*i.e.*, hotspot region)). T_i is an indicator for assignment to the information treatment. We also control for a limited set of demographic characteristics such as sex, age, income, education, political affiliation, and pre-existing medical conditions.

Table 1 demonstrates a strong "first stage": the civil liberties treatment significantly affects both our rights insecurity measures in the expected direction. On average, the concerns that information collected by the government to fight

TABLE 1—FIRST STAGE RESULTS

	Worried Collected Info Misused Later	Worried Forgone Rights Will Not Recover
	(1)	(2)
Civil Liberties Treatment	0.264	0.083
	(0.020)	(0.022)
Control Mean	-0.127	-0.040
Observations	8196	8196

Notes: Outcomes are standardized to mean 0 and sd 1. All regressions include the following controls: demographics (sex, age group indicators, education (indicator for holding a college degree), income quartiles (relative to own country), an indicator for political leaning being left (Democrat for U.S. respondents), an indicator for political neutral, and an indicator for any medical conditions); strata fixed effects (country and hotspot); and survey week fixed effects. Control Mean reports the unconditional mean of the dependent variable of respondents in the control group. Robust standard errors are in parentheses.

TABLE 2—EFFECTS OF CIVIL LIBERTIES TREATMENT

Outcome Variables	Civil Liberties Treatment		Control Mean	Observations
(1)	(2)	(3)	(4)	(5)
Panel A: Overall rights and freedom				
Willing to sacrifice own rights	-0.142	(0.062)	6.497	8196
Willing to sacrifice others' rights	-0.171	(0.061)	6.461	8196
z-score: willing to sacrifice rights	-0.058	(0.022)	0.000	8196
Panel B: Protection of privacy				
Willing to relax privacy protections	-0.043	(0.069)	4.886	8196
Unwilling to accept: track sick people	3.594	(0.750)	51.059	8196
Unwilling to accept: track everyone	2.778	(0.754)	57.438	8196
Contact tracing app	-0.008	(0.010)	0.357	8195
z-score: willing to sacrifice privacy	-0.072	(0.021)	-0.001	8195
Panel C: Democratic rights and institutions				
Prefer strong leader	-0.035	(0.022)	2.406	8196
Prefer delegating to experts	0.031	(0.019)	2.929	8196
Willing to sacrifice free press	0.061	(0.071)	4.875	8196
Preference for democratic system	0.015	(0.017)	3.243	8196
Willing to suspend democr. procedures	-0.054	(0.070)	4.850	8196
z-score: willing to curtail democracy	0.006	(0.021)	-0.001	8196
Panel D: Rights to movement				
Unwilling to accept: close national border	1.272	(0.751)	39.533	8196
Unwilling to accept: recommend stay home	1.398	(0.758)	39.988	8196
Unwilling to accept: arrest if outside home	1.429	(0.770)	53.009	8196
z-score: willing to give up mobility	-0.047	(0.022)	0.000	8196

Notes: Table reports OLS results using experimental variation, based on the in-depth survey sample. Columns (2) to (3) present the OLS estimates and standard errors. Column (4) reports the unconditional mean of the outcome variable of respondents in the control group, and Column (5) reports the sample size. Outcomes of "unwilling to accept" measure the minimum lives that need to be saved to implement the given policy on a scale of 0 to 100. Outcomes of "willing to [do]" are on a scale of 1 to 10. Outcomes of contact tracing app are dichotomous. Outcomes of "preference" are on a scale of 1 to 4. The z-score for each family shown at the bottom row of each panel is an inverse-covariance-weighted index as described in Anderson (2008). All regressions include the following controls: demographics (sex, age group indicators, education (indicator for holding a college degree), income quartiles (relative to own country), an indicator for political leaning being left (Democrat for U.S. respondents), an indicator for political neutral, and an indicator for any medical conditions); strata fixed effects (country and hotspot); and survey week fixed effects. Robust standard errors are in parentheses.

COVID-19 will be misused later of treated respondents were raised by 0.264 sd units, and their worries that forgone rights will not be recovered after the crisis also increased by 0.083 sd units.

Table 2 displays our main results. Focusing first on the z-score indices as our main outcomes of interest, we document significant and sizable effects of the information treatment on the willingness to curtail civil liberties. Respondents exposed to the information treatment are 0.058 sd units less willing to sacrifice overall rights and freedoms, 0.072 sd units less willing to sacrifice privacy, and 0.047 sd units less willing to to give up mobility. However, the willingness to curtail democratic rights and institutions is unaffected by the treatment. This is despite the fact that our complementary longitudinal work suggests willingness to sacrifice democratic procedures was indeed higher during the earliest period in the pandemic (see Appendix Figure B11 Panel C of Alsan et al. 2020*b*).

Turning to specific findings within a given family, we find our experiment reduced the willingness of citizens within liberal democracies to sacrifice both own and others' rights. We also find an almost one person increase in the number of lives needed to be saved in order to support tracking sick people than tracking everyone in absolute terms and percent terms, though the baseline number of lives needed to be saved to support universal tracking was higher (51.1 vs. 57.4, respectively). Privacy was more elastic to the treatment than mobility - which had a similar effect across different versions of the question (raising the number of lives needed to save by 1.3 to 1.4 persons).

IV. Conclusion

In this paper, we report results of a survey experiment designed to examine whether providing information on restrictions and infringements by China and South Korea to contain the COVID-19 pandemic would alter views regarding sacrificing rights of citizens in Western democracies in the short term. We find that respondents did become less willing to sacrifice specific and generic rights, and more worried about long-term erosion relative to the control group, but there was no effect of our treatment on support for democratic procedures.

REFERENCES

Alsan, Marcella, Luca Braghieri, Sarah Eichmeyer, Minjeong Joyce Kim, Stefanie Stantcheva, and David Y. Yang. 2020*a*. "Civil Liberties, Economic Slowdown, and Public Health during the time of Pandemic: A Cross-Country Randomized Trial." AEA RCT Registry. March 31. https://doi.org/10.1257/rct.5609-1.0.

Alsan, Marcella, Luca Braghieri, Sarah Eichmeyer, Minjeong Joyce Kim, Stefanie Stantcheva, and David Y. Yang. 2020*b*. "Civil Liberties in Times of Crisis." National Bureau of Economic Research Working Paper 27972.

Anderson, Michael L. 2008. "Multiple inference and gender differences in the effects of early intervention: A reevaluation of the Abecedarian, Perry Preschool, and Early Training Projects." *Journal of the American Statistical Association*, 103(484): 1481–1495.

Falk, Armin, Anke Becker, Thomas Dohmen, Benjamin Enke, David Huffman, and Uwe Sunde. 2018. "Global evidence on economic preferences." *The Quarterly Journal of Economics*, 133(4): 1645–1692.

Freedom House. 2022. "Freedom in the World." https://freedomhouse.org/report/freedom-world.

Repucci, Sarah, and Amy Slipowitz. 2020. "Democracy under lockdown: the impact of COVID-19 on the global struggle for freedom." Freedom House. https://freedomhouse.org/report/special-report/2020/democracy-under-lockdown.

Rubin, Jennifer. 2022. "Covid-19 may be hastening democracy's demise." Washington Post. https://www.washingtonpost.com/opinions/2022/04/12/covid-pandemic-damaging-trust-democracy/.

World Bank. 2022. "World Development Indicators." https://api.worldbank.org/v2/en/indicator/SP.POP.TOTL?downloadformat=excel.

ONLINE APPENDIX: Civil Liberties Treatment Script

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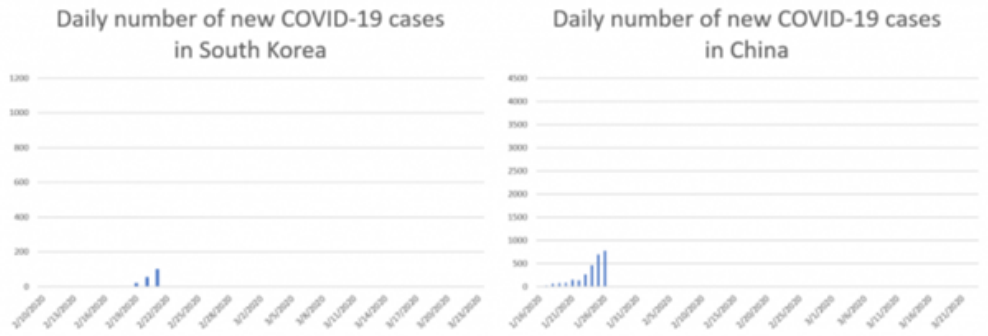
"As the entire world is fighting against COVID-19, countries such as South Korea and China stand out as examples that have successfully contained the outbreak.

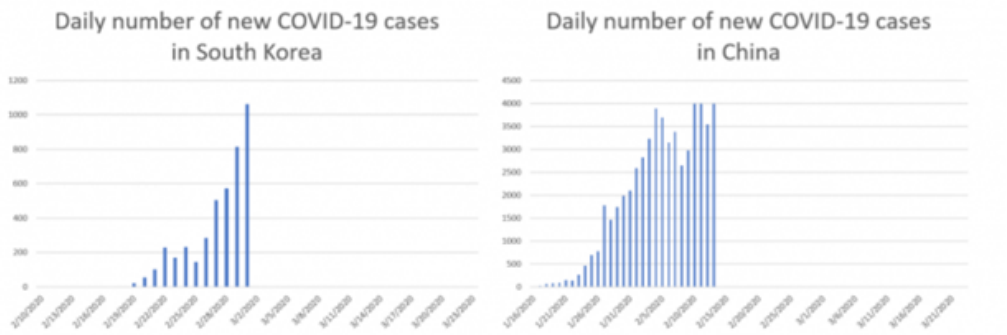
The figures on the next screen show that the number of new cases of COVID-19 in these countries has decreased to close to 0 during the past few weeks.

South Korea and China experienced COVID-19 early on.



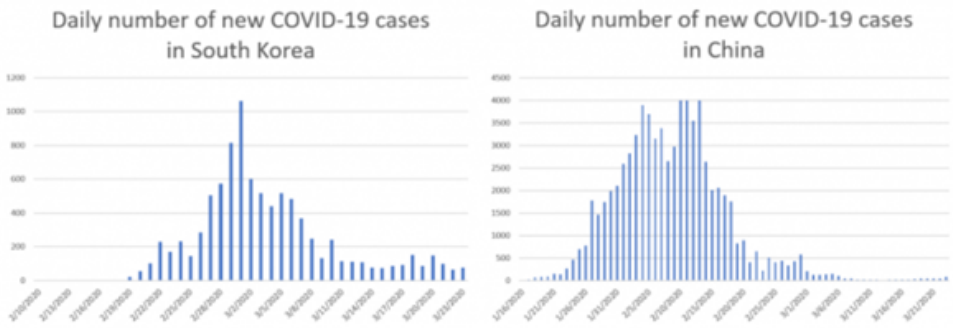
[Graph showing case rates over time in China and South Korea. This graph shows only the evolution of cases in the pre-peak period.]

The epidemic reached a peak in both countries.



[Graph showing case rates over time in China and South Korea. This graph shows the evolution of cases in the pre-peak and peak periods.]

Then the epidemic was quickly controlled.



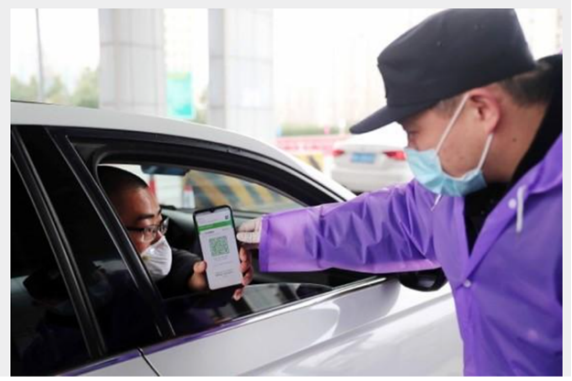
[Graph showing case rates over time in China and South Korea. This graph shows the evolution of cases in the pre-peak, peak and post-peak periods.]

To achieve such success in containing COVID-19, these countries have rolled out perhaps the most aggressive disease containment efforts in history.

Among others, the following policies have been implemented to control COVID-19 in these countries:

[The bullet points below are uncovered one at a time, and each is accompanied by a picture.]

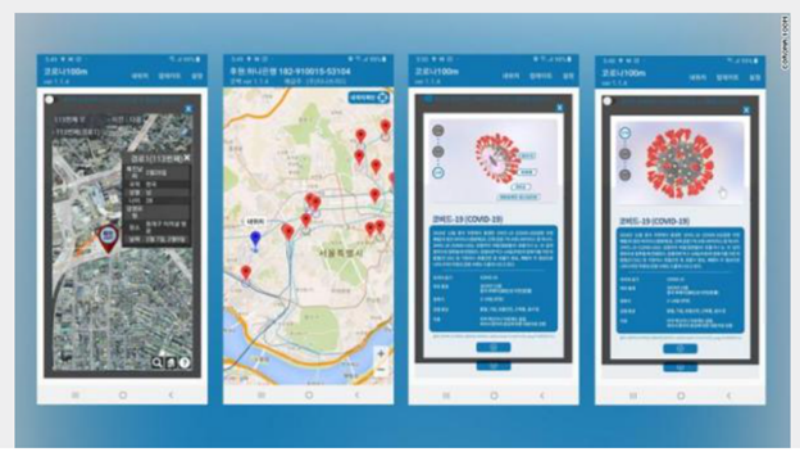
- People need a government-issued permit to leave home;



- Individuals who do not comply with quarantine orders could face one year in jail;

- The government uses artificial intelligence (AI) to tag whether citizens have high risk of contagion, based on smartphone locations, online behavior, and credit card activity;

- The government posts information about the activities and locations of individuals who tested positive for COVID-19 on social media;

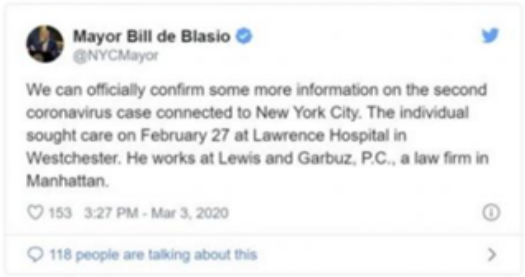


- Government officials go door to door for health checks, and force individuals who are suspected to be ill into quarantine.

Information about the patients is collected and publicly shared by the government in stunning detail.

Such information, obtained by the government to fight the COVID-19 epidemic, can potentially be used in many ways beyond the crisis itself.

For example, in South Korea, people used publicly released information to identify COVID-19 patients, and harassed them and their family members.



We are currently facing perhaps the biggest crisis of our generation. While we must act quickly and decisively, we should also take into account the long-term consequences of our actions.

Policies that could help successfully fight the COVID-19 epidemic, such as a large increase in government surveillance, may be abused and may remain in place even after the epidemic ends.

’In many cases, the fear and panic have allowed governments to impose quite drastic measures which can be very difficult to roll back. Once you have a system implemented, they become normalized.’ - Human Rights Watch

The decisions we and our government take during the COVID-19 crisis may shape our nation and society for years to come.”