

**LEGAL ISSUES OF THE CORONAVIRUS PANDEMIC:
A LAW-AND-ECONOMICS PERSPECTIVE**

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1. INTRODUCTION

The coronavirus pandemic has become a defining event of our times. We have all been affected by the disease in one way or another. Some of our friends, relatives, colleagues, and noted people we admire have had the disease and, in far too many instances, we have known people who have died from the disease. Our schools have been interrupted. Our plans to travel have had to be shelved. We are still avoiding crowds, remembering to wear a mask when outside, and to wash hands frequently, and mastering the art of the Zoom class or meeting.

In this section of the article I lay a foundation for what comes next. To that end, I begin with a brief history of this particular pandemic and a comparison with other recent or historical pandemics. Then I will turn to a brief account of the economic impact that the pandemic has had, followed by a discussion of the public health and economic policy responses to the pandemic.

My focus throughout will be on the United States, but that is only because I am much more familiar with matters in that country. I hope that readers will recognize in their own countries events and issues that are analogous to those I highlight and will be able to derive some lessons for policy and law there.

Writing about an ongoing event like the coronavirus pandemic presents problems that will be obvious: Matters change quickly so that what we thought we knew on April 15 is contradicted by something credible that is publicized on July 20. Because our knowledge is deepening and events are unfolding so quickly, there is always a chance that what I have to say today will be out of date tomorrow. I have tried to anticipate this possibility by speaking as generally and as conditionally as I can, and noting what contingencies might arise and how they might affect my analyses.

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1.1 Background on the Pandemic

The beginning of our current health and economic woes dates to the outbreak in Wuhan, China, in December, 2019, of the disease, covid-19, that comes from being infected by the novel coronavirus, SARS-CoV-2.² The virus and its disease spread so quickly from its origin that the World Health Organization declared the situation to be a pandemic on March 11, 2020.

According to this dating, the world is currently in the sixth or seventh month of the pandemic. Worldwide, there have been – as of early August, 2020 – 19 million cases of covid-19 reported, and over 700,000 deaths.³ That is a case fatality rate (or CFR, a term of art in epidemiology) of 0.0368 or 3.7 percent, which is almost four times the CFR for seasonal influenza.⁴ Those are breathtakingly large numbers.

The country with the most reported cases as of early August, 2020, is the United States, with almost 5 million cases and over 160,000 deaths. The case fatality rate for the United States is approximately 4 percent. That is, the United States, with 4 percent of the world's population, has had 26 percent of all the world's reported covid-19 cases and 23 percent of world deaths from the disease.

For the sake of comparison, recognize that in the Ebola virus outbreak of 2014-2016 there were about 28,000 cases and 11,300 deaths in West Africa and 36 cases and 15 deaths that occurred elsewhere in the world. Note that the CFRs from the 2003 SARS outbreak and the 2014-2016 Ebola virus were much higher than that for covid-19 but that both SARS and Ebola affected a much smaller number of people worldwide and in the U.S.

The only comparable recent pandemic to today's was the Spanish influenza outbreak of 1918-1919. Estimates are that about 500 million people, one-third of the world's population then, contracted the disease (which was caused by the H1N1 virus) and that worldwide deaths were 50 million, with approximately 675,000 deaths in the United States.⁵

² CENTRE FOR DISEASE CONTROL AND PREVENTION, <https://www.cdc.gov/sars/about/fs-sars.html> (last visited Aug, 2020).

³ CORONAVIRUS STATISTICS, <https://covid19stats.live/> (last visited Aug, 2020).

⁴ STATISTA, www.statista.com. (last visited Aug, 2020).

⁵ CENTRE FOR DISEASE CONTROL AND PREVENTION, <https://www.cdc.gov/flu/pandemic-resources/1918-pandemic-h1n1.html> (last visited Aug, 2020).

All of this testifies to the immense seriousness of the current coronavirus pandemic. This health crisis is orders of magnitude worse than any other recent health scare and unlike anything that the world has seen in the past 100 years.

Although we have learned a great deal about covid-19 and the novel coronavirus over the past half-year, there is still much that we do not know. And our uncertainty has contributed to our chaotic public health responses to the virus. We have learned, among many other things, that the disease has a greater effect on those with underlying health problems, such as obesity, diabetes, heart, and respiratory problems. Young people seem not to become as sick from the virus as older people do. Asymptomatic people may account for between one-third and one-half of all transmissions of the virus. This last point highlights the importance of being able to test for the presence of the novel coronavirus and to get those results quickly. The more testing we do and the quicker we get the results and can move to isolate those who have the disease and trace their contacts to warn them of their exposure to the disease, the faster we will be able to stop the spread of the virus.

But what do not know is important, too, in devising sensible public health policies. For example, we suspect, but are not sure, that transmission of the virus from human to human principally occurs through airborne droplets. Thence, the strong public health admonition to wear face masks and maintain social distancing. But one important thing that we do not know is whether having had covid-19 and survived generates antibodies that protect the individual from a recurrence of the disease, and if a recurrence is possible, whether that recurrence will be worse, the same, or not as serious as previous episodes. There is now some anecdotal evidence that those antibodies do *not* protect against catching the disease a second or third (and so on) time. As a result, antibody testing, which was touted at one point early in the pandemic as an important means of determining who had and might have survived covid-19, becomes less important than tests to determine who currently has the disease. Finally, we do not know why, in the U.S., covid-19 strikes minority populations so much harder than other groups and seems to be much more fatal to Native American, black, and Latinx populations than to others.

1.2. *The Economic Costs of the Pandemic*

There have also been very large economic costs of the pandemic. The disease has caused significant rises in unemployment and drops in Gross Domestic Product around the world. In the United States, there were approximately 40 million adults who filed for unemployment benefits in the period between March and July. That is not quite one-third of the labor force and has led to the highest levels of unemployment – on the order of 15 percent – since the Great Depression of 1929 to 1933.

In late July, the U.S. Commerce Department estimated that in the second quarter of 2020 (the period of April, May, and June), the U.S. GDP fell 9.5 percent, which equates to a 32.9 percent annual rate of decline. This was the largest three-month collapse since modern recordkeeping began and “wiped away nearly five years of growth.”⁶

Estimates are that the GDP of the UK will fall 11.5 percent this year. Germany reported, in late July, a drop in GDP for the second quarter of 2020 that was even greater than that in the U.S.⁷ China has had a relatively modest decline of 2.6 percent in its GDP (on an annualized basis) and has recently reported a 3.2 percent increase in GDP in the second quarter of this year over the second quarter of 2019.

What happens for the rest of 2020 depends on what happens to the number of covid-19 infections and deaths. If infections decline, then economies will gradually return to health over the course of the remainder of 2020. But that presumption has already been violated in the case of the United States. After some heartening declines in the number of new cases, especially in states, like New York, Connecticut, and New Jersey, that were “hot spots” in March, April, and May, the number of new cases, particularly in the South and West of the United States, has begun to rise again. Recently, in mid-July, the number of reported new cases across the U.S. rose to over 75,000 per day – significantly higher than had been the case in the earlier days of the pandemic.

It is too soon to tell what impact this resurgence of cases might have on the economic costs of the pandemic. Many jurisdictions are responding to the uptick by reinstating the lockdown or “stay at home” policies that were in place from mid-March on. That is, they are closing bars and restaurants and limiting public gatherings as they had done from, roughly, mid-March through early May

⁶ Ben Casselman, *Virus Wipes Out 5 Years of Economic Growth*, N.Y.T., 1 (2020).

⁷ *Id.*

or in some instances late June, when they relaxed restrictions. The evidence suggests that the states that had either weak initial public health responses to covid-19 or relaxed their restrictions earliest are the states that are experiencing the greatest increases in cases and deaths. Notably, Texas and Florida had no or few public health restrictions on their populaces and have been among the states with the greatest increases in cases and deaths this June and July. A notable exception to this general rule is California, the most populous state, which imposed restrictions on movement and retail operations very early in our experience with the pandemic, but is, nonetheless, one of the three or four states having the greatest increase in the number of cases and deaths.

Conversely to this evidence, those states that maintained their restrictions most forcefully and the longest in time are experiencing either a slowing in the number of cases and deaths, such as Illinois, or a decline in the number of cases and deaths, such as New York.

We also know that no other developed economy than the U.S. has had this resurgence of cases. Most of Europe, for example, had, relatively speaking, run-ups in the number of cases and deaths comparable to those in the U.S. in March and April and early May. But from those peaks, most European countries have all begun a continuing and relatively rapid decline in both numbers of those infected with covid-19 and deaths. It is still unclear why the U.S. experience has been so contrary to that of Europe, although we shall see some possible distinctions in the public health policy response in the U.S. in the following section.

Our leading public health experts are deeply concerned that the Fall and Winter months of 2020 are going to bring another surge in the number of covid-19 cases. The situation will be complicated by the return later in the year of the seasonal influenza, which may interact with the coronavirus in very detrimental ways for public health.⁸

1.3. The Policy Responses to the Pandemic

In discussing policy responses to the pandemic, we can distinguish between two different classes of responses: one to the health issues raised by the pandemic, the other to the economic issues.

⁸ CNN WORLD, https://edition.cnn.com/world/live-news/coronavirus-pandemic-07-14-20-intl/h_0a1e9579c6acb8adc5a8cd454f221d59 (last visited Jul. 14, 2020).

An important point to bear in mind is that the health and economic policies are related. To see this, recognize that consumers are not going to return to in-person dining and shopping if they do not feel safe doing so. Nor are employees going to return to work if they perceive the workplace as a place where they are more likely to catch covid-19 than if they stayed at home. So, the safer people feel from infection, the sooner they will return to work and routine commercial activities.

Another complication in policy response, at least in the U.S. case, is to ask what level of government was instituting and enforcing a policy response to the pandemic. The American system of governance has three levels of government – federal, state, and local.⁹ We might, therefore, consider how each level has responded to the coronavirus pandemic.

1.3.1 Public Health Policy

The public health response from the federal government has been weak, contradictory, and politically motivated. When the first reports of the disease arrived in late January, 2020, the President was preoccupied with his impeachment trial in the U.S. Senate (which began on January 16). He had apparently been briefed in late December and early January by intelligence officers and one of his economic advisors, Peter Navarro, about the possibility of a pandemic. But in the absence of more compelling evidence and given the momentous importance of the impeachment trial, the President did not pay close attention to these early reports.

President Trump routinely downplayed the severity of covid-19 and suggested that the Democrats were building hysteria about the disease in their campaign to damage his presidency. As he memorably said, “There are only 15 people with the disease, and soon there will be none.” And “It’s like a miracle; someday it will just disappear.”¹⁰

This unfortunate attitude pervaded the federal government and prevented that entity from acting to address the disease for almost two full months, till mid-March. And even then the federal response was half-hearted. For example, the president invoked the Defense Production Act of 1950, legislation introduced at the beginning of the Korean War that allows the president to direct

⁹ THE WASHINGTON POST, <https://www.washingtonpost.com/> (last visited Aug. 4, 2020).

¹⁰ Christian Paz, *All the President’s Lies about the Coronavirus*, THE ATLANTIC MONTHLY (Jul. 13, 2020), https://www.theatlantic.com/politics/archive/2020/07/trumps-lies-about-coronavirus/608647/?utm_source=share&utm_campaign=share.

private manufacturers to produce items needed in an emergency.¹¹ In this instance, the president said that he would use the Act to instruct certain manufacturers to produce personal protective equipment (PPE), items that were and still are running short in hospitals and that doctors and nurses need to treat covid-19 patients safely, and to limit the export of PPE. The President suggested that the shortage was due to doctors and nurses taking the equipment from hospitals for their own use. There is not a shred of evidence to support this suggestion.

On March 13 the president declared a “national emergency” due to covid-19. One week before the emergency declaration, the President authorized \$8.3 billion in spending on the pandemic, \$5.3 billion for ongoing efforts to contain the virus and \$3 billion for research on a vaccine against covid-19. On the same day as the President declared the pandemic to be a national emergency, he also suspended all interest payments on student loans until the end of the pandemic. What that emergency entailed was not entirely clear, for two reasons. First, the federal government did not really follow its declaration with concrete steps and, worse, was inconsistent. The emergency order suggested that the federal government intended to promulgate guidelines drawn up by the Centers for Disease Control and Prevention, but then the president disavowed those guidelines and, worse, began to use Twitter to encourage citizens in the states that enacted public health measures to oppose those measures. In at least four instances involving states with Democratic governors, President Trump tweeted the message “LIBERATE ___!” adding the state name in the blank – thereby encouraging his followers to protest lockdowns or stay-at-home orders. In one of those states, Michigan, men armed with assault weapons briefly occupied the state legislature to protest the governor’s public health orders.

The second reason for the ineffectiveness of the president’s emergency order was that his administration’s dithering about what to do – including its repeated contentions that the pandemic was not serious but was, rather, a mild influenza – left such a vacuum in the nation’s policy space that many of the nation’s fifty governors, some of them working in conjunction with other governors in their region, took over the task of crafting public health policies to address the pandemic. In many states, most of them in the northern and eastern halves of the country, the principal policies

¹¹ COUNCIL ON FOREIGN RELATIONS, <https://www.cfr.org/in-brief/what-defense-production-act> (last visited Aug, 2020).

were to issue “stay at home” orders, ban gatherings of more than 10 people, close commercial and retail businesses, and the like. Public health officials are the ones who suggested these responses, and many governors tied their policies to those suggestions.

But some governors, most of them in southern states, such as Florida, Texas, and Arizona, did not follow those suggestions. They allowed commercial entities to remain open, would not endorse or even allow mayors to endorse the public wearing of masks, and followed the President in suggesting that the reaction to covid-19 was overblown. And, as we have seen, those states experienced a significant spike in covid-19 cases and deaths, beginning in June and July.

1.3.2. Economic Policy Responses

An unintended consequence of the public health measures instituted in states from early- and mid-March was astonishingly large economic costs. Most businesses simply closed. The so-called hospitality industry – restaurants, hotels, airlines, cruise ships, vacation rentals, and more – was devastated. Unemployment, as I indicated above, rose to its highest levels since the Great Depression, and recent estimates are that the GDP of the U.S. fell by 9.5 percent in the second quarter, the largest quarterly drop since records have been kept. Economists at the University of Chicago estimated that 37 percent of the labor force could continue to work by connecting from home or some other remote location but that 63 percent of the labor force in the U.S. could not work remotely.

To their great credit, Congress and the Federal Reserve acted quickly and generously to the economic crisis. For example, the Federal Reserve announced on March 12 that it would loan \$1 trillion to banks to help them maintain their clients’ liquidity. Three days later, the Fed reduced interest rates to zero and announced a \$700 billion “quantitative easing” program. “Quantitative easing” involves the Fed’s purchase of assets as a means of getting liquidity into the hands of asset holders.

For its part Congress passed four bills between mid-March and early May to ease the economic consequences of the coronavirus pandemic. Taken together, those four bills appropriated almost \$3 trillion for various forms of relief. “Quantitative easing” involves the Fed’s purchase of assets as a means of getting liquidity into the hands of asseholders. Included in those programs were \$1,200 to be distributed to all adults who earned less than \$75,000 per year, a Paycheck Protection Program that loans money to businesses and forgives the repayment of the loan if a large fraction

of the loan goes to pay employees, and the addition of \$600 per week to whatever state benefits unemployed workers receive.

Congress is currently considering a fifth relief bill. They are doing so acrimoniously and under a binding time constraint. The moratorium on evictions and foreclosures that was part of the earlier relief acts expires on August 1. So, too, does the \$600 per week federal supplement to state unemployment compensation. Unemployment benefits are, by and large, a state, not a federal, responsibility and vary considerably depending on one's domicile state. There has been some speculation on whether those receiving the state weekly benefits plus the \$600 federal benefit are comfortable enough *not* to seek re-employment. Those who believe that the \$600 federal supplement is too generous apparently believe that its continuation will prolong unemployment. With those expirations, the economic situation is likely to become even worse.

1.4. The Plan of the Article

The next section of this article will give a brief introduction to law and economics, the tools of which I intend to use in Section III to examine some legal issues raised by the coronavirus and covid-19. There are, of course, other disciplines – epidemiology,¹² microbiology, demographics, public health, medicine, psychology, and more – that have central things to contribute to our understanding of this disastrous situation. But economics, perhaps surprisingly, does have important contributions to make to assist our understanding of the legal issues raised by this pandemic.

2. A BRIEF INTRODUCTION TO LAW AND ECONOMICS

Law and economics – or the economic analysis of law – is a scholarly innovation that Professor Bruce Ackerman of the Yale Law School has called “the most important development in legal scholarship of the twentieth century.” This new method uses tools from microeconomics to throw light on legal issues.

¹² DAVID QUAMMEN, *SPILLOVER: ANIMAL INFECTIONS AND THE NEXT HUMAN PANDEMIC* (W. W. Norton & Company 2013)

For example, consider the negligence liability standard. Under the traditional understanding of negligence, if there has been an accident; a victim has been injured; and an injurer has been identified, a court ought to find the injurer liable for money damages to compensate the victim if that injurer failed to take “reasonable care.” If the injurer *did* take reasonable care or if the victim failed to take her own reasonable care, then the injurer ought not to be liable.

The economic view of negligence is consistent with this traditional view but distinct and, I and many others believe, richer. First, the economic understanding provides a different view of what care should count as “reasonable.” According to law and economics, the social costs of accidents will be minimized if actors invest in “cost-justified precaution.” That is precaution that will prevent an accident or mitigate losses and whose cost is less than the expected accident losses. One calculates “expected accident losses” as equal to the probability of an accident’s taking place, given the amount of precaution taken, times the losses that the victim is likely to suffer. This is not an easy calculation to make, and advanced treatments of the subject seek to explore how people do or might make this calculation. Note, by the way, that we can analyze many different ways in which to help individuals and organizations to make these calculations – in the context of automobile accidents by, for example, clearly posting speed limits and other traffic laws, by requiring automobile manufacturers to build safety features into their cars, by mandating the wearing of seat belts and other passenger restraints, by moving to a regime of autonomous vehicles (which, by some estimates, will significantly reduce automobile accidents, 94 percent of which are due to human error), and more. In application, suppose that there has been an accident involving two motorists, one of whom is clearly the injurer; the other, the victim, who has suffered losses (such as damage to his car, medical expenses for his own injuries, and lost income from being unable to work). The injurer will be held liable to the victim for his damages if precaution that would have prevented the accident (such as not speeding or obeying the traffic rules) cost less than the probability that the accident would have occurred times the victim’s losses, and the injurer did not take that precaution. If he did take the precaution but an accident happened anyway, he will (or should be) excused from negligence liability for the victim’s losses.

Second, where traditional analysis focuses on what should happen if there is litigation, as in the examples above, law and economics lays even greater stress on how law can influence pre-accident behavior so that accidents are far less likely to happen or to be less injurious if they do occur. That is, law and economics imagines that if potential injurers know (perhaps through their

attorneys) the actions that will excuse them from negligence liability in the event of an accident, then they will take adequate precaution – that is, precaution whose cost was less than the expected benefit to a potential victim. Prior to an automobile accident, any given driver does not know if she will be the injurer or the victim. But that fact should not matter to negligence’s ability to induce adequate precaution by both parties. If she is thinking about precaution as law and economics imagines that people do or ought to do, she will take all cost-justified precaution so that however things turn out, she will be protected. If she is the injurer but has taken all cost-justified precaution, she will not be liable for any victim’s losses. If she is the victim and has been injured by a person who took reasonable care and is, therefore, not liable, she will have, nonetheless, minimized her own injuries by taking reasonable care.

Law and economics has thrown light by applying the tools of microeconomics – such as game theory, the analysis of risk allocation, and the theory of decisionmaking under uncertainty – on issues in all areas of civil law, criminal law, corporate law, administrative law, family law, and more.

There are two important recent developments in law and economics. The first is what is called “behavioral law and economics.”¹³ Behavioral science (or behavioral economics) imports the findings of cognitive and social psychology into legal and economic decisionmaking. Psychologists, most notably Daniel Kahneman¹⁴ and Amos Tversky,¹⁵ have done numerous experiments to see whether actual behavior confirms or refutes rational choice theory, the prevailing theory of decisionmaking in microeconomics. Rational choice theory posits that decisionmakers are rational in the sense that their preferences are transitive (if *A* is preferred to *B* and *B* is preferred to *C*, then *A* is preferred to *C*) and their actions are well-suited to achieving their goals. An implication of RCT is that rational people do not make mistakes unless they are misled or misinformed. For example, standard microeconomics proposes that individuals have attitudes toward risk that influence people’s decisions when faced with uncertainty: People are either risk-averse, risk-neutral, or risk-

¹³ EYAL ZAMIR & DORON TEICHMAN, *BEHAVIORAL LAW AND ECONOMICS* (2018).

¹⁴ DANIEL KAHNEMAN, *THINKING, FAST AND SLOW* (2020).

¹⁵ MICHAEL LEWIS, *THE UNDOING PROJECT: A FRIENDSHIP THAT CHANGED OUR MINDS* (2016).

seeking. Those categories speak for themselves. For our purposes here, it is important to note that standard microeconomics imagines that if a person is risk-averse, they are risk-averse with respect to any decision about an uncertain course of action. It does not matter, for example, whether the uncertainty arises from a gain (as in buying a lottery ticket) or a loss (as in a house fire).

However, in a famous series of experiments and papers, Kahneman and Tversky showed that most people are risk-averse with respect to gains but risk-seeking with respect to losses.¹⁶ They showed that as a result of this finding, people's choices can be affected – indeed, changed – by how a choice is framed. For instance, if people are presented with a choice between public health options, both of which frame the choice by focusing on lives saved, they behave in a risk-averse manner. However, if people are presented with precisely the same choice between public health options that frame the choice by focusing on lives *lost*, then people behave in a risk-seeking manner.

The second important development in law and economics is the rise of empirical legal studies.¹⁷ Using experiments, data from public archives, case data, and more, law-and-economics scholars have subjected the hypotheses about legal issues to confrontation with data to see whether the real world agrees with or refutes those hypotheses. To take one famous example, John Donohue and Steve Levitt showed in 2001 that half of the remarkable decline in crime that began in the U.S. in 1991 can be attributed causally to the legalization of abortion by the U.S. Supreme Court in January, 1973.¹⁸

The contributions of behavioral and empirical law and economics will continue to enrich our understanding of legal issues, as I hope to show in the following section.

3. LEGAL ISSUES RAISED BY COVID-19

The novel coronavirus and the pandemic that it has spawned have raised new legal issues or exacerbated old and on-going legal issues. For example, many employers, retail merchants, restaurants, airlines, hotels, and customers and employees of those businesses are deeply worried

¹⁶ Amos Tversky & Daniel Kahneman, *The Framing of Decisions and the Psychology of Choice*, 211 *SCIENCE*, 453 (1981); Daniel Kahneman & Amos Tversky, *Prospect Theory: An Analysis of Decision Under Risk*, 47 *ECONOMETRICA*, 263 (1979).

¹⁷ 2 ROBERT M. LAWLESS, JENNIFER K. ROBBENOLT & THOMAS S. ULEN, *EMPIRICAL METHODS IN LAW* (2018).

¹⁸ John J. Donohue III & Steven D. Levitt, *The Impact of Legalized Abortion on Crime*, 116 *Q. J. ECON.*, 379 (2001).

about how the law will deal with liability issues if businesses reopen to their employees and customers. What if a cohort of customers at a restaurant, all of whom dined there on the same evening, come down with covid-19? Under what theory may they sue the restaurant for its responsibility for their getting ill? What problems of proof will they encounter? Understandably, customers and employees want to be safe, and businesses want to be assured that if they take adequate precaution, they will not be held liable for their employees' or customers' illnesses. Do existing principles of tort liability provide both sides of this issue with adequate incentives to take care? Will they feel reasonably protected against liability and infection? Or does the federal government need to intervene to make the tort liability system post-covid-19 better?

In this section, I shall use the tools of law and economics to help understand how to think about these legal problems. Almost all of my examples will come from the United States, but my hope is that because every country is experiencing this same pandemic, these examples will resonate with every country's experience.¹⁹

3.1. Emergency Powers

Covid-19 is a disease that comes from being infected by the SARS-CoV-2 virus. It is, we have come to learn, highly transmissible from human to human, especially in the minute droplets that humans emit when they breathe, cough, sneeze, talk, sing, yell, and the like. For example, one of the first "superspreader" events took place at a church choir practice in Seattle in March. By contrast, it has recently been discovered that it is extremely difficult for the coronavirus to be transmitted from surfaces to humans. Of course, these findings about transmissibility could change.

Another important finding is that asymptomatic carriers of the coronavirus – that is, people who have the virus but have yet to manifest any symptoms of covid-19 – account for between one-third and one-half of all transmissions.

Finally, the best estimate of how long it takes between the time one becomes infected by the coronavirus and begins to manifest covid-19 symptoms is two weeks. For some, the disease may manifest itself soon after having been infected, and for others, later.

Taken all together, these facts suggest problems that defy the abilities of rational individuals to deal with by themselves or by agreement with other rational individuals. First, there is the ability of individuals to determine if they have been infected. If tests were readily and cheaply available and if their results could be given within a very short time, such as 15 minutes or even 24 hours, then rational people might be able to get tests and results of tests frequently and fast enough to take actions that would diminish the spread of covid-19. They could, for example, immediately isolate themselves so as not further to infect others. In addition, if a test on Monday had shown a given individual to be covid-19-free but a test on Wednesday showed her to be infected with the disease, then public health officials could do “contact tracing.” That would involve contacting those with whom the now-infected individual had spent time between the (negative) Monday test and the (positive) test on Wednesday and warning them, then contacting those whom those direct contacts had been with and warning them, and so on. These informational matters are beyond the reasonable ability of even the most rational person to deal – information being one of the most difficult items for people to deal with adequately. Moreover, it can be time-consuming and is far better left to trained individuals to do. I should note that the complexity of contact tracing can be greatly diminished by more frequent testing and more rapid results. If, for example, it takes two weeks for results of a test to come back, the contact tracer has to try to get a list of everyone the infected person has been near in the past two weeks, who those people have been near, and so on. By contrast, if people are getting tested twice a week (which is the standard that public health officials recommend), the number of people who might have been near an infected person in the few days between tests is far smaller, and, therefore, the contact tracer’s job is far simpler. It is also true and worth noting that technology – as with mobile phone apps as have been used to great effect in South Korea – can make the job of contact tracing much, much simpler and, probably, more accurate. But privacy concerns about these apps are keenly felt in the United States. Thus, practically speaking, society must undertake the jobs of testing and contact tracing and design policies for disseminating the information thereby gathered, subject to privacy considerations. The United States federal government has completely mismanaged the testing for covid-19. The first tests they produced were flawed and had to be recalled. The tests now in use are of questionable veracity. To take but one example: Governor Mike DeWine (R-Ohio) had a test for covid-19 early on August 6 before he was to meet President Trump, who was visiting Ohio. The test was positive, indicating that Gov. DeWine had covid-19. So, he did not meet with the President. Later in the

day, Gov. DeWine took a second test for covid-19 that indicated he did *not* have covid-19. Either he had a miraculous and spontaneous cure over the course of the day, or, more likely, the test is flawed. The number of tests that are now available is wholly inadequate for the public health task at hand.

Second, the transmission of the coronavirus to others is what economists call an “externality” or an “external harm.” That is, it is a harm that the infected person can impose on others without their consent, even without their or the infector’s knowledge. Economists recommend *internalization* as the means of dealing with externalities. That would mean bringing to the attention of the externality-generator that he is doing harm unintentionally and restricting the infector’s behavior so as to minimize his ability to impose the disease on others. For example, public health authorities would probably recommend “social distancing,” that the infector be isolated, that he and those he is around wear face masks to prevent infecting or being infected by virus-laden air droplets, and that his contacts be traced. Public health specialists refer to this conjunction of practices as “test, trace, and isolate.”

Third, because up to 50 percent of infections can come from asymptomatic infectors, isolation and face-mask-wearing may not be enough, however important they are. The normal interactions of human beings – commuting to work, shopping, attending sporting events and concerts, going to a restaurant for a meal or a bar for a relaxing evening, watching a movie at the cineplex, and so on – often involve large numbers of people being within close proximity. That being the case, there is a public-health argument for restricting the number of people who can be out in public or even going so far as to issue “lockdown” or “stay at home” orders.

Authorities, such as public health administrators, might issue hortatory advice to people within their jurisdiction to follow these practices. Alternatively, governmental authorities might issue orders to those in their jurisdiction to obey these public health guideline with, perhaps, fines or other sanctions for failure to comply. In the United States, those governmental authorities might be federal, state, or local. If the federal authorities issued mandatory guidelines (and other facilitating orders) to deal with the information and externality problems presented, there would be one national policy to govern all 330 million people in the country. There are both advantages and disadvantages of that unitary policy. A large advantage would be that everyone would be doing the

same thing to combat the spread of the disease. Among other things, that single policy would minimize the spread of the disease between localities or states that might have different policies. A large disadvantage would be that there might be enforcement issues that outrun the ability of federal authorities to control. Relatedly, as I am about to point out in the text, a single policy for the entire country will almost certainly not account for significant differences – as in population density – across states and localities.

Alternatively, as has been the practice of the Trump administration, regulation may be pushed down to the states. States then would be free to develop their own regulations and guidelines and their enforcement practices. Some states entered into interstate compacts (agreements among states, subject to Congressional approval²⁰) with nearby states to adopt similar practices with the result that there was regional uniformity in regulations. Among all of the fifty states, there was a great deal of variation in the range and seriousness of the guidelines and regulations that they adopted to deal with the problems of covid-19. For example, Iowa and Illinois are neighboring states, but Iowa did not have stringent regulations while Illinois did.²¹ The states in the Middle Atlantic and New England areas and Illinois in the Midwest, adopted stringent lockdown practices. Other states, such as Florida, Georgia, Texas, and Arizona, refused to institute stringent behavioral controls or stay-at-home orders. The consequences of these variations were predictable and predicted: The states with more stringent controls have, by and large, fared better than those that had more lax controls. But, in truth, the contrast is not as sharp as that. Some states that imposed lockdown orders early, like California, have seen a recent spike in cases. Indeed, California has become the state with the greatest number of covid-19 cases.

The central legal issue in all these matters has been the exercise of emergency powers that all state governments have granted their governors and that Congress has granted to the executive branch. There cannot be any question that the benefits of giving government emergency powers in special circumstances exceed the costs and that the emergency of the covid-19 pandemic and the informational and externality issues justify invoking those powers.

²⁰ Lisa Hansmann, *Interstate Compacts: A Primer*, EDMUND J. SAFRA ETHICS CENTER HARVARD UNIVERSITY, (Apr. 30, 2020) <https://ethics.harvard.edu/files/center-for-ethics/files/interstatecompactsprimer.pdf>.

²¹ PANDEMIC ECONOMICS, <https://bfi.uchicago.edu/podcast/pandemic-economics/> (last visited Aug, 2020).

That doesn't mean that there are no legal questions raised by the use of emergency powers to deal with the covid-19 pandemic. For instance, some have contended that contact tracing violates privacy interests and that mandatory face-mask wearing infringes on civil liberties. Others have argued that forbidding groups of people greater than a certain, small number to gather violates the First Amendment right of assembly and freedom of religion. Still another set of complaints has arisen about the government's compelling the closure of some businesses, such as bars, restaurants, hotels, sporting venues, and cinemas. Some have claimed that the extraordinary economic costs inflicted on those businesses amount to a compensable taking.²²

I do not find those criticisms compelling, but I recognize that they are important questions that those exercising those emergency powers should be prepared to answer. In all those cases, I think that the answer is that the benefits of the regulations exceed their costs. Nonetheless, I leave for another day the question of whether those who are financially injured by the exercise of these emergency powers have a valid claim for compensation.

Additional questions are these: Should there be fines for failing to wear a mask? Or for failing to obey an order to isolate oneself? Or for a doctor's failing to notify the authorities that a patient has covid-19? Or a business' failing to police social distancing? Would it be lawful to fine people for failing get a covid-19 vaccine?

3.2. *Covid-19 and the Commerce Clause*

The search for a vaccine to protect individuals from covid-19 has begun in earnest. There are said to be over 100 pharmaceutical companies, worldwide, engaged in a race to develop a vaccine. In the United States the Trump Administration selected five companies in early June to receive substantial financial aid with their vaccine development. Among other help, the administration has promised to assist with manufacturing promising vaccines if the Food and Drug Administration has granted emergency use licensing to a particular vaccine or that vaccine has received full and

²² Mary Williams Walsh, *What Is Insurable in a Pandemic*, B1 N.Y.T. (Aug. 7, 2020).

final FDA approval.²³ In normal circumstances a new drug or vaccine must pass through three phases of clinical trials,²⁴ and prudent pharmaceutical companies, knowing that approval is not certain till the results of widespread testing (phase III) are complete, do not undertake manufacturing till the drug receives final FDA approval. Because manufacturing takes time, it can be months or longer till an approved drug is widely available for patient use. Indeed, the prior record for developing and bringing to patients a safe and effective vaccine is four years.²⁵ This is a truly innovative policy for which the administration deserves great credit.

But even with these efforts to discover a vaccine for covid-19 and to make it available early, there is another hurdle that must be surmounted: In surveys only 50 percent of the respondents plan to get vaccinated against covid-19 once a vaccine is available.²⁶ This is distressing. Economists believe that vaccination against a communicable disease is an “external benefit” – that is, an action that confers an unbargained-for benefit on other persons. The greater the percentage of a population that has been vaccinated, the less likely that any unvaccinated person is to contract the disease from another person.

Governments can take advantage of an external-benefit-generating activity by either mandating or subsidizing that activity. For example, governments typically mandate that young people be educated through a particular age on the theory that a literate and numerate population is a social benefit, not just an individual advantage. Governments typically subsidize getting the annual influenza vaccine. In many communities the shot is free.

With respect to increasing the number of people who will get the covid-19 vaccine when it is available, a Congressional mandate to get the vaccine like the one I suggested at the end of the last section, is, apparently, not constitutional. Congress has until recently used the Commerce Clause

²³ U.S. HEALTH AND HUMAN SERVICES, *U.S. Government Engages Pfizer to Produce Millions of Doses of COVID-19 Vaccine*, (Jul. 20, 2020), <https://www.hhs.gov/about/news/2020/07/22/us-government-engages-pfizer-produce-millions-doses-covid-19-vaccine.html>.

²⁴ WCG CENTRE WATCH, *Human Clinical Trial Phases*, (Jul. 2020), <https://www.centerwatch.com/clinical-trials/overview#:~:text=Once%20approved%2C%20human%20testing%20of,continuing%20to%20the%20next%20phase.>

²⁵ Noah Welland & David E. Sanger, *Trump Administration Selects Five Coronavirus Vaccine Candidates as Finalists*, *T.N.Y.T.*, (Jul. 27, 2020) <https://www.nytimes.com/2020/06/03/us/politics/coronavirus-vaccine-trump-moderna.html>.

²⁶ Warren Cornwall, *Just 50% of Americans plan to get a covid-19 vaccine. Here's how to win over the rest*, *Science*, (Jun. 30, 2020) <https://www.sciencemag.org/news/2020/06/just-50-americans-plan-get-covid-19-vaccine-here-s-how-win-over-rest#:~:text=Recent%20polls%20have%20found%20as,vaccine%2C%20with%20another%20quarter%20wavering.>

of the *Constitution* as the basis for national regulation of an activity or industry.²⁷ But the Supreme Court has decided in a series of cases that the Commerce Clause cannot be used as the basis for the regulation of noncommercial activities.²⁸

If this view is correct, then to increase the benefits of taking the covid-19 vaccine, the federal and state governments will probably have to rely on changing attitudes and subsidization.

Urging people to get the vaccine early may face some significant hurdles. It is possible that the survey finding that only about 50 percent of adult Americans intend to get the vaccine once the FDA has approved it may be due to the public's skepticism about the approval process. Like so much of the federal and some states' public health policies to stop the spread of the coronavirus, vaccine testing – like the wearing of masks, social distancing, and the like – has been politicized; in fact, some or many of the survey respondents may fear that the Trump Administration, which is in serious danger of not being reelected on November 3, 2020, may short-circuit the clinical testing process in order to get a political bounce from having produced a vaccine.

3.3. *Reopening the Courts*

When governors began to issue stay-at-home orders in early March, courts and lawyers realized that they should suspend the business of the courts. And so 45 states and territories suspended jury trials. By mid-Summer, 2020, most states had not yet resumed jury trials. In Champaign County, Illinois, the county circuit clerk began to send out jury summons in June with instructions to appear in mid-July. Some of those summoned sought to be excused on the ground that serving as a juror would expose them to infection with covid-19, and the circuit clerk accepted that as a reason for postponing jury service for those who raised that fear.

Some courts have experimented with “virtual proceedings,” in which the parties involved – judges, lawyers, plaintiffs, defendants, and others – use a computer communication program to do some routine proceedings. But new trials or trials that were interrupted by the pandemic are not taking place.

²⁷ United States Constitution, Art. I, § 8, Cl. 3.

²⁸ *United States v. Alfonso Lopez*, 514 U.S. 549 (1995).

Most famously, the United States Supreme Court heard oral argument in several cases through telephonic and computer connections. Those virtual connections were made available to the public so that for the first time the public could listen to the Court's proceedings without being physically present at the Supreme Court Building in Washington, DC.

The federal judiciary, in contrast to the states, "has been processing cases at a rate pretty close to normal."²⁹ Judge Jed Rakoff, United States District Judge of the United States District Court for the Southern District of New York, reports that the federal judiciary typically has a much smaller caseload than do state judges and that the federal courts have been very good at planning for emergencies like the coronavirus pandemic. Much of his courts' business early in the covid-19 crisis consisted of application for those in jail or prison to be released to home confinement. Those applications usually turn on whether the applicant is a flight risk or a danger to the community, but in the pandemic, they turn on the ground of fear of contracting covid-19 in jail or prison.

A more routine issue is how a prisoner and his counsel can safely and securely consult. Many jails and prisons are not adequately equipped to allow video consultations, and yet they are not comfortable with in-person meetings between counsel and client.

Arraignments, trials, and other legal proceedings are, generally, public. Thus, the plaintiff, the defendant, counsel, and the public all have a right to be present. To conduct such proceedings requires having courtrooms or other venues that are large enough to allow social distancing. Some courts have allowed a defendant in a criminal proceeding to appear by video from the room in the courthouse where he is confined before appearing in court (the "cellblock").

The wearing of masks in court proceedings may raise fairness issues. Lawyers may not be able to notice tell-tale signs of prejudice, such a smirk or scowl, if a prospective juror is wearing a mask. Some lawyers have asked judges to allow masks to be removed from potential jurors during *voir dire* and from witnesses during testimony, and those requests have been granted.

Because of fears that many jurors may have of being in close proximity to other jurors, the Arizona Supreme Court, anticipating that many calls to jury duty would be ignored, has reduced the number of potential jurors that can be struck [without cause] by each side to two, from the usual six."³⁰

²⁹ Jed S. Rakoff, *Covid and the Courts*, N.Y.REV, 10-12 (2020).

³⁰ Shaila Dewan, *Drama in Courtrooms: The Return of the Jury*, A7 T.N.Y.T., (Jun. 11, 2020).

There is a broadly held feeling that these and similar measures are mere stopgap measures, that the standard in-person proceedings are vastly preferable. But no one will feel comfortable with returning to the *status quo ante* until we are well beyond this pandemic.

3.4. *Liability*

In the current Congressional negotiations regarding a new relief bill, the Republican negotiators are said to have liability relief as their top priority. They cite concerns that the behavior of employees, customers, and others may be adversely affected by fears of contracting the coronavirus and of liability for harms arising from having contracted covid-19 due to the negligence of a shopowner, an educator, an employer, a healthcare professional, and so on. For example, an employer may be worried that one or more of his employees may bring an action against him alleging that he contracted covid-19 in the workplace. Or a theater owner may fear that his customers may sue him for negligently failing to clean his establishment with the result that some customers were infected with covid-19.

I recognize that these are two-sided transactions – that employees may be reluctant to return to work unless they are confident that the workplace is safe and that customers will not patronize a restaurant or hotel unless they are assured that the proprietor has followed public health guidelines on masks for employees and customers, maintaining social distancing, ventilation, and so on.

The Republican position is surely premised on both of these concerns – on protecting employers from liability if they have been nonnegligent and on encouraging employees and customers to feel safe in going to work and going to commercial establishments to shop.

There must be other, unspoken premises at work in this position, and I suspect that they are these: that trial lawyers will perceive suing employers, commercial entities, healthcare providers, educators, and others for negligent care in the pandemic as a potentially lucrative business opportunity³¹ and that there is little substance to these allegations, that they are merely a means of shaking down defendants for money.

³¹ Andrew Duehren, *Senate GOP Aims to Funnel Covid Liability Cases to Federal Courts*, W.S.J., (Jul. 16, 2020).

The Democratic position – because almost everything in the U.S. is politicized today – is probably this: that the tort liability system works reasonably well to provide incentives for everyone to take care; that only those who violate obvious norms of precaution are held liable for injuries; and that the safety regulation system, which provides *ex ante* safety standards for those who might cause harm, fills in the gaps in the tort liability system.³²

Rather than waste time fighting about whether the tort liability system works well or ill, whether trial lawyers perform a vital function or are mere predators on the business community, let us try to find a middle way forward. William Galston of the New Center and *The Wall Street Journal* has recently suggested such a way: Congress should offer a “safe harbor” act that says if employers and commercial establishments comply with Centers for Disease Control and Prevention guidelines for safe workplaces, schools, and commercial businesses, the act would “guarantee employers [and businessowners] who can demonstrate that they have met these standards a ‘safe harbor’ against litigation [related to covid-19].”³³

There are details that need to be specified. For instance, because this compromise would apply only to the current pandemic, there needs to be a sunset provision. The act might say something general, such as that the act should lapse within six months of the end of the pandemic or by the end of 2022, whichever comes first, or something specific, such as that the act expires when a safe and effective vaccine against covid-19 is widely available. This latter provision would have the effect of inducing people to get the vaccine. Having failed to do so could be deemed contributory negligence.

Another detail that needs addressing is for employers to make certain that their employees get tested frequently and isolate themselves if they have been found to test positive for covid-19. There ought, also, to be incentives for someone, perhaps the federal government, to compensate employees for their lost wages while they isolate or are recovering from covid-19. Some employees who are not feeling well or who have been exposed to the coronavirus or have tested positive for the disease might not stay away from work if to do so means losing income. We have a friend whose son worked with someone who had tested positive for covid-19 but stayed on the job because she needed the income. Our friend’s son was frightened but did not want to go to his employer to tell

³² Ephrat Livni, *US businesses want immunity from coronavirus lawsuits*, QUARTZ, (Apr. 24, 2020).

³³ Galston, *Democrats Should Back ‘Safe Harbor’ Law*, A17 W.S.J., (May 13, 2020).

him about his co-worker's infection. A law that provided for the continuing compensation for an isolated worker would obviate this problem.

3.5. *Voting*

On November 3, 2020, the American people will vote for federal (president, vice-president, and 35 Senate seats) and state offices. The experiences that many states have had in holding their primary elections between January and July, in the midst of the coronavirus pandemic, have raised concerns about the viability of in-person voting. In those states that allowed mail-in votes, the state authorities and the post office were overwhelmed by the volume of mail. Many voters who had requested mail-in ballots never received them and, as a result, never voted. Take the Commonwealth of Kentucky. Four states officially call themselves a “Commonwealth,” rather than a State – Kentucky, Massachusetts, Pennsylvania, and Virginia. There is no difference between a “commonwealth” and a “state.” In a normal election only 1.5 percent of voters request a mail-in or absentee ballot. Here is a brief primer on the differences between mail-in and absentee ballots. Many use the words “mail-in ballots” and “absentee ballots” interchangeably, but there are subtle differences between them. The absentee ballot, which is available in all 50 states, the District of Columbia, and all U.S. territories, is for those voters who will be out of the state or incapacitated and unable to vote in person on the scheduled date of the election. That practice began during the Civil War (1861-1865) to allow soldiers who were stationed away from their home states to participate in their home state elections. Federal law today requires that absentee ballots be sent to armed forces personnel and citizens who are overseas. In 16 states a voter who requests an absentee ballot must give a “reasonable excuse” for being unable to vote in person. Another 28 states and the District of Columbia have what is called a “no excuse” absentee ballot, which means that one simply has to ask for an absentee ballot but does not have to provide a reason for wanting to vote absentee. Thus, the “no excuse” absentee ballot is equivalent to a mail-in ballot. All of the likely swing states in the 2020 presidential election – Florida, Pennsylvania, North Carolina, Michigan, Wisconsin, and Arizona – allow the “no excuse” absentee ballot. Some states impose additional restrictions on absentee voters, such as a requirement that their ballot be notarized or witnessed or

that the voter provide his own stamp for returning the absentee ballot. But those ballots can also be placed in secure boxes or handed to a clerk at the appropriate state office; so, the stamp requirement should not significantly deter voting.

In contrast to the absentee ballot, there are five states – Washington, Oregon, Utah, Colorado, and Hawaii – that vote almost entirely by means of a “mail-in” ballot. In those states voters do not have to request a ballot by mail; the authorities send an application to every registered voter in the state. And typically, the state provides a prepaid return envelope. But in the June primary elections, Kentucky state officials in essence ran two parallel elections – a mail-in election involving 760,00 mailed ballots and 270,000 people who voted in-person at a limited number polling places. With the help of both the Republican and Democratic parties, state officials made the process work relatively flawlessly. There were a few delays at some polling stations, but there were not long lines of voters waiting, as they socially distanced, to get in. And the state had provided special venues for receiving the flood of mailed ballots and an increased number of workers to count those mailed ballots. All went well.

Other jurisdictions held elections that did not go as smoothly. In April Wisconsin held its primary election. At the time the mayor of Milwaukee, Wisconsin’s largest city, and the governor had issued stay-at-home orders to try to stop the spread of the coronavirus. The governor tried to use his emergency powers to postpone the election till June, but the Wisconsin Supreme Court, on a party-line 4-2 vote, voided the governor’s order, arguing that postponing an election was not within the governor’s emergency powers. They were probably correct. At the federal level, we have recently been reminded that the president does not have the power to cancel or re-schedule a federal election. The timing of federal election matters comes from an 1845 statute and other controlling legislation and constitutional doctrine. In Wisconsin, one of the most hotly contested items on the ballot was for a seat on the Wisconsin Supreme Court. There was some speculation that the Wisconsin Supreme Court’s ruling against the governor’s attempt to postpone the election till June was, at least in part, motivated by the Republican Party’s belief that its candidates are generally favored if voting is more costly or difficult. In the end, despite the very long lines at polling places, the Democratic candidate for the open seat on the Wisconsin Supreme Court won.

Therefore, the in-person voting and submission of absentee ballots went on as scheduled. In a normal, non-pandemic year, there are 180 polling places in the City of Milwaukee. But in this

pandemic year, the city only opened *five* polling places, largely because poll workers (approximately 60 percent of whom were older than 61 in 2018 and therefore would have been more vulnerable to contracting covid-19) were reluctant to show up.³⁴

So, absentee ballots were the only recourse for those who did not want to brave the long lines at the greatly diminished number of polling places. A federal district court issued an extension that moved the deadline for the state to receive absentee ballots by six days, which would have allowed people to send in ballots that were postmarked after the primary election took place (an almost unheard of extension).

On the night before the election, the U.S. Supreme Court issued a stay against the district court extension. That meant that some people who wanted to vote and would have taken the opportunity to send in absentee ballots under the district court's ruling had either to make sure to post their ballots on election day or to vote in person. Apparently, so many people felt so strongly about voting (and concerned that their absentee ballots might not be counted) that they braved the long delays – some as long as 8 hours – to vote in-person.

I cite these examples of how the pandemic has adversely affected primary voting because it is everyone's belief that those difficulties signal that similar problems are likely to affect the state and federal elections in November. But those November election problems are likely to be orders of magnitude worse than those in the primary elections of the Spring and early Summer. In the average primary election only 22 percent of eligible voters cast ballots. In a national election the figure is closer to 60 percent of those eligible. Put somewhat differently, the cumulative voting totals in 47 state, district, and territorial primaries between February and June were 55 million people. The expected voting totals in all 50 states, the District of Columbia, and the territories is likely to be 150 million on one day, November 3.

The good news is that we have had the experience of dealing with pandemic concerns in the primaries and should have learned enough to deal with the issues for the general election in the Fall.³⁵

³⁴ Michael Wines, *From 47 primaries, 4 warning signs about the 2020 vote*, T.N.Y.T., (Jun. 30, 2020).

³⁵ *Id.*

Given that poll workers are likely to be reluctant to staff polling places if the pandemic is, as seems likely, still with us in November, and that many voters, too, would prefer not to have to venture out into public to vote, then the states (which are constitutionally in charge of much of the process of voting) will want to make voting by mail easy and secure.

There are several real problems and two specious problems that are likely to arise this Fall. If many more people than is normal decide to vote by absentee or mail-in ballot, there will be problems for the post office in managing this extraordinary volume and in the state election officials' ability to count the mailed ballots in a timely fashion. The percentage of mail-in ballots in presidential election years has increased continuously from 7.6 percent in 1996 to 12.9 percent in 2004 to 18.5 percent in 2012 and to 20.9 percent in 2016. Most states do not allow officials to begin processing mail-in ballots till the in-person polls have closed. Depending on the volume of these mail-in ballots and the number of people trained to check their validity and count them, it may be days or weeks before all the ballots are tallied. The State of New York took slightly more than one month to process the huge number of mail-in ballots submitted in their June primary election. So, there may be delays in the announcement of winners and losers in all of the Nov. 3 elections. Those delays can become a source of anxiety and distrust with potentially ugly consequences for the nation.

There are two specious problem with mail-in votes – both frequently brought up by President Trump. One is that they are much more subject to fraud than is in-person voting. The other is that they favor Democratic candidates over Republican candidates. There is empirical evidence on both contentions. With regard to fraud, that has been extremely rare in absentee voting and in the five states that currently rely almost exclusively on mail-in ballots. Second, there is no evidence that suggests that mail-in voting favors one party over another.³⁶

There are several things that the states can do to accommodate a larger than normal volume of mail-in ballots and to ensure that the risk of fraud is minimized. States can require earlier requests for absentee ballots. Many states, like Ohio, require that such a request be made by the Saturday before a Tuesday election. But even a modest change like moving the deadline for requests to five

³⁶ Reid J. Epstein & Stephanie Saul, *Does Vote-by Mail Favor Democrats? No. It's a False Argument by Trump*, T.N.Y.T., (Apr. 10, 2020).

days before the election may be enough. States might set that earlier deadline both to give themselves more time, pre-election, to organize the ballots but also to allow flawed ballots (those, for instance, in which signatures on file do not match those on the submitted ballot) to be cured.

All of these matters will cost the states substantial sums of money. Congress appropriated and distributed \$400m to the states to help with voting preparation in one of its early relief bills, but many experts believe that five times that much – \$2b – is required to equip the states to handle the anticipated surge in mail-in ballots.

3.6. *Behavioral Considerations*

I have implicitly been assuming that decisionmakers in these matters – legislators, judges, lawyers, executives, businessmen, consumers, healthcare providers, and more – are reasonably rational in making their choices about law and safety. But as I mentioned toward the end of Section II, law and economics is moving away from the rational choice theory of human decisionmaking in favor of the conclusions emerging from experiments in cognitive and social psychology. Those conclusions typically find that human beings are flawed or imperfect decisionmakers. We make predictable mistakes, not just random, haphazard errors. And we do not learn very well how to avoid those mistakes. We make them over and over.³⁷

Behavioral considerations must be brought to bear on the study of many aspects of the coronavirus pandemic. First and foremost, we can invoke behavioral science to explain one of the most fundamental facts about the virus: People do not seem to assess the risks of the virus accurately. It is not that they miscalculate by a small amount; they miscalculate by orders of magnitude. People are not good at estimating risks. For example, they tend to latch onto what is readily available to them rather than investigating the true, objectively verifiable risks. This is known as the “availability heuristic.” A “heuristic” is a quick method of discovering something for oneself. As an example, if you were to ask a group of people in the United States which kind of death, homicide

³⁷ SCOTT PLOUS, *THE PSYCHOLOGY OF JUDGMENT AND DECISION MAKING* (1993).; Russell B. Korobkin & Thomas S. Ulen, *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics*, 88 CAL. L. REV. 1051 (2000).; Doron Teichman & Kristen Underhill, *Behavior Science and the Legal Response to Covid-19*, Columbia Law School Working Paper, (Jul. 2020).

or suicide, is more common, most will answer, “Homicide.” Why? Because homicides are published in media and are, therefore, readily available. Suicides are typically not publicized, unless the decedent was a famous or notorious person. But, in point of fact, annual suicides are approximately three times the number of annual homicides. In 2018, for example, there were slightly more than 14,000 homicides in the U.S. and slightly more than 48,000 suicides.

Additionally, human beings suffer from “optimism bias”: They believe that they are more likely than average to have favorable outcomes, a good life, a successful enterprise, a good grade, a long and happy marriage. (It is, in many ways, a charming fault about humans.) Almost 50 percent of marriages in the U.S. end in divorce. The figure for first marriages is about 41 percent; for second marriages, 60 percent; and for third marriages, 73 percent. As the great Samuel Johnson said, “Remarriage is the triumph of hope over experience.” So as a first approximation, when asked what is the probability that any one couple’s marriage will end in divorce, the objectively accurate answer (unless one has special knowledge about that couple) would be 50 percent. But if you ask those about to be married or recently married the question about their marriage surviving, they will give you a very low number, usually zero.

Finally, we all suffer from “confirmation bias.” We place more weight on evidence that supports our position than we place on evidence that questions our position. Thus, if we dislike President Trump, we give more weight to those who are critical of him and his policies than we do to someone who applauds him and his policies.

How might these biases or heuristics apply to assessing the risk of covid-19? They all suggest that unless one has strong evidence readily available to them that this unseen and unseeable virus causes significant harm, they may discount the risk of becoming ill and discount the social benefit of taking steps to contain the viral outbreak. If public officials are saying that the disease is nothing more than a mild flu, that it will disappear quickly, that 99.9 percent of cases are harmless, and the like and if one believes those assertions rather than the tabulated evidence of the number of cases and deaths, then one will give more weight to the proposition that covid-19 is not worth worrying about; it really is not worth shutting the economy down.

In contrast, if you are a healthcare worker who has seen patients and coworkers die of covid-19, the evidence that this is a very serious disease is readily available. And you will probably be easy to convince that serious public health steps are necessary. You will also pay more attention

to the objective, tabulated information on the number of cases and deaths than to “happy talk” by politicians eager to have you believe that the risks are minimal and that all will be well soon.

3.7. Other Matters

There are, of course, other legal issues upon which I have not touched. In administrative law, for instance, there are issues about the extent, if any, to which authorities should or can relax testing standards so as to hasten the availability of new vaccines and treatments. In the area of civil liberties, there are fraught issues of the extent to which the governments can restrict freedom of assembly and movement, gun sales (which were shut down in some states), and abortions and other voluntary medical procedures (so as to free scarce medical resources for pandemic-related uses). Additionally, the legislatures, administrative agencies, and courts must wrestle with whether phone tracing of individuals, as part of a policy of contact tracing, violates individual rights to privacy. There are also civil liberties issues arising from the fact that prisoners in jails and prisons are suffering inordinately high exposure to the coronavirus and are demanding alternatives such as home confinement as more humane. Finally, there are issues of the use of federal executive power. Here the issue is not of “overreach,” of going beyond what would seem to be allowed, but of “underreach,” of not exercising power to do what would be prudent to do. Specifically, some scholars have raised the issue of whether the Trump Administration may have made the coronavirus pandemic significantly worse than it might have been by their inaction.³⁸

4. CONCLUSION

The novel coronavirus, SARS-CoV-2, has generated the greatest health and economic crises of the last 100 years. It has affected nearly 20 million people worldwide and killed more than 700,000 people. In the United States, covid-19, the disease that this coronavirus causes, has afflicted nearly 5 million people and killed more than 160,000. In addition to the tragedy of so many

³⁸ David E. Pozen & Kim Lane Scheppele, *Executive Underreach*, in *Pandemics and Otherwise*, 113 *Am. J. Int'l L.* (forthcoming Oct. 2020); Cameron Peters, *A Detailed Timeline of All the Ways Trump Failed to Respond to the Coronavirus*, VOX (June 8, 2020), <https://www.vox.com/2020/6/8/21242003/trump-failed-coronavirus-response>.

lives lost and the lasting effects of the illness on so many, the disease has devastated every developed and many developing economies. Unemployment rates have soared around the world, and GDPs have fallen by the greatest levels since governments began keeping systematic records.

Along with the health and economic problems, the novel coronavirus has generated a series of novel legal issues in many different areas of law. Those issues strain the bounds of received legal theory and require fresh thinking.

I have tried to use the tools of law and economics to address some of the more salient issues arising from the coronavirus pandemic. The public health measures that may be necessary to stop the spread of covid-19 are great, and without question they impose significant costs on individual citizens and on commercial enterprises. The personal and emotional consequences of more than 700,000 lives lost and of many other lives interrupted by and, perhaps, affected for a long time by this disease are immense. And so are the economic costs of unemployment, business and individual bankruptcies, investments gone to waste, plans shelved, education disrupted and changed for the worse, the difficulty of getting to visit and hug loved ones, and more.

I have tried to argue that in every instance law and economics argues for applying cost-benefit calculations to find the best policy responses to the challenges that covid-19 has presented us. Those calculations may not be so blindingly clarifying that they point to one and only one answer to the legal problems we face, but they do make the choices clearer – as illustrated by the matter of a liability “safe harbor” provision. Reasonable (and fallible) people may initially disagree about whether and how much to shield businesses from liability for pandemic losses. But with the help of cost-benefit analysis they are likely to find common ground.