1 The Laboratories of Democracy

1.1 COVID-19 and the US States

In late 2019, reports began to circulate about a new and worrisome virus that had emerged in the Chinese city of Wuhan. Chinese authorities initially downplayed the severity of the situation; however, by the end of December, they acknowledged the existence of a large cluster of viral pneumonia cases in Wuhan. Although the specific source of these illnesses was unknown, health officials discovered that many of those stricken had ties to Wuhan's Huanan Seafood Market, so they shut down this market on January 1, 2020. Still, initial reports from the World Health Organization (WHO) a week later contended that there was no evidence of human-to-human transmission of whatever virus was causing these illnesses.[1]

At first, this outbreak received limited attention in the United States. The cluster of cases appeared to be localized. The outbreak was in a far-off city that few Americans had even heard of, despite a population of 11 million people – the size of New York City and Chicago combined. The United States had been spared the effects of earlier outbreaks from similar viruses such as SARS in 2003 and MERS in 2012. Furthermore, some political leaders and health officials in the United States initially downplayed the extent to which this new virus might be contagious.

Then the situation changed quickly; on January 21, the US Centers for Disease Control and Prevention (CDC) acknowledged the first known case of the virus in the United States.[2] Major US airports began to screen passengers coming from China on January 17, but the infected person had traveled from Wuhan to Washington State on January 15. The coronavirus, which would be named SARS-CoV-2 and which produced the disease that came to be designated COVID-19, was now officially in the United States. By the end of January – only one month after the *New York Times* first wrote about a "mystery pneumonia-like illness"[3] in China – the CDC reported the first case of person-to-person transmission of the coronavirus in the United States, and the WHO labeled the outbreak a "public health emergency of international concern."[4]

Much has been written about the US federal government's hesitant and inconsistent response to the emergence of the coronavirus. The focus of this

[1] www.who.int/csr/don/05-january-2020-pneumonia-of-unkown-cause-china/en/ As of summer 2021, investigators remained uncertain whether the virus emerged from animal-to-human transmission or via a leak from a research laboratory.
[2] Later analysis suggested the virus might have been circulating in the United States in late 2019.
[3] www.nytimes.com/2020/01/06/world/asia/china-SARS-pneumonialike.html
[4] See www.nytimes.com/article/coronavirus-timeline.html for a useful timeline.

study, however, is not on the federal government but rather on how state governments make public policy. Consider the situation in which states unexpectedly found themselves with respect to COVID-19. In February, California, Oregon, and Washington announced new cases of the disease. Then in the first week of March, the number of cases and the number of states with cases rapidly began to escalate. In the first four days of March, Arizona, New York, North Carolina, and New Hampshire all announced their first cases, followed by Nevada, Tennessee, Colorado, and Maryland the next day, and ten more states the day after that. Nearly every US state found itself confronting the outbreak of a lethal virus, one that virtually no one had heard of only a few weeks earlier.

Policymakers in every state immediately found themselves needing to make decisions on a range of issues. Should they attempt to restrict people living in harder-hit states from traveling to their state? How could they procure the personal protective equipment (PPE) needed by frontline medical workers? Given the shortages of such equipment, how should they ration it? Should they shut down K-12 schools – and if so, temporarily or for the remainder of the school year? Should athletic events be canceled? Who should be eligible to get tested for the virus? What protections should be adopted for the most at-risk people, such as those living in nursing homes? State leaders were abruptly faced with a seemingly endless list of critical decisions, all of which needed to be addressed as soon as possible.

As a crucial first step, policymakers – in most cases, governors, with input from legislators and public health officials – had to decide whether to issue stay-at-home orders. The working hypothesis behind these orders was that keeping people at home would limit everyone's exposure to those who already had contracted the disease. And this in turn would "flatten the curve" by reducing the number of new infections and hospitalizations.[5] That is, preventive actions would distribute the incidence of the disease over a longer period of time, which in turn would help hospitals avoid becoming overwhelmed. This hypothesis was plausible and was supported by most experts, but it was theoretical, with little evidence of how successful it would be or how best to implement it. In addition, it would come at a significant economic cost, with businesses closing and millions of workers being laid off.

With the virus spreading rapidly, cases increasing dramatically, and deaths beginning to mount, policymakers had little time to figure out the best course of action. In mid-March, within days of one another, governors in all fifty states issued "state of emergency" declarations to enhance their powers to combat the

[5] The phrase "flatten the curve" and the logic behind this idea are usually attributed to Howard Markel, a professor and physician at the University of Michigan. See Kruzel 2020.

coronavirus. Starting with California, states then began to issue directives ordering their citizens to remain in their homes. On March 30, within hours of one another, Virginia, Maryland, and the District of Columbia all issued stay-at-home orders. By April 2, thirty-eight states had imitated the actions of those first adopters. In seven more states, local officials adopted such a policy. Only a handful of states – Arkansas, Iowa, Nebraska, North Dakota, and South Dakota – chose not to implement such policies either statewide or locally.

Figure 1 captures the remarkable speed of the adoption of stay-at-home orders. In a little more than two weeks, we moved from a single state taking this action to a large majority having done so, a strikingly fast spread of such a major and intrusive policy. Were these stay-at-home orders likely to work? It seemed plausible that they would; but with such an intense need to act quickly, there was little time for states to carefully assess the effectiveness of such orders and little incentive to delay action until experts could conduct such assessments. Furthermore, there was little evidence regarding the specific form the orders should take – whether they should apply to everyone in the state, to pockets of the state that were at higher risk, to only specific categories of nonessential workers, and so on. Nor was there any certainty about how negatively these laws would affect the economy. Yet there was no time to wait and learn from

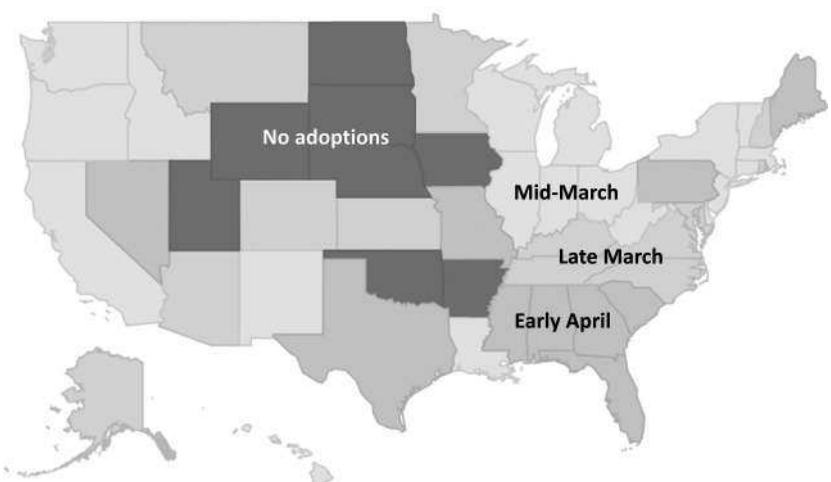

Figure 1 The quick spread of statewide stay-at-home orders (March–April 2020). Data for figure compiled from "States' COVID-19 Public Health Emergency Declarations, Mask Requirements and Travel Advisories," National Academy for State Health Policy (www.nashp.org/governors-prioritize-health-for-all/).

other states' experiments. States needed to move quickly; once some acted, others followed in short order.

Another front in state-level responses to the virus concerned whether states should require citizens to wear face masks when going out in public. This policy question emerged later and followed a different, slower pattern than that for stay-at-home orders. Only a few states required face masks initially; some that did, such as Ohio, quickly reversed the policy when citizens reacted negatively to the order.

Throughout the spring of 2020, however, evidence about the effectiveness of wearing masks steadily began to mount. This evidence took many forms[6] – laboratory tests on animals demonstrated that masks were effective in reducing contagion; computer simulations showed the virus could be nearly eradicated in the United States if approximately 70 percent of the public would wear masks; countries in which mask wearing was the norm (such as Japan[7]) were faring far better than those without such practices. Still, few states issued full or even partial mandates for mask wearing.

One reason US states hesitated to mandate masks was concern about the public's reaction. In general, polls and observed behaviors showed that strong majorities of the public supported wearing masks, but they also revealed stark partisan differences. Republicans (focused on individual liberty costs) were much less likely than Democrats (focused on community health benefits) to wear masks or to support a mask mandate, with independents falling in between. As a result, state policymakers had to worry about the political costs of issuing such an order, particularly since 2020 was an election year.

Conflicting signals from the national government contributed to the lack of action on mask policies. On February 29, 2020, US Surgeon General Jerome Adams tweeted:

> Seriously people – STOP BUYING MASKS! They are NOT effective in preventing general public from catching #Coronavirus, but if healthcare providers can't get them to care for sick patients, it puts them and our communities at risk!

At the time, US citizens were advised to wear masks only if they felt sick or were at high risk. Once evidence began to emerge of a surprisingly high number

[6] See www.nature.com/articles/d41586-020-02801-8 and www.vanityfair.com/news/2020/05/masks-covid-19-infections-would-plummet-new-study-says.

[7] Despite being a country with a much older population living in densely packed cities – both of which would portend a significant outbreak – and despite not shutting down the economy (and not even closing virus incubators like karaoke bars), the death rate from the virus in Japan as of July 2020 was one-*fiftieth* of that in the United States. Many experts attributed this outcome in large part to the universal norm of wearing masks in public in Japan (www.bbc.com/news/world-asia-53188847). Other Southeast Asian countries in which mask wearing was the norm, like Thailand, also suffered far fewer infections and casualties in the early months of the pandemic.

of asymptomatic disease spreaders, however, the CDC shifted gears and advised people to wear masks in public places. But signals remained mixed. On the one hand, public health experts like Dr. Anthony Fauci, who originally had said that masks were not necessary ("There's no reason to be walking around with a mask"), now started to encourage people to wear masks (and to wear one himself).[8] First Lady Melania Trump signaled her support for the CDC's new guidance. On the other hand, President Donald Trump, while acknowledging the CDC's recommendation, said, "This is voluntary. I don't think I'm going to be doing it." Vice President Mike Pence, following the president's lead, did not wear a mask while touring the Mayo Clinic in April to observe their work with COVID-19 patients (an action for which he later apologized).

Faced with these mixed signals both from citizens within their states and from national political leaders, state policymakers varied considerably in their masking policies and prescriptions. By June, a combination of changing policy outcomes and emerging evidence offered newfound clarity. First, in terms of policy effects, a number of states chose to reopen their economies, even before reaching CDC-recommended benchmarks for doing so. As a result, the virus started to spread out of control again, with some states like Arizona, Florida, and Texas hit especially hard and fourteen states seeing record numbers of cases by the end of June. With the pandemic becoming ever more salient and spreading to new places, state policymakers were looking for policy options that promised to control the virus.

Second, national political leaders, including prominent Republican members of Congress like Senate Majority Leader Mitch McConnell, Senator Chuck Grassley, Senator Lamar Alexander, House Minority Leader Kevin McCarthy, and Representative Liz Cheney, began to advocate more strongly and consistently for wearing masks, as did well-known Fox News personality Sean Hannity.[9] Even President Trump occasionally struck a different tone, at one point saying "I'm all for masks" and allowing himself to be photographed wearing a mask for the first time in mid-July. Support from these high-profile Republicans and conservatives was especially important for governors who worried about the political costs of a mask mandate, given the opposition among a substantial number of Republican voters.

Third, and for our purposes most importantly, evidence about the efficacy of masks began to emerge not just from abstract scientific studies or from other

[8] See www.reuters.com/article/uk-factcheck-fauci-outdated-video-masks/fact-checkoutdated-video-of-fauci-saying-theres-no-reason-to-be-walking-around-with-a-mask-idUSKBN26T2TR.

[9] www.washingtonpost.com/politics/republican-leaders-now-say-everyone-should-wear-a-mask–even-as-trump-refuses-and-mocks-those-who-do/2020/06/30/995a32d0-bae9-11ea-80b9-40ece9a701dc_story.html

countries but also from other states, which had begun to experiment with mask-wearing policies. Some of this evidence was anecdotal: several of the earliest places that had been hardest hit, such as New York City, had brought the virus under control in part through embracing mask wearing. Other more systematic studies supported this conclusion, showing that mandates caused more people to wear masks, a behavioral change that yielded a significant reduction of cases and deaths. One scientific study estimated that the mask requirement implemented by fifteen states between April 8 and May 15 led to a decrease of between 230,000 and 450,000 cases in those states.[10]

By early July 2020, several more states had adopted mandates, including some that previously had argued against doing so but changed their view after assessing outcomes in states with mask mandates.[11] As Figure 2 shows, mask

Figure 2 The slower spread of statewide mask mandates (April–August 2020). Data for figure compiled from "States' COVID-19 Public Health Emergency Declarations, Mask Requirements and Travel Advisories," National Academy for State Health Policy (www.nashp.org/governors-prioritize-health-for-all/).

[10] See www.healthaffairs.org/doi/10.1377/hlthaff.2020.00818. Goldman Sachs also conducted a study about the efficacy of masks in mid-summer 2020, concluding at the time that "Our numerical estimates are that cumulative cases grow 17.3 percent per week without a mask mandate but only 7.3 percent with a mask mandate, and that cumulative fatalities grow 29 percent per week without a mask mandate but only 16 percent with a mask mandate." The study further estimated that a universal mask mandate would save 5 percent of GDP. See www.washingtonpost.com/business/2020/06/30/mask-mandate-gdp-economy-goldman-sachs/.

[11] For example, Texas Governor Greg Abbott, who earlier refused to issue a state-level mask mandate and blocked local governments from mandating masks, partially reversed course, ordering anyone in a Texas county adversely affected by the virus to wear a mask in public.

mandates – like stay-at-home orders – spread across the states, but they did so more slowly. Only a few states experimented with mandates in April, but over time states were able to observe more and more experiments with mask mandates and to take the time to learn about the effects of these experiments. By August, the majority of states had adopted this policy. Not all states issued mask mandates (a point we return to later), but many did, after gauging whether or not the adoption of this policy would help in their state.

As this brief overview of state responses to the first several months of COVID-19 in the United States indicates, we sometimes see quick convergence to specific policies across almost all the states, as occurred with stay-at-home orders. In other instances, states do not converge, and those adopting a new policy take longer to do so. In still other areas – such as COVID-19 policies regarding aid to unemployed workers, determining who was eligible for testing or vaccines, reopening restaurants and bars, and so on – we continued to see a patchwork of different policies throughout the pandemic.

This variety of outcomes indicates the complicated nature of policymaking in a federal system, with policy choices affected by public opinion, political parties, current events, and more. But it also indicates that state choices can be influenced by observing what other states have done, taking time to consider those other actions, and then assessing them. In other words, within American federalism, states can *learn* from one another, resulting in the spread of good policies. But do they? Which policies spread for which reasons? Which conditions lead good policies (and not bad ones) to spread, or vice versa? These questions form the central focus of this study.

1.2 Policymaking in the US Federal System

The ability of different states to experiment with different policies – to act as policy laboratories – is one of the foundational promises of our government's federal construction. This experimentation can then lead to the discovery of new policies, ones that are more innovative and, by some criteria, better. Furthermore, with states approaching a policy from various angles, other states can observe these earlier approaches and decide whether or not to adopt them. In this way, a federal system can allow for good policies to spread while limiting the spread of bad policies.

That, at least, is the ideal in a federal system. By allowing states to experiment with different policies, we can discover which policies work and which ones do not. Later-adopting states can observe which policies worked – and where, and why, and how – thereby facilitating the spread of good policies while containing bad ones. But an unanswered question is whether state policymaking in our

federal system actually operates this way in practice. This study explores whether that ideal holds, whether our federal structure of policymaking does indeed facilitate the spread of good policies while constraining the spread of bad ones.

Before proceeding, we first need to address what we mean by "good" and "bad" policies. We recognize, of course, that these are value-laden terms, and that what one person views as a good policy another might view as a bad one. To choose just one example, a religious conservative might view a policy that restricts access to abortion as a good one, whereas a secular liberal might view that same policy as a bad one. Thus, defining "good" and "bad" policies is not always straightforward. Policy analysts have long struggled with what constitutes a good policy, and we won't resolve this difficulty here.[12] What we can do is set out guidelines that we – and those interested in state policymaking – can use.

We begin with the classic definition based on benefit-cost analysis, which suggests that a good policy is one in which the benefits of the policy outweigh the costs. Yet because there have been few systematic cost-benefit analyses of policies across all fifty states, we embrace a somewhat broader definition of good policies that also includes those in which the policy successfully achieves the goals it sets out to accomplish and those policies that embody best practices.[13] This definition can be applied in many policy areas, beyond only those assessed by the most rigorous cost-benefit analyses.

This view of what constitutes a good policy also allows that different states might use different evaluative criteria when designing and evaluating a policy.[14] With respect to COVID-19 policies, for example, a state might choose to emphasize protecting the health of its citizens as the primary goal of any potential policy. Other states might instead focus on protecting the economy. Or they might attempt to strike a balance between health and the economy. Or they might emphasize other goals, such as ensuring individual liberty or access to in-person education. Moreover, some considerations – like COVID-19 cases and deaths – may be easier to measure and therefore may become more salient

[12] McConnell (2010) identifies the difficulties involved in characterizing a policy as good or bad and argues that many policies may succeed along some dimensions but not others.

[13] As such, we are not engaged in a hypothetical exercise, wherein the best available policy is later declared bad because something better has come along (although an insistence on keeping a mediocre policy when a much better one appears may be considered bad policymaking).

[14] This is not to suggest that whatever policymakers embrace should be deemed "good public policy." Often what is politically expedient has significant longer-term consequences. Failing to address climate change or ignoring budget deficits, while politically beneficial in the short run, ultimately has costs, and often those costs grow substantially over time. The bill always comes due.

than other criteria or values.[15] Each state can decide how much weight to place on each of the many dimensions of policy when determining its goals and assessing the effects of its policy choices.[16] Such state-by-state variance, if responsive to the values held by its citizens, tends to be better than a one-size-fits-all approach.

In evaluating a policy, it is also worth recognizing that although a good policy might achieve the goals its proponents promised, those benefits may be short-lived or dependent on further policy choices. The Czech Republic, for example, was one of the early success stories with respect to COVID-19, quickly adopting and promoting a universal mask-wearing policy and seeing a dramatic reduction in infections. However, in response to this initial success, the country then followed this first policy choice with other policy choices, such as opening up the economy too soon and promoting tourism, that undermined its successes and soon led to some of the worst outcomes during the pandemic.[17] Thus, when we discuss whether a policy is good, we are talking about whether that policy had its intended, positive effect, regardless of whether or not later policy choices undercut that effect. Conversely, initially troubling policy choices can be modified and improved by governments that continue to learn beyond their original adoption.[18]

Taken together, good policies are ones that provide more benefits than costs, in line with the goals of the policies' proponents, while also recognizing that different states will weigh policy costs and benefits differently and that initial success does not guarantee continued success. We believe this definition of good and bad policies strikes the right balance between being too vague and too restrictive.[19]

Our goal is to understand whether, in our federal system, good policies spread while bad ones don't. As the title of this study suggests, we contend that good

[15] Depending on whether they are conducted by independent bureaucrats, elected policymakers, or interested policy advocates, policy analyses likewise vary in the measurements used and the weights attached to particular evaluative criteria.

[16] Gilardi, Shipan, and Wüest (2021) demonstrate how different states emphasize different aspects of policies.

[17] This example illustrates both that there is a time dimension to evaluating policies and that in addition to individual policies, combinations of policies might be necessary to ensure success. We develop this second point in more detail in Section 2.

[18] Glick (2012) explores the trade-off between mimicking and modifying.

[19] Adding further complexity to the idea of good or bad policy choices is that the same policy that is good for one state may be bad for another state, depending on its circumstances and the weights it chooses to place on different evaluative criteria. We return to this idea when we discuss the concepts of "trialability" and "relative advantage." Furthermore, when policy choices are made not by weighing costs and benefits but instead are based on undue partisan political pressures or electoral concerns, fears of appearing weak or indecisive, or wishful thinking rather than concrete evidence, bad policy outcomes are more likely to follow. Good politics and good policy are not necessarily aligned.

policies often do *not* spread, while bad ones might. However, our perspective is not all doom and gloom, as we also identify the conditions, lessons, and reform proposals that allow good policies to spread and that can hinder the spread of bad policies. Doing so requires us to think systematically about why policies spread, a task to which we now turn.

1.3 Policy Diffusion

State legislators often seek office because of their interest in a specific policy. One legislator might be interested primarily in agricultural issues, perhaps because they grew up on a farm. Another might be drawn to issues that revolve around the provision of insurance, perhaps because of a prior life experience or because insurance issues are highly salient in their district – say, due to increased risks for fires or floods. Still others might feel most passionate about civil rights issues, or education, or small businesses.

These legislators can specialize and gain policy expertise in their preferred issue areas once they are elected to office. But they also will find themselves dealing with issues that extend well beyond their own personal interests or those of their constituents. The legislator who sought public service to influence insurance policy ends up participating in hearings related to roads and transportation. The one who became a legislator to reform agriculture policy winds up voting on bills dealing with Medicaid requirements or racial injustice. Sometimes policymakers have the choice of which issues they will address. However, as the spread of COVID-19 illustrates, other policy issues often force their way onto the agenda. Policymakers need to tackle them just the same.

Faced with a wide range of issues, state legislators have to figure out which policy actions to take. In large part, they do this by considering factors that are internal to the state. In setting a new policy related to crime, for example, legislators might be influenced by the overall level of crime in their state and the type of criminal activity that occurs most frequently (whether violent, property, or white-collar crime). They might also consider the public's perception about whether crime has been worsening, public opinion toward policing and incarceration, and a variety of demographic factors in the state, such as population density in its cities, the distributions of age and education among state residents, and so on.

State policymakers also can be influenced by *external* factors. More specifically, they can observe what other states have done to address a policy problem and then take this information into account when deciding whether to act and if so what action to take. If state legislators in Wisconsin are deciding what crime policy to enact, they can look to see which actions have been successful (or not)