# JOINT ECONOMIC COMMITTEE CONGRESSMAN DON BEYER, VICE CHAIR



### **Automatic Support for Americans during the Coronavirus Crisis**

Linking Spending to Economic Conditions Supports the Economy While Giving Americans Confidence That They'll Get the Help They Need

Leading economists have long advocated for using "automatic stabilizers" to help counteract the destructive impact of recessions and to hasten recovery. Such mechanisms, like unemployment insurance, automatically expand when the economy worsens and shrink when it recovers. This prevents consumer demand—and the economy—from falling into a downward spiral.

Congress has acted forcefully to counteract the economic fallout of coronavirus with a dramatic expansion of unemployment insurance, aid to state and local governments and more. But that aid is temporary and, unlike enhanced automatic stabilizers, will begin to expire this summer while we likely remain in the middle of dual public health and economic emergencies.

Providing economic support to Americans during the public health emergency is critical to beating the virus. The goal in every other economic downturn has been to get people back to work quickly, but the current objective is to allow them to stay home or practice social distancing for as long as it takes to get the virus under control. Public health experts predict that Americans will not cooperate with these measures if they can't support their families.

Economic assistance should continue even after the end of the public health emergency, given how deep the current economic downturn is and how long it may last. We already have seen more than 24 million Americans lose their jobs in just five weeks and images of food lines have proliferated across the country, evoking the depths of the Great Depression. This will likely not end quickly: the Congressional Budget Office notes that its forecast is highly uncertain, but estimates that, without additional economic support by Congress, unemployment *at the end of 2021* will be 9.5%, only slightly better than the very worst (10%) of the Great Recession.<sup>1</sup>

The most sensible way for Congress to guarantee that economic assistance will continue as long as it is needed is by directly linking it to the state of the economy instead of picking arbitrary expiration dates. This would mimic the automatic stabilizer approach that economists have long urged, provide certainty to families that they will get the aid they need, ensure that support does not depend on politics and automatically turn off support when it is no longer needed. Neither economists nor epidemiologists can predict the length of this recession—some believe the economy will begin to rebound quickly while others say it will remain depressed for years. Linking aid to economic conditions accounts for either possibility.

A discretionary approach to economic support risks cutting off aid to families as they comply with public health guidelines that essentially require unemployment or wait for the economy to recover. These consequences would be especially grave for low-income Americans and people of color.<sup>2</sup> This risk—in an election year with divided partisan control of Congress—is too grave. Linking support to economic conditions, on the other hand, avoids that unnecessary risk.

#### THE DEPTH AND LENGTH OF THE CRISIS

#### Social distancing likely will need to continue for well over a year

The country is currently debating how and when to begin to relax the social distancing measures that began in March, but it is clear that they will be with us well beyond the summer. Significant reductions in social distancing will require both a sustained reduction in the number of new coronavirus deaths and the establishment of a robust testing and contact tracing regime to prevent these social distancing reductions from causing the number of additional deaths to surge.

Our current level of testing in particular remains substantially below the amount recommended by experts. The U.S. has administered a total of 4 million coronavirus tests as of April 21, but some recommendations—such as those from Nobel Prize-winning economist Paul Romer and Harvard University's Edmond J. Safra Center for Ethics—believe we will need to perform *at least five times that many tests (20 million) per day.*<sup>3</sup> Some states such as Georgia have announced plans to relax public health guidelines, which National Institute of Allergy and Infectious Diseases Director Anthony Fauci warns "could be setting us back" and "certainly isn't going to be helpful."<sup>4</sup>

Even some of the advance phases of leading plans for reducing social distancing do not envision the return of large sporting events, crowded bars and other important components of our economy until an effective treatment or vaccine is widely available. Former Food and Drug Administration (FDA) Commissioner Scott Gottlieb believes that some treatments may be available by the fall, but manufacturing these drugs at scale could prove to be a major challenge.<sup>5</sup> A vaccine could take even longer to develop—12 to 18 months—with production and distribution adding significantly to the timeline. The previous record time for development and production is four years for the mumps vaccine.<sup>6</sup> It is conservative to assume that some forms of social distancing will need to persist for well over a year and may last multiple years.

#### Containing the coronavirus is the most important economic policy

Economists widely believe that our number one priority should be containing the coronavirus. In a recent statement, prominent former officials from both Democratic and Republican administrations, including two former Chairs of the Federal Reserve, four former Secretaries of the Treasury and five former Chairs of the Council of Economic Advisers, wrote that:

"Our paramount concern at this moment should be to slow the spread of this virus and equip our health care system to effectively respond. Saving lives and saving the economy are not in conflict right now; we will hasten the return to robust economic activity by taking steps to stem the spread of the virus and save lives."

"While Americans practice social distancing and medical professionals work to save lives, policymakers should put measures in place to support households and businesses through this difficult period. These collective efforts will allow more businesses to get up and running again as soon as possible and minimize the severity of the economic hardship on the American people."

Social distancing deliberately chokes off significant portions of our economy and the sooner we can safely reduce it through testing, contact tracing and the development of treatments and vaccines the better. In fact, there is nothing more important for the economy than supporting these steps. Prematurely and unsafely relaxing social distancing, on the other hand, not only entails an unacceptable human cost but will further hurt the economy since Americans will not feel it is safe to participate in the economy. This would ultimately lengthen the amount of time much of the economy effectively stays closed.

The President has claimed that "we cannot let the cure be worse than the problem itself"—that mandated shutdowns of part of the economy are worse than the likely economic impact of the coronavirus unchecked.<sup>8</sup> However, in a recent University of Chicago survey, 80 percent of the nation's top economists agreed with the statement that "abandoning severe lockdowns at a time when the likelihood of a resurgence in infections remains high will lead to greater total economic damage than sustaining the lockdowns to eliminate the resurgence risk," while only 14 percent were unsure and 6 percent did not respond; none disagreed.<sup>9</sup>

#### The U.S. economy has rapidly fallen into deep recession

Data have accumulated showing that the economic collapse has been even worse than initially feared. Moody's Analytics estimates that U.S. economic output declined 29 percent in the month since the first week of March. This is larger than the drop in annual output that occurred between 1929 and 1933.<sup>10</sup>

The Congressional Budget Office (CBO) estimates that GDP in the second quarter will decline by 12 percent from the previous quarter or by 40 percent at an annualized rate. It expects the unemployment rate to average close to 14 percent during the second quarter and average 16 percent during the third quarter.<sup>11</sup>

Institution	Date	Second Quarter GDP Estimate (Annualized)	Second Quarter Unemployment Estimate
<u>CBO</u>	4/24/2020	-40%	14%
Pantheon	4/24/2020	-30%	18%
Goldman Sachs	4/14/2020	-35%	15%
JP Morgan	4/9/2020	-40%	20%
Morgan Stanley	4/3/2020	-38%	15.7%
Bank of America	4/4/2020	-30%	15.6%

The decline in economic activity has resulted in unprecedented job losses in such a short amount of time, which in turn will feed into a further decline in economic activity as Americans' declining incomes will reduce their consumption. Over 24 million Americans applied for unemployment benefits in just five weeks, which does not account for workers who have not applied or have tried and failed to apply because of states' outdated unemployment insurance systems.<sup>12</sup>

#### We cannot accurately predict the length of the recession

There is considerably more uncertainty over what the economy will look like beyond the second quarter. The duration of this recession will depend on how much social distancing will be required, and for how long, to prevent the virus from overwhelming the health system. Reliable economic forecasts for the fourth quarter of 2020 and first quarter of 2021 do not exist since we do not know whether that will be a period when the economy is recovering from the current round of social distancing or whether a new round will be required if the virus reemerges during the fall. In fact, CDC Director Robert Redfield recently warned that the second wave of the virus will likely be worse than the initial wave since it will coincide with next winter's flu season.<sup>13</sup>

It is also likely that the intensity of the outbreak and the need for social distancing measures will vary significantly across the country and world in the coming months. This adds to the uncertainty about the duration of the recession, since even a region where the coronavirus is under control and social distancing measures have been relaxed could see lower demand for the goods it exports to the rest of the world.

Another key factor is how effectively Congress's response helps small businesses, workers and state and local governments weather the storm. If small businesses emerge with relatively little debt and can quickly reopen, the economy may bounce back relatively quickly. If millions of small businesses permanently close and workers are saddled with large amounts of debt (including unpaid rent), then the economy could take years to recover. The success of the Paycheck Protection Program and additional unemployment benefits will play a large role in determining which scenario unfolds. Moreover, insufficient aid from the federal government to state and local governments could delay the recovery of the labor market as the pressure of falling revenue and rising health costs squeezes their budgets and could cause them to cut jobs—as occurred in the recovery from the Great Recession.<sup>14</sup>

Overall, CBO's most up-to-date projections assume that current social distancing measures will continue through June but that they will decline, on average, by about 75 percent in the second half of the year. CBO's projections also account for the possibility of a reemergence of the pandemic and note that a lesser degree of social distancing likely will continue through the first half of next year. CBO predicts that it will take a long time for the economy to recover and is projecting that unemployment will remain at 9.5 percent *at the end of 2021*. <sup>15</sup> By comparison, unemployment peaked at 10 percent during the Great Recession. <sup>16</sup>

Critically, this level of unemployment assumes that Congress does not enact new economic support legislation. Congress has the ability to reduce the unemployment rate in 2021 by enacting continued economic support while the economy is weak. Moreover, CBO notes that "these preliminary projections…are subject to enormous uncertainty" but also that "new information has generally suggested a worsening outlook."<sup>17</sup>

#### THE HIGH COST OF AN INADEQUATE OR DELAYED RESPONSE

#### Failure to extend economic support will create widespread hardship

Congress must continue to provide extraordinary economic support to workers, small businesses, and state and local governments as long as the economy remains depressed. The most straightforward reason is that insufficient support will lead to a rapid and dramatic increase in poverty, homelessness and hunger. CBO projects that nearly 27 million fewer Americans will have a job as a source of income in the second and third quarters this year. Millions more will be working at reduced pay from working part-time involuntarily. They will not be able to meet basic needs such as paying rent unless Congress provides support until the economy is healthy again.

A recent study by the Columbia Center on Poverty and Social Policy quantified this by estimating that if the unemployment rate reaches 20 percent, the poverty rate could hit 17 percent—the highest rate since 1967 when reliable poverty numbers are first available. <sup>18</sup> This estimate accounts for social safety net spending but does not include the CARES Act and its increase in unemployment benefits as well as direct payments. In other words, the Columbia number shows how high poverty *could* rise if the CARES Act unemployment benefits expire while the unemployment rate remains elevated.

The Columbia report also highlights how much more severe the consequences of not extending economic support for people of color. It finds that while a 30 percent unemployment rate would increase the poverty rate for white Americans by 4.3 percentage points, the share of Black Americans in poverty would rise 12.6 percentage points and the share of Latinos in poverty would rise 9.4 percentage points.

### Failure to assure Americans that they will receive adequate support will undermine their willingness to obey essential public health measures

Providing economic support to groups hardest hit by the economic response to the coronavirus is also a critical part of containing the virus. Public and political support for social distancing measures will erode if it means small-business owners and workers see the remainder of their savings disappear. Cities may be unwilling to enforce stay-at-home orders if the accompanying revenue loss means laying off a substantial portion of their teachers and firefighters.

A letter signed by over 800 public health and legal experts makes this point explicitly;

To enable people to cooperate with social distancing and other measures, policymakers must ensure that people are protected from job loss, economic hardship, and undue burden... Individuals will not cooperate with self-isolation or other voluntary social distancing measures if they are unable to provide for themselves and their families." <sup>19</sup>

The top public policy priority at the moment must be successfully containing the virus and providing adequate economic support for its duration is absolutely critical for achieving that aim.

#### An inadequate or delayed fiscal response will slow economic recovery

Insufficient economic support will slow down the recovery when social distancing has ended. This was an important lesson from the Great Recession, when the American Reinvestment and Recovery Act's vital fiscal support ended while the economy was still in recovery.

In particular, the lack of support for state and local governments after 2010 led to substantial job cuts that slowed down the recovery of the labor market and reduced consumer spending. This significantly slowed the pace of the labor market recovery since private-sector hiring not only had to make up for its own substantial job losses but also had to cover public-sector job losses.<sup>20</sup> Moreover, laid-off state and local governments workers cut back on their own spending, slowing private-sector hiring further.

#### TYING SUPPORT TO ECONOMIC CONDITIONS IS ESSENTIAL

Congress has two ways to continue to provide economic support during the pandemic and ensuing economic recovery—continually renewing support measures when they are set to expire or passing legislation that will "trigger" continued economic support if objective economic measures such as the unemployment rate continue to show the economy is weak. Linking support to economic conditions is far better than relying on haphazard renewal for four reasons.

### Automatic support provides certainty to households, businesses, markets, and state and local governments

Americans depending on the extra \$600 per week in unemployment benefits may cut back on spending to prepare for the possibility of their expiration this summer. State governments cannot adequately budget if they are unsure how long fiscal support will last. The inclusion of well-designed triggers will make it much easier to predict when economic support measures will end.

#### Aid should continue based on economics instead of politics

There exists bipartisan agreement at this moment that workers, small businesses, and state and local governments did not cause the coronavirus and should not have to needlessly suffer because of it. Congress should lock that agreement into place while it exists instead of hoping that it can sustain itself over the next two years. Nobody knows which party will hold the presidency in 2021, which makes this an ideal time to ensure that workers and state and local governments will receive the support they need next year regardless of who wins in November.

#### Linking aid to economic conditions turns off aid when it is no longer needed

It is important to remember that a well-designed trigger not only ensures economic support continues as long as it is needed, but automatically shuts off that aid when it is no longer needed. This would also remove much of the politics from the debate about when to shut off aid, which could end up being just as important, and assuage concerns that economic support will continue indefinitely.

#### Automatic support will help Congress better evaluate what is working

Congress has worked tirelessly over the last several weeks to provide the public health and economic support to respond to the coronavirus and has enacted new paid sick days, small business lending, unemployment insurance and other legislation. Members of Congress and their staffs need time for hearings and consultations with experts to determine if these programs are working, but this will be far more difficult to achieve if they are constantly working to extend critical legislation at the last minute. Importantly, programs that are scheduled to extend automatically based on economic conditions can still be improved in new legislation.

#### Automatic stabilizers have widespread support from top economists

Even before this crisis, economists were putting in considerable work to design policies that would automatically stabilize the economy by turning economic support on and off based on economic conditions. Nobel Prize-winning economists such as Paul Krugman<sup>21</sup> and Joseph Stiglitz<sup>22</sup> have both written on how strong automatic stabilizers are the best way to respond to a downturn.

The most forward thinking work on the subject was contained in the book *Recession Ready*, edited by Heather Boushey of the Washington Center for Equitable Growth and Ryan Nunn and Jay Shambaugh of the Brookings Institution's Hamilton Project, and was released in the spring of 2019.<sup>23</sup> If its innovative proposals had been in place before the current crisis, it would have made the response far easier. In particular, a proposal by former Federal Reserve economist Claudia Sahm (now with the Washington Center for Equitable Growth), would provide direct payments to families based on a rule she developed for detecting recessions.

#### THE BIGGEST BANG FOR THE BUCK

Policymakers should focus their efforts on tying the most important programs that are proven to deliver assistance to the Americans most affected by the public health and economic fallout of coronavirus. In particular, that aid should go to those who may be forced to choose between complying with social distancing measures and their economic livelihoods. Congress should also consider linking small business support to economic and public health conditions while fixing problems implementing the Paycheck Protection Program.

#### Linking UI benefits to the unemployment rate provides stability

Perhaps the most important provision of the CARES Act is its changes to unemployment insurance benefits including an across-the-board increase in weekly benefits by \$600, making certain workers such as independent contractors eligible for unemployment benefits for the first time, and extending the amount of time unemployed workers can collect benefits. Given CBO's (uncertain) estimate that the unemployment rate could be at 9.5 percent at the end of 2021, both higher benefits (expiring on July 31st) as well as eligibility changes and additional weeks (expiring on December 31<sup>st</sup>) will need to be extended but nobody knows for how long.<sup>24</sup>

#### Aid to state governments slows the downward spiral

Congress has also provided important aid to states and cities with a \$150 billion Coronavirus Relief Fund and an increase in the share of Medicaid costs paid by the federal government (thus decreasing the share paid by state governments) that amounts to about \$40 billion on an annual basis. <sup>25</sup> But the target end dates for this aid were intended to address states' public health needs instead of the larger budget squeeze from the economic downturn they are facing; the relief fund will only cover expenses through 2020 while the Medicaid match only lasts as long as the public health emergency.

States and cities could face budget shortfalls for an extended period—it took over 10 years from the beginning of the Great Recession for state and local employment to reach its pre-recession level. Congress should, therefore, not only provide additional aid to states and cities, but it should also link the federal government's share of Medicaid costs to economic conditions. One way to do this is to adopt a mechanism that was part of *The Take Responsibility for Workers and Families Act*, which was introduced by House Democrats in March. It would have increased the federal government's share of a state's Medicaid costs (Federal Medical Assistance Percentage, or FMAP) based on how much a state's unemployment rate exceeded a threshold based on its historical unemployment rates.

#### Feeding families via SNAP provides an economic lift

Similarly, the Families First Act included important provisions related to food security such as additional benefits for low-income families with children who normally get free or reduced-price meals at school during the public health emergency. But the economic crisis will, by definition, outlast the public health emergency so these nutrition assistance provisions will need to be extended. Moreover, we are already seeing demand surge at food pantries across the country as the economic crisis becomes a hunger crisis. Congress should, therefore, provide a temporary increase in the maximum SNAP benefit.

This support should continue as long as the economy is weak since SNAP could play a significant role in supporting aggregate demand during both the public health crisis and economic recovery. Each dollar of SNAP benefits results in \$1.50 of economic activity when the economy is weak in large part because it is targeted to the lowest income families who will immediately spend additional income while helping farmers and grocery stores maintain business.<sup>27</sup>

## ADDRESSING CONCERNS ABOUT LINKING SUPPORT TO THE STATE OF THE ECONOMY

#### Concerns about federal debt are no reason to oppose automatic renewal

Some policymakers may hesitate to support tying aid to the state of the economy because of the potential expense, especially given the trillions of dollars Congress has already spent and is expected to spend responding to the coronavirus. But there is practical unanimity among

economists that concerns about debt should not limit the public health and economic response to the coronavirus.

Greg Mankiw, Chairman of President George W. Bush's Council of Economic Advisers, has written, "There are times to worry about the growing government debt. This is not one of them." Similarly, Jason Furman, Chairman of President Barack Obama's Council of Economic Advisers, has argued that "policymakers cannot afford to be overly concerned about deficits right now."

The most important reason why policymakers should not fear an overly aggressive economic response is that recessions have enormous economic and social costs. Workers laid off during a recession suffer permanently lower earnings, reduced employment rates, higher divorce rates and even higher mortality rates.<sup>30</sup> Similarly, an enormous body of research shows that poverty and material deprivation for children can have enormous long-term economic consequences. The National Academy of Sciences estimates that child poverty costs the country up to \$1.1 trillion each year from increased crime, worsened health and reduced earnings of adults.<sup>31</sup>

The most serious consequence of the increase in debt and deficits, on the other hand, is high interest rates, which can lead to an ever-escalating interest burden and lower private-sector investment. These can be legitimate concerns, but they are remote for the U.S. today given how low interest rates were even before the crisis (the yield on a 10-year Treasury averaged 2.0 percent in December 2019<sup>32</sup>) and how low they have sunk now (the 10-year yield averaged 0.6 percent the week that ended April 24).<sup>33</sup> In fact, real interest rates are actually now *negative* after accounting for expected inflation.<sup>34</sup> Former IMF chief economist Olivier Blanchard has written that debt has no fiscal cost when the growth rate exceeds the interest rate—something that is both the historical norm in the U.S. and will almost certainly be the case when the current recession ends—given the government's ability to roll over debt.<sup>35</sup>

Research also suggests that deficit-financed stimulus can actually *improve* a country's fiscal situation. A landmark study by University of California at Berkeley economists Alan J. Auerbach and Yuriy Gorodnichenko found that expansionary fiscal policy when the economy is weak can *actually* help reduce governments' debt-to-GDP ratios, even when a country has a high level of debt.<sup>36</sup> Similarly, research coming out of the Great Recession showed that fiscal stimulus can easily more than pay for itself if it prevents "hysteresis" where a recession permanently lowers potential output by, for example, causing some workers to permanently exit the labor force.<sup>37</sup>

#### Duration of triggers' support is likely shorter than it may appear

Another concern policymakers may have about automatic triggers is that certain proposals' unemployment targets may imply large amounts of federal support for many years. As argued above, deficits should not be policymakers' primary concern at the moment but the duration of the triggers is likely to be shorter than they appear at first glance.

The FMAP trigger that was part of Take Responsibility for Workers and Families Act would continue to provide fiscal support for states until their unemployment rates reach specific target levels based on their own historical unemployment rates.<sup>38</sup> If the trigger had been enacted on the

national level based on the national unemployment rate in January 2009, then the national unemployment rate would have had to reach 5.4 percent for the support to be turned off. The U.S. did not hit that level of unemployment until 2015.

Yet, it would likely have taken the United States much less time to reach 5.4 percent unemployment if such an FMAP trigger had been law since it would have provided additional fiscal support to state and local governments. This would have limited the large reductions in state and local employment that occurred in the aftermath of the Great Recession that significantly slowed the recovery. Well-designed, targeted, and powerful triggers may not need to last long periods because they will help reduce the unemployment rate themselves.

Triggers that use the unemployment rate may also need to have particularly low targets for unemployment because there is good reason to believe that much of the job loss from coronavirus will not immediately translate into significantly higher unemployment. The U.S. Bureau of Labor Statistics, which calculates national and state unemployment rates, only considers someone unemployed if they are temporarily laid off or if they are available, interested and actively searching for work. Many workers in industries that the coronavirus has effectively shuttered are not looking for work and will not be considered unemployed.

A recent study by economists at the University of Texas Austin, the University of Chicago and the University of California, Berkeley used recent survey data to calculate that, as of April 6<sup>th</sup>, 20 million workers had lost jobs and the share of working-age Americans with a job had declined from 62 to 54 percent.<sup>39</sup> But their estimated unemployment rate only rose from 4 percent to 6 percent because the vast majority were not searching for a job (this study does not use the exact same question on unemployment as BLS, however, so the official result may be different). Moreover, the unemployment rate has long failed to capture other signs of labor market weakness such as workers having their hours cut but remaining unemployed or leaving the labor force.

This suggests that triggers should aggressively target a low unemployment rate to roughly make up for the fact that some of the increase in joblessness will not be reflected in the unemployment rate. Policymakers may also wish to consider alternative measures of the health of the labor market such as the employment-to-population ratio.

#### Linking support to economic conditions now doesn't preclude improving it later

Another concern about linking programs to economic conditions is that it may make it harder for Congress to improve them as we see what is working and what is not. Congress has worked quickly and tirelessly over the last few months to erect new programs and may wish to tweak them. Some policymakers may be concerned that putting these programs on automatic renewal will put them on autopilot and preclude improving them.

Enacting automatic renewal now is a commitment to continue economic support to groups that are bearing the brunt of the crisis such as unemployed workers, low-income Americans, people of color, and state and local governments. If policymakers identify ways that these programs can be improved, it can always tweak programs that are on automatic trigger or the trigger itself. Indeed, there is likely to be strong support in Congress for making improvements to economic

support programs if the default is that they will continue while the economy is weak. The most important priority at the moment, however, is establishing that default. Linking relief to the state of the economy does not take away any of Congress's power and it can always turn off the relief sooner, keep it going longer, or take any additional steps they need to improve it.

Finally, increasing SNAP, boosting the federal Medicaid match rate, and extending the number of weeks that someone can receive unemployment benefits are proven ways to help the economy when it was weak. They were signature components of the American Recovery and Reinvestment Act and should not yield new surprises about unintended impact.

#### SUGGESTED READING

Chad Stone and Sharon Parrott, "<u>Labor Market Conditions Should Determine Duration, Size of COVID-19 Relief Measures</u>," Center on Budget and Policy Priorities, April 13, 2020

Heather Boushey, Ryan Nunn and Jay Shambaugh, *Recession Ready*, Washington Center for Equitable Growth and the Brookings Institution's Hamilton Project

Matthew Fiedler and Wilson Powell III, "States Will Need More Fiscal Relief. Policymakers Should Make That Happen Automatically," April 2, 2020

New Democrat Coalition, "Recommendations for Coronavirus Response & Economic Recovery"

<sup>&</sup>lt;sup>1</sup> Phill Swagel, "CBO's Current Projections of Output, Employment, and Interest Rates and a Preliminary Look at Federal Deficits for 2020 and 2021," Congressional Budget Office, April 24, 2020, <a href="https://www.cbo.gov/publication/56335">https://www.cbo.gov/publication/56335</a>

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<sup>&</sup>lt;sup>3</sup> Arman Azad, "The US needs to perform millions of coronavirus tests per week, experts say," *CNN*, April 21, 2020, <a href="https://www.cnn.com/2020/04/21/health/millions-of-tests-report/index.html">https://www.cnn.com/2020/04/21/health/millions-of-tests-report/index.html</a>; Ezekiel J. Emanuel and Paul M. Romer, "Without More Tests, America Can't Reopen," *The Atlantic*, April 18, 2000, <a href="https://www.theatlantic.com/ideas/archive/2020/04/were-testing-the-wrong-people/610234/">https://www.theatlantic.com/ideas/archive/2020/04/were-testing-the-wrong-people/610234/</a>; Edmond J. Safra Center for Ethics at Harvard University, "Roadmap to Pandemic Resilience," April 20, 2020, <a href="https://ethics.harvard.edu/files/center-for-ethics/files/roadmaptopandemicresilience">https://ethics.harvard.edu/files/center-for-ethics/files/roadmaptopandemicresilience</a> updated 4.20.20.pdf

<sup>&</sup>lt;sup>4</sup> Rick Rojas and Richard Fausset, "'I Am Beyond Disturbed': Internal Dissent as States Reopen Despite Virus," *The New York Times*, April 21, 2020, https://www.nytimes.com/2020/04/21/us/coronavirus-georgia-south-carolina.html

<sup>&</sup>lt;sup>5</sup> Ezra Klein, "Scott Gottlieb on how, and when, to end social distancing," *Vox*, April 14, 2020, <a href="https://www.vox.com/2020/4/14/21219021/scott-gottlieb-coronavirus-covid-19-social-distancing-economy-recession">https://www.vox.com/2020/4/14/21219021/scott-gottlieb-coronavirus-covid-19-social-distancing-economy-recession</a>

<sup>&</sup>lt;sup>6</sup> Donald G. McNeil Jr., "The Coronavirus in America: The Year Ahead," *The New York Times*, April 18, 2020, https://www.nytimes.com/2020/04/18/health/coronavirus-america-future.html

<sup>&</sup>lt;sup>7</sup> The Aspen Economic Strategy Group, "Economic Strategy Group Statement on COVID-19 Pandemic and Economic Crisis," March 25, 2020, <a href="https://economicstrategygroup.org/resource/economic-strategy-group-statement-covid19/">https://economicstrategygroup.org/resource/economic-strategy-group-statement-covid19/</a>

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