



## Debate Brief · Economic Shutdown

***Resolved: The benefits of the shutdown of the U.S. economy due to the coronavirus are worth the costs.***

*"How much is a human life worth? That is the real discussion that no one is admitting, openly or freely. That we should. To me, I say the cost of a human life, a human life is priceless. Period."*  
—New York Governor Andrew Cuomo, May 2020

*"Trade-offs have been with us ever since the late unpleasantness in the Garden of Eden."*  
—Thomas Sowell, "Economic 'Power,'" December 2003

*"Bad decision making, as shown in research, often begins with reducing a complex problem to the single variable with the biggest emotional wallop."*  
—Holman Jenkins, Wall Street Journal, March 2020

*"The Nation holds a position unsurpassed in all former human experience. This does not mean that we do not have any problems. ...But it does mean that if [we all] apply ourselves industriously and honestly, we have ample powers with which to meet our problems and provide for a speedy solution."*  
—Calvin Coolidge, Second Annual Message to the U.S. Congress, December 3, 1924

Note: For the purposes of the 2020 Coolidge Cup, the phrase "the shutdown of the U.S. economy" refers primarily to the set of actions and orders put forth by federal and state officials that required businesses and institutions to close. It does not refer to the various voluntary actions that individuals and organizations took to mitigate risk.

## **ABOUT THE COOLIDGE FOUNDATION**

The Calvin Coolidge Presidential Foundation is the official foundation dedicated to preserving the legacy and promoting the values of America's 30th president, Calvin Coolidge, who served in office from August 1923 to March 1929. These values include civility, bipartisanship, and restraint in government, including wise budgeting. The Foundation was formed in 1960 by a group of Coolidge enthusiasts, including John Coolidge, the president's son. It maintains offices at the president's birthplace in Plymouth Notch, Vermont, and in Washington, D.C. The Foundation seeks to increase Americans' understanding of President Coolidge and the values he promoted.

## **BACKGROUND**

At some point in late 2019 a new coronavirus made the jump from animals to humans. In the months that followed, the virus spread quickly across the globe, sweeping through nearly every country, with particularly devastating results in places such as Italy, Iran, Spain, and Brazil.

In the U.S., the Centers for Disease Control and Prevention confirmed the first known person-to-person transmission of the virus in the country on January 30, 2020. Subsequent weeks brought more cases to light, though still in relatively small numbers and confined to urban areas. By mid-February it was clear that the risk of an epidemic was high, and that the situation could reach the level of a pandemic. Concerns over the lack of preparedness of the healthcare system to accommodate potentially large numbers of patients started to arise.

By March, it became clear that the transmissibility of the virus was such that it could spread quickly, and that for some individuals (including those who are elderly and those with complicating risk factors), the disease could be fatal. It was around this time that businesses, industries, and other various forms of economic activity began to shut down—first voluntarily (as with professional sports and colleges) and then shortly later by government orders.

### **Policy Response: A Case of Tradeoffs**

Understanding the concept of **tradeoffs** is crucial to analyzing public policy, and indeed to succeeding in this debate. By shutting down the economy, the coronavirus may spread less rapidly, but at the same time a whole new host of costs are imposed on society. Recognizing the many tradeoffs involved in choosing one course of policy action versus another is the first step in analyzing costs and benefits inherent in each approach and weighing them against each other. That is the task inherent in this debate resolution.

The strategy and rationale for shutting down economic activity is relatively straightforward: if we prevent and/or delay the spread of the virus, it might “buy us time” in various ways, including a) spreading the number of cases out over a longer timeframe that is more manageable for our healthcare system, b) allowing physicians to figure out how to treat COVID-19 more effectively, and c) allowing scientists to possibly develop a vaccine.

These are the potential benefits, yet shutting down a substantial part of an economy also has real costs. Almost 40 million Americans have lost their jobs since the start of the pandemic. Workers in many public-facing industries such as restaurants and retail have been hit especially hard, losing jobs and wages. Nearly a third of American tenants are missing their rent payments. Entrepreneurs and small business owners are losing their businesses while well-known companies like J. Crew, Hertz, Neiman Marcus, and J.C. Penney are filing for bankruptcy. Even those who are fortunate enough to be able to continue working “remotely” do not escape adversity—consider the working parents who shoulder full-time work *and* the role of home educator when public schools close. There are even costs to other areas of health and safety.

People susceptible to depression become more depressed. People stuck at home with abusive partners become more susceptible to violence. These effects are just the tip of the iceberg.

The challenging question is, after you take into account everything on both sides of the ledger, do the benefits of economic shutdown outweigh the costs? Economists use cost-benefits analysis to analyze these types of questions, but rarely are there so many variables involved and at such a large scale. We invite you to think about the U.S. response to the pandemic. Consider the tradeoffs and weigh the benefits and costs associated with shutting down large portions of the U.S. economy. All things considered, is the shutdown worth it?

## COOLIDGE CONNECTION

The worst pandemic in American history was the pandemic of Spanish Influenza<sup>1</sup> that swept the nation (and much of the globe) in 1918-1919. Worldwide, approximately 500 million people were infected by influenza—or about one-third of the world’s population—and roughly 50 million of those people died. In the U.S., approximately 30 million people were infected, and about 675,000 people died.

The influenza pandemic struck in three waves. Wave 1 ran from about March 1918 to May 1918, and was the least deadly of the three waves. Wave 2 ran from about September 1918 to early December 1918 and was by far the deadliest. The third and final wave arrived in early 1919 and lasted to about June 1919. One big difference: this spring COVID-19 dominated the news. In 1918 and 1919, the press and leaders made it a policy to play down the influenza, which of course affected public attitudes.

At the time of the 1918 pandemic, Calvin Coolidge was Lieutenant Governor of Massachusetts. (He did not become President of the United States until 1923, when President Warren G. Harding died in office.) The city of Boston became one of the earliest hit places when troops returning from the war overseas brought the disease back with them.

Lt. Governor Coolidge and other state and city officials monitored the spread of the disease. Under the direction of Coolidge, the state put out calls for help for medical personnel and other forms of assistance. One proclamation signed by Coolidge read, "It is earnestly requested that everyone who has had medical or nursing experience or who can assist in any way, communicate with the Commissioner of Health at the State House." To help keep the spread of influenza at bay, the City of Boston closed schools, and also closed certain businesses such as movie theaters, dance halls, pool halls—so-called “places of amusement” and “unnecessary places of public assembly.” Conscious of the effect that closures could have on the economy and on the war effort, the city did not apply these mandated closures to all businesses.

Ultimately over 50,000 people in Massachusetts contracted the flu out of a population of about 3.7 million. Although final death counts statewide are unclear, daily death tolls at their peak were in the hundreds. Eventually, after about two months, the outbreak started to subside.

As you think about this debate topic, think about Coolidge’s experience during the influenza. What were some of the important similarities and differences with respect to the current crisis we face with the coronavirus and COVID-19? What decisions were made back then about tradeoffs, and how might Coolidge respond today?

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<sup>1</sup> Although we do not know with certainty where the Spanish Flu originated, we do know that it did not originate in Spain. The reason it came to be known as the Spanish Flu was because Spain was one of the few neutral countries during WWI, and thus one of the few countries that did not have war-time censorship of its press. Whereas other countries suppressed news of influenza outbreaks in order to avoid negatively affecting morale at home and among the troops, Spain reported freely on its influenza cases—and as a result became associated with it.

## KEY TERMS

**Tradeoffs** – A situation in which if one thing increases, something else has to decrease, is said to have tradeoffs. Doing your homework versus going out with your friends is a familiar example. In economics, when you choose to do one thing instead of another, what you give up by not choosing the next best alternative is called the “opportunity cost” of that decision.

**Gross Domestic Product (GDP)** – GDP is a measure of the value of all the goods and services produced in the United States in one year. It tracks the health of a country's economy. Economists use GDP to figure out whether an economy is growing or experiencing a recession.

**CARES Act** – The Coronavirus Aid, Relief, and Economic Security (CARES) Act is a law enacted in March 2020 that addresses the economic effects of the COVID-19 pandemic. The Act provides various types of economic aid to individuals, businesses, and industries. The cost of the CARES Act is about \$2.2 trillion (about 10 percent of the current U.S. gross domestic product).

**Epidemic & Pandemic** – An epidemic is a sudden increase in the number of cases of a disease, above what is normally expected in a specific population or region. A pandemic is an epidemic that has spread much more generally over many countries or continents, sometimes for which a much larger proportion of the population is either affected or susceptible.

**Basic Reproductive Rate** – In epidemiology, the Basic Reproductive Rate is an estimate of the average number of new cases of a disease that each case is generating at a given point in time. It is usually written as  $R_0$  and pronounced “R naught.” If  $R_0 > 1$ , the number of cases will increase. If  $R_0 < 1$ , the number of cases will decrease. The  $R_0$  of a disease is not an intrinsic, unchanging number: it changes as peoples’ actions and responses change.

**Externalities** – In economics, externalities are costs or benefits of an activity that are not borne by the people directly involved in the activity. Negative externalities impose a cost on others.

**Asymmetric valuation of gains and losses** – When people weigh the expected benefits and costs of some action, they often value potential gains and losses unevenly. Studies have found that people tend to place more importance on avoiding potential losses than on achieving similar gains. This idea is captured by the dictum, “losses loom larger than gains.”<sup>2</sup>

**Non-Pharmaceutical Interventions (NPIs)** – NPIs are actions other than taking medicine or getting vaccinated that people take to slow the spread of an infectious disease.

**Unemployment Rate** – People are considered unemployed if they do not have a job, provided they have actively looked for work in the prior four weeks, and are currently available to work.

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<sup>2</sup> Kahneman, Daniel, and Amos Tversky. “[Prospect Theory: An Analysis of Decision under Risk](https://www.jstor.org/stable/1914185).” *Econometrica*, vol. 47, no. 2, 1979, pp. 263–291. JSTOR, [www.jstor.org/stable/1914185](https://www.jstor.org/stable/1914185).

## AFFIRMATIVE ARGUMENTS

### 1. Shutting down activity minimizes the spread of COVID-19 to a manageable level, which is necessary to save lives and so benefits us all.

If we continue with economic activity in a business-as-usual fashion, the virus that causes COVID-19 will likely spread very quickly and infect a large number of people. Although we know that only a relatively small percentage of people who get COVID-19 (the disease caused by the novel coronavirus) require hospitalization, even a small percentage of a large number is enough to overwhelm the American healthcare system.

An analysis based on a large number of cases in China suggests that for people over 80 years old who get COVID-19, the chance that their illness will become so severe that it will require hospitalization is around 19%.<sup>3</sup> This percentage is lower for younger people. For people in their fifties who get COVID-19, about 8% will require hospitalization, and for people in their twenties who get COVID-19, about 1% will require hospitalization. Especially concerning is that many of these cases end up requiring critical care. Overall in China, about 5% of COVID-19 cases required critical care, while in Italy about 10% required critical care.

According to the American Hospital Association, there are 5,256 community hospitals in the United States.<sup>4</sup> Of these hospitals, 2,704 hospitals (51.4%) provide intensive care for a total intensive care unit capacity of about 96,596 ICU beds.<sup>5</sup> Roughly two-thirds of these beds can accommodate an adult. The remainder are for children and newborns.

In modern society, most forms of economic activity put people in close physical proximity to one another. Shopping in stores, dining in restaurants, commuting to and from work using public transit, attending sporting events and concerts, traveling to conferences, exercising in gyms, and engaging in countless other activities multiply the number of interactions and contacts that people have with one another. Shutting down these types of economic activities, as we have done in the United States over the past several months, is necessary to prevent the number of COVID-19 cases from getting too high too quickly. If the ICU hospitalization rates for China or Italy hold true for the U.S., then a situation in which 1 to 2 million Americans have COVID-19 concurrently would be enough to exhaust ICU bed capacity—and that is to say nothing about other factors that also limit healthcare system capacity, such as the availability of

“If you look at the curves of outbreaks, they [have] big peaks, and then come down. What we need to do is flatten that down. [Fewer people infected means] less deaths. You do that by trying to interfere with the natural flow of the outbreak.”

Anthony Fauci, Director of the National Institute of Allergy and Infectious Disease.  
Quoted in [STAT News](#), March 2020.

<sup>3</sup> Wu Z, McGoogan JM. [Characteristics of and Important Lessons From the Coronavirus Disease 2019 \(COVID-19\) Outbreak in China](#). JAMA. 2020;323(13):1239–1242.

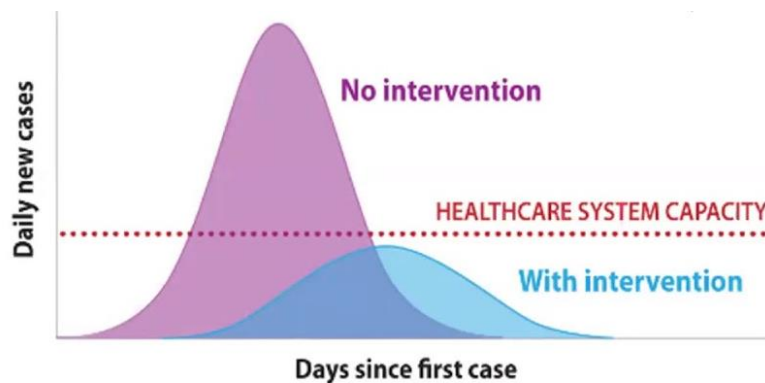
<sup>4</sup> American Hospital Association. [Fast Facts on U.S. Hospitals, 2020](#). Chicago, IL: American Hospital Association.

<sup>5</sup> Ibid.

ventilators, personal protective equipment, and the physicians and nurses who are expected to deliver the care.

The public health strategy of slowing the spread of an infectious disease such that the demand on system resources at any one time never exceeds system capacity is known as “flattening the curve” (see Figure 1). This strategy concedes that new cases of the disease will occur, but proposes that they can be spread over a longer period of time.

**Figure 1. The “Flattening the Curve” Strategy**



Source: Centers for Disease Control and Prevention. [CDC.gov](https://www.cdc.gov). (2020).

Flattening the curve has worked before. For example, in 1918 when America faced the Spanish Flu pandemic, cities that were quick to close businesses and schools, cancel large gatherings, and require people to stay home, fared much better than cities that were more reluctant to close businesses and that went ahead with their plans for large gatherings, such as parades.<sup>6</sup>

## **2. Placing a standard government value on the expected number of human lives saved, the benefits of shutdown outweigh the costs.**

Assume that it is possible to place a value on human life. Federal agencies in fact do this all the time in the course of conducting cost-benefit analyses with respect to figuring out how to design new laws and regulations.<sup>7</sup> For instance, the Department of Agriculture places the value of a statistical life (VSL) at \$8.9 million.<sup>8</sup> The Food and Drug Administration places the VSL at

<sup>6</sup> Godoy, Maria. “[Flattening A Pandemic's Curve: Why Staying Home Now Can Save Lives](#)” NPR. March 13, 2020.

<sup>7</sup> Lee, Don. “[Reopening the economy could hurt it](#)” LA Times, April 9, 2020.

<sup>8</sup> Merrill, Dave. “[No One Values Your Life More Than the Federal Government](#)” Bloomberg. October 19, 2017.



\$9.5 million. The Environmental Protection Agency places the VSL at \$10 million. These figures are adjusted annually to keep pace with inflation, average earnings potential, and other factors.

If we have a dollar value for a life that we can work with, if we can estimate how many lives the economic shutdown will save, and if we can estimate the cost of the economic shutdown, then it is possible to compare the benefits to the costs in a dollars-to-dollars way and get a verdict.

According to researchers at the University of Wyoming, the total number of infections would reach 287 million without shutdown-style social distancing and 188 million with shutdown-style social distancing. They assume a death rate for COVID-19 that is consistent with what has been observed in the U.S., this translates into about 1.24 million lives saved. They then apply the federal government's VSL of \$10 million per life, the total benefit comes to approximately \$12.4 trillion. Meanwhile, citing estimates from Goldman Sachs, the researchers calculate the total cost of the economic shutdown to be \$7.21 trillion.<sup>9</sup> Note: this \$7.21 trillion represents the difference in GDP losses without shutdown (\$6.49 trillion) compared to with the shutdown (\$13.7 trillion).

"If we could save 1 million lives valued at \$10 million each, you'll discover that's \$10 trillion. What's the cost? The cost is that we're going to be producing less. ... [The lockdown] saves us \$10 trillion worth of human life, and we're doing so at the cost of \$500 billion. That's a stunning cost-benefit calculation."

Justin Wolfers, University of Michigan.  
Quoted in "[Is It Time to End the Coronavirus Lockdowns? A Soho Forum Debate.](#)" April 21, 2020.

To complete the cost-benefit analysis: Subtracting the total cost (\$7.21 trillion) from the total benefit (\$12.4 trillion) yields a positive net benefit for economic shutdown of \$5.16 trillion.<sup>10</sup>

### **3. The shutdown has led to rapid technological innovation as people and businesses adapt to change.**

As dark as the clouds of the shutdown have been, there have been some unexpected silver linings in the areas of technology and innovation. One can choose to look at these as completely new benefits that would not have otherwise been brought about, or as innovations that were on their way but accelerated into the market. Either way, these developments represent real gains. Below are three examples:

1. Videoconferencing. Videoconferencing tools have been around for years, but adoption of these tools in the past has been hindered by low quality, limited features, poor usability, and weak security. With so many individuals switching to working and learning from home in such a short time span, technology companies have been able to invest more aggressively in videoconferencing platforms such as Zoom, Google Hangouts, and

<sup>9</sup> Goldman Sachs. "[The Sudden Stop: A Deeper Trough, A Bigger Rebound.](#)" March 31, 2020.

<sup>10</sup> Thunström, Linda, et al. "[The benefits and costs of using social distancing to flatten the curve for COVID-19.](#)" Journal of Benefit-Cost Analysis (2020): 1-27.

Microsoft Teams. Zoom alone went from serving 10 million customers a day at the start of 2020 to now over 200 million customers a day.<sup>11</sup> Videoconferencing is far better now because of the shutdown.

2. **3D Printing.** Hobbyists had long dabbled in 3D printing, but now that supply chains are strained and export bans from some countries are in place, many companies aggressively invested in 3D printing to manufacture the physical things that they need. Faster than ever before, companies are turning to 3D printing to manufacture parts that they need for devices.<sup>12</sup> Hospitals responding to the pandemic can manufacture ventilators and ventilator parts to make up for shortages. Healthcare workers who need personal protective equipment can manufacture masks and face shields. The subtitle of one article on this trend captures this beneficial trend succinctly: “Goodbye prototyping, hello mass production.”<sup>13</sup>
3. **Contactless Payment/Pickup Systems.** When the SARS epidemic hit China in 2002, one of the major adaptations that came about was the creation of new business-to-consumer and business-to-business online marketplaces, as people and businesses sought ways to buy and sell things without shopping in person.<sup>14</sup> A similar thing is happening in the U.S. right now as a result of the enforced shutdown. Companies are developing contactless credit cards and mobile “e-wallets.” Drone delivery by companies such as Amazon.com and others is advancing rapidly now thanks to rules that require distancing. New York City is working on making paying for the subway contactless.<sup>15</sup> Even regular restaurants have improved their capabilities in terms of taking and fulfilling orders with little to no human contact. These innovations will stay with us and continue to provide benefits even after the shutdowns are over, but they would not have been brought about as rapidly if it had not been for the policy of shutting down some economic activity.

#### **4. We are minimizing the damage of the shutdowns by being short and strict. Our short shutdowns may be bad, but long shutdowns would be worse.**

Most people concede that some level of reduced economic activity is necessary in order to minimize the damage that COVID-19 can cause. A salient question, therefore, is: which is

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<sup>11</sup> [“The changes covid-19 is forcing on to business”](#) *The Economist*. April 11, 2020.

<sup>12</sup> Griffiths, et al. [“The latest 3D printing efforts against Covid-19”](#) TCT Magazine. June 2020.

<sup>13</sup> Poor, William. [“Watch 3D printers churn out medical supplies to fight COVID-19”](#) The Verge. April 27, 2020.

<sup>14</sup> Yan Xiao and Ziyang Fan. [“10 technology trends to watch in the COVID-19 pandemic”](#) World Economic Forum. April 27, 2020.

<sup>15</sup> Walden, Stephanie. [“Banking After COVID-19: The Rise of Contactless Payments in the U.S.”](#) Forbes. June 12, 2020.

better, a shutdown that is very strict but short, or a shutdown that is much more permissive but longer? The tradeoffs in policy design lead to tradeoffs in costs and benefits.

According to some researchers, economic shutdowns that are shorter and stricter are more likely to minimize overall economic damages.<sup>16</sup> The researchers who studied this using computer models found that stricter shutdowns of two months with bans on travel and labor of at least 80 percent are economically preferable to more moderate lockdowns that last longer (four or six months).<sup>17</sup> The reason for this is that businesses can rely on reserves for short periods of time better than they can adapt to long-term disruptions in regional and global supply chains. In other words, the duration of the lockdown matters more to an economy than the severity of the lockdown.

If shutting down economic activity in the short run enables an economy to reopen more fully later on and for a longer period, then all else equal, it is a better option.

## **5. One life lost to COVID-19 unnecessarily is one life too many.**

How much is a human life worth? Advocates of extended economic shutdown place a very high value on human life. Some would argue that one cannot put a price on a human life at all. The approach of shutting down the economy prioritizes the saving of lives over all other things. In the context of the COVID-19 pandemic response, this view was expressed perhaps most visibly by New York Governor Andrew Cuomo, who in a press conference said:<sup>18</sup>

*"There's a conversation that is going on about reopening that we are not necessarily explicit about, but which is very important. There's a question that is being debated right under the surface and the decisions we make on reopening are really profound decisions. The fundamental question which we're not articulating is how much is a human life worth? How much do we think a human life is worth?"*

*"To me, I say cost of a human—a human life is priceless, period. Our reopening plan doesn't have a tradeoff."*

If you agree that it is not possible to place a value on a human life, then the policy that aims to minimize the spread of COVID-19 is the policy that produces the maximum benefit because each avoidable death represents a near-infinite loss. Therefore, saving lives is worth any cost.

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<sup>16</sup> Guan, et al. [Global supply-chain effects of COVID-19 control measures](#). Nat Hum Behav (2020).

<sup>17</sup> Ibid.

<sup>18</sup> ["Governor Cuomo on Reopening Economies Amid COVID-19 Pandemic."](#) Office of the Governor of New York. May 5, 2020.

## 6. It is better to be safe than sorry.

The good news with respect to the threat posed by the novel coronavirus is that the probability of an extreme scenario in which millions or tens of millions of people in the U.S. die as a result of COVID-19 is small. The bad news is that we cannot be sure yet exactly how small that probability is. Until we do the rigorous scientific and epidemiological work that is

necessary to understand the virus and the disease, we cannot rule out any of the worst case scenarios or know how best to avoid them. Because viruses have the capability to spread exponentially, the potential downside risk is severe. Therefore, we should exercise caution *even if it turns out that later we can say we were overly cautious.*

Some commentators have compared the risks associated with the new virus to the risks associated with seasonal influenza, or with ordinary activities of daily life, such as driving a car or swimming in a pool. Their point is to show that we do not accept the policy of economic shutdown for other causes of death, then we should not accept it for COVID-19. Such comparisons can provide some helpful context, but a flaw with placing too much importance on this type of analysis is that the range of expected deaths due to these causes is relatively well understood and relatively narrow, whereas the range of expected deaths due to a brand new virus is unknown and almost unpredictable. It is a false analogy. We have vaccines against the flu and pre-existing immunity that limit the worst-case scenario. Similarly, with motor vehicle deaths and accidental drownings, the annual variation is small and there is no reason to think that it could suddenly multiple. (E.g., the annual number of motor vehicle deaths has stayed between about 36,000 and 53,000 for the past 40 years.<sup>19</sup>)

Put simply, it requires a major stretch of the imagination to envision 10 million deaths from car accidents or drownings in a year, but it only requires a modest stretch of the imagination to envision 10 million deaths from a new virus that takes hold and spreads uncontrollably.

“CDC estimates that influenza has resulted in between 9 million and 45 million illnesses, between 140,000 and 810,000 hospitalizations and between 12,000 and 61,000 deaths annually since 2010.”

Source: [Centers for Disease Control and Prevention](#). Accessed June 2020.

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<sup>19</sup> [“Car Crash Deaths and Rates”](#) National Safety Council. Accessed: June 2020.

## NEGATIVE ARGUMENTS

### 1. Under reasonable assumptions, the costs of economic shutdown exceed the benefits.

The task of comparing the benefits and costs of economic shutdown as a policy response to a pandemic is not an easy one. On the benefits side, many parameters are unknown. Some parameters, such as how many deaths will occur under various scenarios, have very wide plausible ranges. On the costs side, many figures are estimates and projections—not actual known numbers—that are sensitive to their own assumptions. Nevertheless, if one is to have any guide to action, the analysis must be attempted.

Economists who challenge the wisdom of the shutdown recognize that the costs of the pandemic will be significant regardless of how we respond, but point out the importance of using accurate assumptions about the benefits and fully accounting for all the costs in order to understand the tradeoffs.

Researchers at the University of Chicago provide the following perspective, using a value of about \$4.3 million per statistical life:<sup>20</sup>

*[W]e estimate that an unrestricted pandemic infecting 60 percent of the US population and with an infection fatality rate below 1 percent would result in roughly 1.4 million deaths, heavily concentrated among the elderly, with a total value of lost lives of about \$6 trillion. For comparison, that is equivalent to about 30 percent of annual US GDP, suggesting that even small progress against the spread of the disease can be quite valuable.*

*Against this, we estimate that efforts to slow the pandemic via a nationwide shutdown of “non-essential” economic activities would carry a cost approaching \$7 trillion per year (roughly \$20 billion per day), even ignoring other long-run costs from reduced values of human and physical capital and any intrinsic value of reduced civil liberties.*

According to these authors, an extensive shutdown of economic activity would avoid approximately \$6 trillion in loss of life but cost approximately \$7 trillion in economic hardship—a tradeoff suggesting a loss of roughly one trillion dollars in value. (This is roughly in line with

“The costs of disease and premature death are high. Living longer is a good thing, and empirical evidence shows life and health are valued highly, but they are not the only thing. People’s behavior reveals that they are willing to bear greater risks to life and health in order to have more of other goods and services. ...

“It is critical to remember that the trade-off here is not between ‘lives’ and GDP—it is the trade-off between two things that people themselves value: health and other aspects of their lives.”

Source: Mulligan, Murphy, and Topel. [“Some basic economics of COVID-19 policy: A look at the trade-offs we face in regulating behavior during the pandemic.”](#) Chicago Booth Review. April 27, 2020. (BOOTH typo)

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<sup>20</sup> Mulligan, Murphy, and Topel. [“Some basic economics of COVID-19 policy: A look at the trade-offs we face in regulating behavior during the pandemic.”](#) Chicago Booth Review. April 27, 2020.

other estimates, including one that puts the lost economic output in the U.S. at 5 percent of GDP, or \$1.1 trillion, for every month of the economic shutdown.<sup>21</sup>) As we learn more about the disease, we can better refine parts of these types of calculation—particularly on the benefits side, the value for which highly depends on the number of deaths that are forecasted. Early in the pandemic when factors such as the transmissibility of the virus and the case fatality rate of the disease are poorly understood, epidemiologists have to estimate effects with wide ranges. The worst-case scenarios have a low probability of occurring, but not a zero chance of occurring. Some politicians and public health officials see it as their job to prevent those worst-case scenarios from happening.

Economists and epidemiologists alike are still learning about COVID-19 and refining their models. Most recently, the Institute for Health Metrics and Evaluation (IHME) has extended its US COVID-19 forecasts through October 1, 2020, taking into account its expectation that deaths will remain relatively level through the summer and then begin to rise moderately in September. Their latest forecast gives a range of U.S. deaths between 133,201 and 290,222 by October 1. Though still merely an estimate, this is significantly lower than the estimates of 1 to 1.4 million on which some of the early decisions about economic shutdown were based.<sup>22</sup>

## **2. Shutting down economic activity is particularly destructive to small businesses, so-called Mom and Pop stores. *By trying to protect mom and pop, we are killing Mom and Pop.***

Some large corporations are diverse enough and have large enough cash reserves to be able to weather a storm, but many small businesses are not built with this amount of resiliency. Small businesses tend to be financially fragile. For example, the median business carries less than one month of cash on hand.<sup>23</sup> According to a poll conducted by insurance firm MetLife and the U.S. Chamber of Commerce, one in four small businesses (24%) report that they are two months or less away from having to close permanently as a result of current conditions. About one in 10 small businesses (11%) say they are less than one month away. These are just a snapshot of how small businesses are faring at the moment. The destruction of small businesses is expected to get worse.<sup>24</sup>

“43% of small businesses say they are 3-6 months away from permanently shutting down.”

Source: MetLife and the U.S. Chamber of Commerce. [“Special Report on Coronavirus and Small Business”](#) U.S. Chamber of Commerce. April 3, 2020.

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<sup>21</sup> Makridis and Hartley. [“The Cost of COVID-19: A Rough Estimate of the 2020 US GDP Impact.”](#) The Mercatus Center at George Mason University. April 6, 2020.

<sup>22</sup> [“IHME models show second wave of COVID-19 beginning September 15 in US”](#) Institute for Health Metrics and Evaluation. June 11, 2020.

<sup>23</sup> Bartik, Glaeser, et al. [“How Are Small Businesses Adjusting to COVID-19? Early Evidence from a Survey”](#) NBER Working Paper No. 26989. April 2020. JEL No. E65,I12020,L20

<sup>24</sup> Ibid.

The economic shutdown was in many ways sold to the public as a strategy for limiting the spread of the disease and protecting the most vulnerable among us—namely older Americans. It is ironic and unfortunate that a policy intended to protect the physical health of “mom and pop” (i.e., older Americans) is instead destroying the lifelong creations (i.e., small brick-and-mortar “mom and pop” businesses) of these individuals.

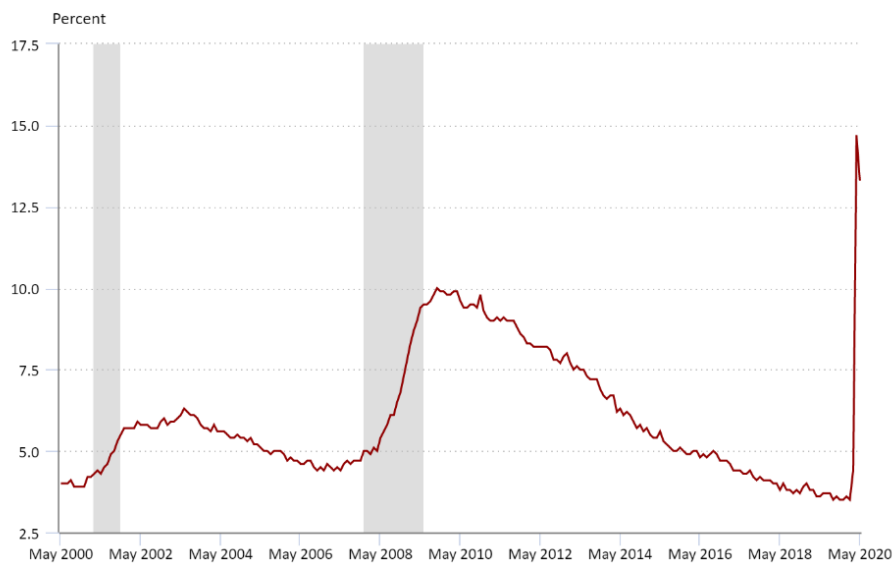
### 3. Playing “nanny” in response to a crisis such as a pandemic makes Americans accustomed to accepting a nanny state the rest of the time.

The more the government shuts down economic activities, the more unemployed workers there are, and the louder the calls to provide people with cash relief and stimulus. Barely a month into the economic shutdown, Congress approved a \$2.2 trillion relief package that included direct payments to individual Americans. The package also included 13 *additional* weeks of unemployment payments, to be added to the 26 weeks that most states provide for laid-off workers, plus four months of \$600 weekly bonus payments in addition the usual weekly unemployment checks.

“A substantial minority of workers, particularly in low-wage professions like food service and janitorial work, may end up receiving more than 150 percent of their previous weekly salary.”

Source: Thomson-Deveaux, Amelia. “[Many Americans Are Getting More Money From Unemployment Than They Were From Their Jobs](#)” FiveThirtyEight.com. May 15, 2020.

**Figure 2. Civilian Unemployment Rate, Seasonally Adjusted**



Source: [U.S. Bureau of Labor Statics](#). (Accessed: June 17, 2020).

As a combined result of the economic shutdown and the increased attractiveness of being on the dole, the incentive to work is disappearing. Economist Benjamin Cowan has examined the decline in workforce participation from multiple angles:<sup>25</sup>

*From February to April 2020, more individuals transfer from being at work to out of the labor force [or] absent from work (8%; roughly 4% each) than to unemployed (6.5%). In addition, 6% of individuals transfer from full-time work (at least 35 hours per week) to part-time work (less than 35 hours) in addition to the 9% who transfer from full-time work to not working.*

By some estimates, about 68% of unemployed workers who can collect unemployment are now receiving more on unemployment than their wage used to be.<sup>26,27</sup> Not only is this expensive for taxpayers, having such generous incentives hurts workers by keeping them out of the workforce longer and keeps unemployment higher for longer—even introducing moral hazard as people who could conceivably return to work could choose not to do so.<sup>28</sup> As Prof. Norm Miller of the University of San Diego described:<sup>29</sup>

*With 39 weeks of benefits at up to 75 percent of wages, plus bonus checks that are not taxable, there will be up to a nine-month lag in intensive job seeking by some hourly workers, especially in retail jobs, while virus fears linger. Some people will take advantage of this time to take courses and enhance skills. Others will go surfing.*

To be fair, one must recognize that *some* increase in unemployment due to the pandemic would have happened anyway, even in the absence of a government-directed economic shutdown. But with the government enforcing such a strict and widespread shutdown, it has made many regular jobs impossible to do, causing employment to fall further than it otherwise would have fallen.

#### **4. Someone is paying for the additional costs brought about by the economic shutdown, and it is our grandchildren.**

As we saw in the previous argument, in the modern political environment pursuing a policy of government-directed economic shutdown leads almost inexorably to increased spending on various forms of aid and “stimulus,” as it gives people a justification for holding the government responsible for all or part of their misfortune. Previous actions such as the 2009 stimulus

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<sup>25</sup> Cowan, Benjamin. [“Short-run Effects of COVID-19 on U.S. Worker Transitions”](#) NBER. June 2020.

<sup>26</sup> Kurtzleben, Danielle. [“What's In It For You? \\$1,200 Checks, 13 Weeks of Unemployment Payments and More”](#) NPR. March 25, 2020.

<sup>27</sup> Ganong, et al. [“US Unemployment Insurance Replacement Rates During the Pandemic”](#) NBER. May 2020.

<sup>28</sup> Ibid.

<sup>29</sup> Molnar, Phillip. [“Will better unemployment benefits hurt efforts to reopen the economy?”](#) The San Diego Union-Tribune. May 1, 2020.



package on the heels of the financial crisis have paved the way for Congress to pass a large spending bill, and in the spring of 2020 that is exactly what it did.

Three separate coronavirus relief packages have been passed by Congress at a total cost of more than \$2 trillion. The Coronavirus Aid, Relief, and Economic Security (CARES) Act provides \$1.8 trillion in direct aid to individuals and businesses. The CARES Act is the largest stimulus package in the history of the nation—more than twice the size of the American Recovery and Reinvestment Act of 2009, which cost approximately \$831 billion.<sup>30</sup>

The economic shutdown—and the cost of the associated relief spending—change the federal budget permanently for the worse. Remember that for every dollar that the federal government plans to spend in a given year's budget, it must collect a dollar in taxes or borrow a dollar from a lender. The federal government already runs a deficit (e.g., during the 2019 fiscal year, the federal government spent \$4.4 trillion and collected \$3.5 trillion, resulting in a deficit of approximately \$900 billion, or about 4 percent of GDP).<sup>31</sup> Each year's deficit gets added to the cumulative deficit of previous years to form the national debt. A little over a year ago, the national debt was an astounding \$21 trillion. Now, after all of the recent spending, it stands at an astronomical \$24.95 trillion.

Carrying such extreme debt affects our nation's fiscal health in countless ways, including threatening the viability of programs such as Social Security. According to researchers at the Wharton School at the University of Pennsylvania, the Social Security trust fund could run out four years earlier as a result of the coronavirus-related spending.<sup>32</sup> These programs will either need to be cut, modified, or paid for with higher taxes. Expressed by John H. Cochrane of the Hoover Institution writing in the Wall Street Journal:<sup>33</sup>

*The bill for the government response to coronavirus will be astronomical. The trillion-dollar "stimulus" is a lot of money, and it will eventually have to be paid for with taxes. The economic shutdowns are even more expensive. The U.S. economy produced about \$21 trillion in 2019. If "essential" businesses still open are even half of that, each month of a national shutdown costs the economy almost a trillion dollars. The damage will become harder to fix as businesses fire workers and close forever.*

Some have quipped that the coronavirus relief checks should have been signed as a gift from our sons and daughters. That is not a good tradeoff for America to make.

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<sup>30</sup> Boccia and Bogie. "[This Is How Big the COVID-19 CARES Act Relief Bill Is](#)" Heritage Foundation. April 20, 2020.

<sup>31</sup> [Congressional Budget Office](#). May 2020.

<sup>32</sup> Shin and He. "[The Impact of the Coronavirus Pandemic on Social Security's Finances](#)" Penn Wharton Budget Model. May 28, 2020.

<sup>33</sup> Cochrane, John H. "[Flatten the Coronavirus Curve at a Lower Cost](#)" Wall Street Journal. March 24, 2020.

## 5. Even if shutting down the economy saves *some* lives by reducing the spread of COVID-19, it exacerbates other health-related problems and increases other types of deaths.

As part of the economic shutdown, healthcare facilities were directed to cancel scheduled surgeries and doctor visits and reallocate their resources to prepare for cases of COVID-19. Some types of facilities, such as dentists, closed completely during the shutdown. Because *avoided deaths* cannot be directly measured, it is easy to lose sight of the cost of either forgoing or delaying treatment—especially for serious and common conditions such as heart disease, diabetes, and stroke. Even patients with cancer are struggling to receive treatment such as chemotherapy and radiation therapy due to COVID-19-related cancellations and delays.<sup>34</sup>

The cost of forgoing or delaying treatment for non-COVID-19 health issues could be as high as 8,000 U.S. deaths per month of the shutdown.

Source: Atlas, et al. "[The COVID-19 shutdown will cost Americans millions of years of life.](#)" The Hill. May 25, 2020.

Scott Atlas, a physician and senior fellow at Stanford University's Hoover Institution, and colleagues recently gave the following estimates of the cost in life-years for each month of the economic shutdown:<sup>35</sup>

- Missed strokes cost 100,000 years of life per month of shutdown
- Late cancer diagnoses cost 250,000 years of life per month of shutdown
- Missed living-donor transplants cost 5,000 years of life per month of shutdown
- If 10% of vaccinations are missed, it will cost 24,000 years of life per month of shutdown

In addition to the human costs stemming from cancelled or delayed healthcare, there are also costs incurred from worsening mental health and increased domestic violence as unemployment soars and people are kept home, sometimes with abusive partners. Drug overdoses and suicides—sometimes called “deaths of despair”—also contribute costs. Every 1% rise in the unemployment rate will likely produce a 3.3% increase in drug-overdose deaths and nearly a 1% increase in suicides.<sup>36</sup>

## 6. Cocooning is better than quarantining. There are less costly alternatives to dealing with the threats that the virus presents.

The choice of extensive economic shutdown or exercising no caution at all is a false alternative. There are other approaches that we can take that would protect those who are the most vulnerable without incurring many of the devastating economic effects that we have described in this brief.

<sup>34</sup> Uzzo, et al. "[Coronavirus disease 2019 \(COVID-19\): Cancer care during the pandemic](#)" UpToDate. June 15, 2020.

<sup>35</sup> Atlas, Scott. "[The COVID-19 shutdown will cost Americans millions of years of life.](#)" The Hill. May 25, 2020.

<sup>36</sup> Keeney, Ralph. "[Decisions about Life-Threatening Risks](#)" New England Journal of Medicine. July 21, 1994.

The most obvious approach is to focus on physically isolating and protecting only those who are at the greatest risk—including the elderly, the very young, those who are immuno-compromised, and those with other specific risk factors—and encourage the rest of the population to practice conventional precautions such as careful hand washing and mask wearing, while allowing them to choose to go to work, shop, eat in restaurants, and attend large gatherings, and so forth. This basic strategy can be supplemented with more frequent testing, contact tracing, and “hotspotting” (i.e., watching carefully for localized outbreaks and responding swiftly), while scientists and doctors work to develop or identify treatments and eventually a potential vaccine.

“What is certain about the virus, 4 months after the U.S.’s first case, is that it overwhelmingly threatens the old and is fairly harmless to the young. The average age of someone who dies of coronavirus is 75; 42% of deaths have been in nursing homes and assisted-living facilities. Meanwhile, the death rate for people under age 50 is 0.4% or less....”

Source: Beyer, Scott. [“Why the Shutdown in America Must End”](#) Independent Institute. May 28, 2020.

**Table 1. U.S. Deaths from COVID-19 and Total Deaths (all causes), by Age Group**

| Age group         | COVID-19 Deaths | Total Deaths     | Percent of All Deaths Across All Age Groups |
|-------------------|-----------------|------------------|---|
| Under 1 year      | 8               | 6,157            | 0.5%  |
| 1-4 years         | 5               | 1,196            | 0.1%  |
| 5-14 years        | 13              | 1,755            | 0.2%  |
| 15-24 years       | 125             | 10,968           | 0.9%  |
| 25-34 years       | 699             | 23,273           | 2.0%  |
| 35-44 years       | 1,780           | 33,377           | 2.9%  |
| 45-54 years       | 4,976           | 63,186           | 5.4%  |
| 55-64 years       | 12,307          | 148,510          | 12.8%                                       |
| 65-74 years       | 21,462          | 228,135          | 19.7%                                       |
| 75-84 years       | 27,529          | 283,801          | 24.4%                                       |
| 85 years and over | 34,435          | 360,298          | 31.0%                                       |
| <b>All Ages</b>   | <b>103,339</b>  | <b>1,160,656</b> | <b>100%</b>                                 |

Source: Provisional COVID-19 Death Counts by Age. [Centers for Disease Control and Prevention](#) (June 2020)

This general strategy is known by several names, including “cocooning” and “stratify-and shield.” Security and cautiousness around nursing homes, for instance, is tightened while restrictions are gradually lifted (or not enacted in the first place) for everyone else.<sup>37</sup> Examples of countries that have done this with some success include Singapore, Taiwan, and South

<sup>37</sup> Beyer, Scott. [“Why the Shutdown in America Must End”](#) Independent Institute. May 28, 2020.

Korea.<sup>38</sup> Researchers studying alternative approaches believe that “countries that enforce reasonable hygienic measures on time can avoid lockdowns throughout the pandemic provided that the number of spare ICU beds per million is above the threshold of about 100 [per million population].”<sup>39</sup> For reference, for the U.S. that would mean about 35,000 spare ICU beds out of a total of 100,000 ICU beds nationwide. The researchers note, “In countries where the total number of ICU beds is below this threshold, a limited period OF quarantine to specific high-risk groups of the population suffices. We conclude that only a limited-time quarantine of the high-risk group might be necessary, while the rest of the economy can remain operational.”<sup>40</sup>

One of the reasons why this is likely to work better is that it distributes the power and responsibility of risk assessment and judgment very broadly to particular individuals, businesses, and institutions. They can make judgements based on their context, rather than following orders that are set from a nation-wide or state-wide perspective. This is advantageous when the general threat level is high in one area (e.g., New York City) but low in another (e.g., Plymouth, Vermont) at a given moment. It allows economic activity in low-risk locations to continue while other specific locations such as cities or towns are temporarily more restricted.

## **7. The shutdown is another example of the old taking financial advantage of the young.**

More than half (55%) of the deaths related to COVID-19 have been of people 75 years old and older. Nearly three-quarters of the deaths have been of people 65 years old and older.<sup>41</sup> Many of the older people who die from COVID-19 had relatively few life-years remaining, compared to younger people. Yet despite the asymmetry in risk, young people and people with young families have been kept at home from school, told they cannot go to work, and in many ways asked to bear the financial burden of the economic shutdown.

“Schools can shut down, and sick people should stay home, along with older or at-risk individuals, until the panic subsides, but the healthy must be allowed to work.

“Every family, state, city, and business can make the best decisions during this crisis, but we cannot have simplistic top-down mandates.”

Source: Luddy, Bob. [“Back to Work by March 30: A Coronavirus Imperative”](#) March 23, 2020.

Most of the “benefits” to the economic shutdown have gone to a relatively small number of older people, while most of the costs have been borne by younger people. Asking one segment of the population to accept such a large sacrifice for another segment of the population is not an American approach to addressing a problem.

<sup>38</sup> Cochrane, John H. [“Flatten the Coronavirus Curve at a Lower Cost”](#) Wall Street Journal. March 24, 2020.

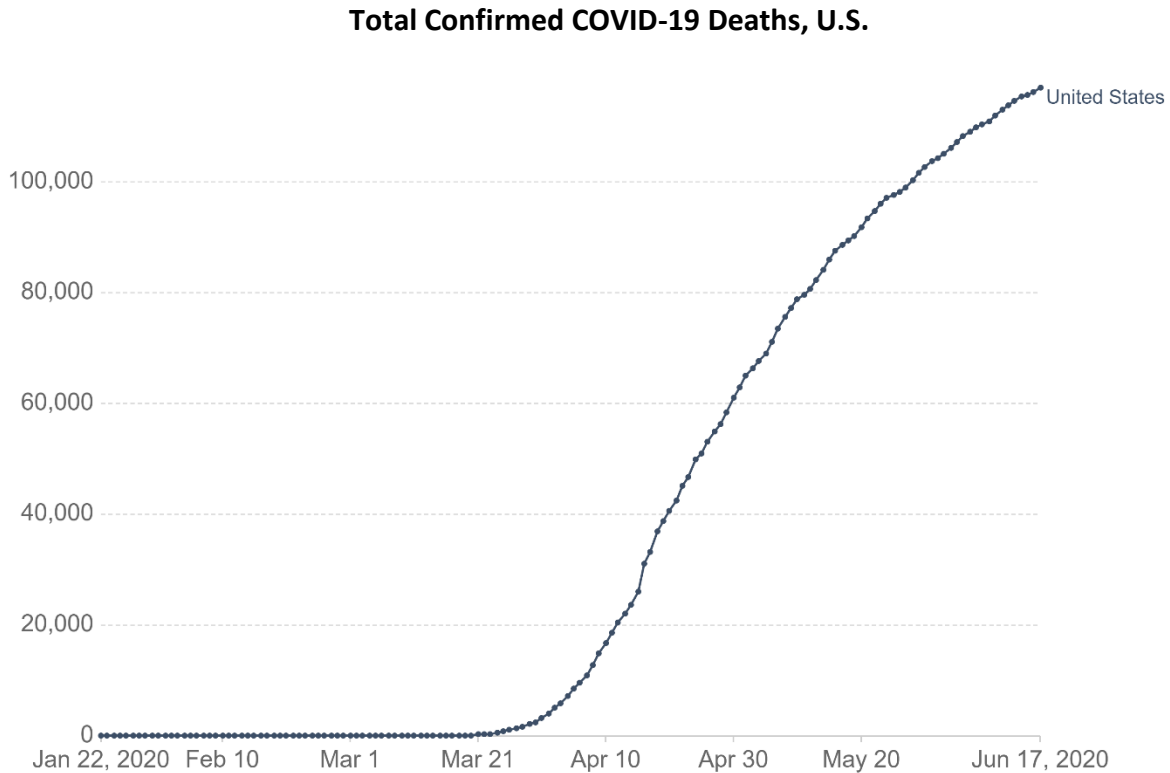
<sup>39</sup> Gershon, et al. [“Managing COVID-19 Pandemic without Destructing the Economy”](#) Cornell arXiv:2004.10324.

<sup>40</sup> Ibid.

<sup>41</sup> Provisional COVID-19 Death Counts by Age. [Centers for Disease Control and Prevention](#) (June 2020)

## APPENDIX A. United States Deaths from COVID-19

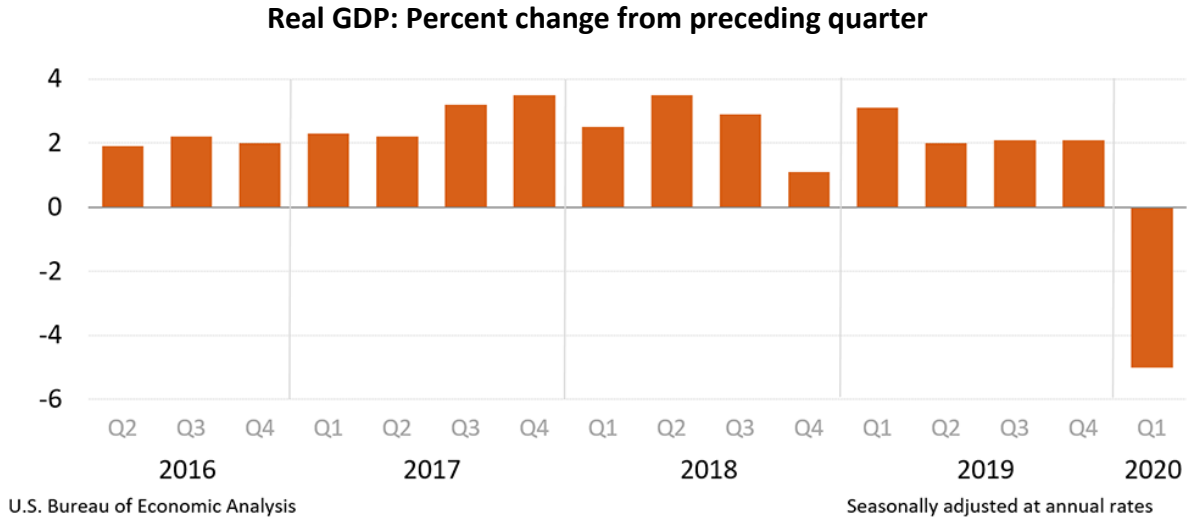
On May 28, 2020, the death toll from COVID-19 in the United States officially surpassed 100,000 people. The graph below shows the cumulative deaths from COVID-19 from mid-January to mid-June. Note that limitations in the availability of testing and challenges in properly attributing the cause of death means that these estimates are subject to some inaccuracy.



Source: [European Centre for Disease Prevention and Control](#) (ECDC). Accessed June 17, 2020.

## APPENDIX B. Gross Domestic Product

Gross Domestic Product (GDP) is the single most comprehensive concept that economists use to measure economic activity. Though not a perfect measure, it approximates the value of all the goods and services produced in a country. For many quarters leading up to the recent COVID-19 pandemic, the growth rate of the GDP was around 2 percent. In the first quarter of 2020, the growth rate fell to negative 5 percent, indicating that the economy contracted.

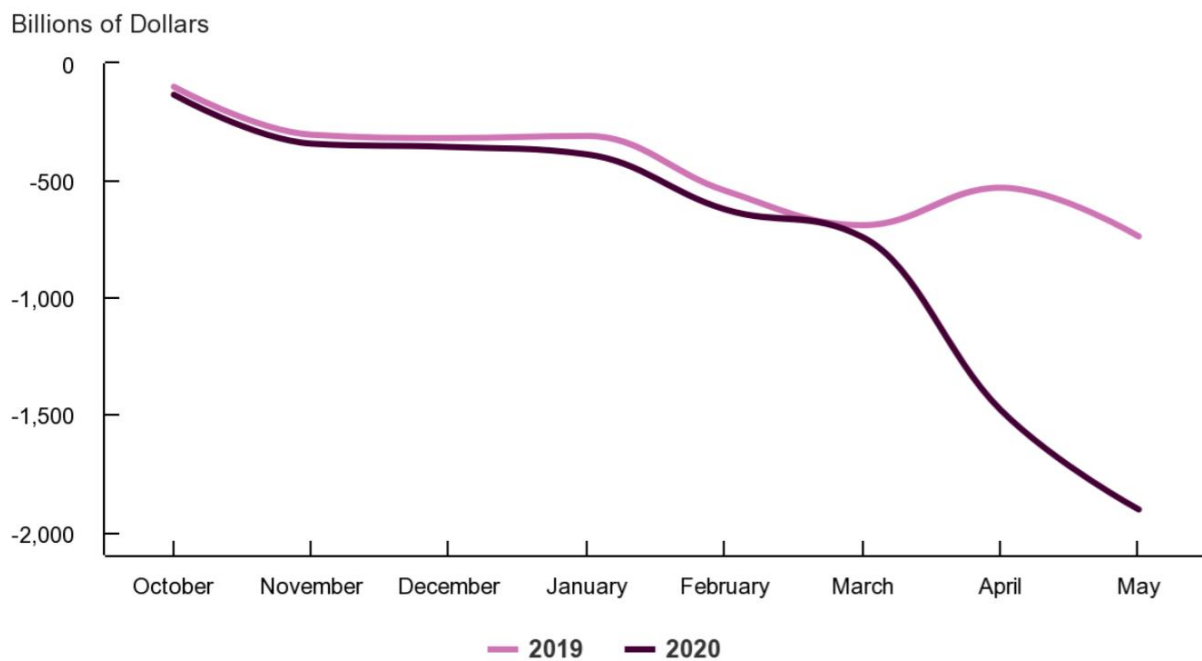


Source: [U.S. Bureau of Economic Analysis](https://www.bea.gov/). May 28, 2020.

## APPENDIX C. Deficit Spending Continues During the Economic Shutdown

According to the Congressional Budget Office, the federal budget deficit was about \$1.9 trillion in the first eight months of fiscal year 2020. As a reminder, the 2019 fiscal year began on October 1, 2018, and ended on September 30, 2019. The 2020 fiscal year began on October 1, 2019, and will end on September 30, 2020. As CBO reports, “Revenues were 11 percent lower and outlays were 30 percent higher through May of this year than during the same eight-month period in fiscal year 2019.”

**Monthly Cumulative Deficits, Fiscal Years 2019 and 2020**



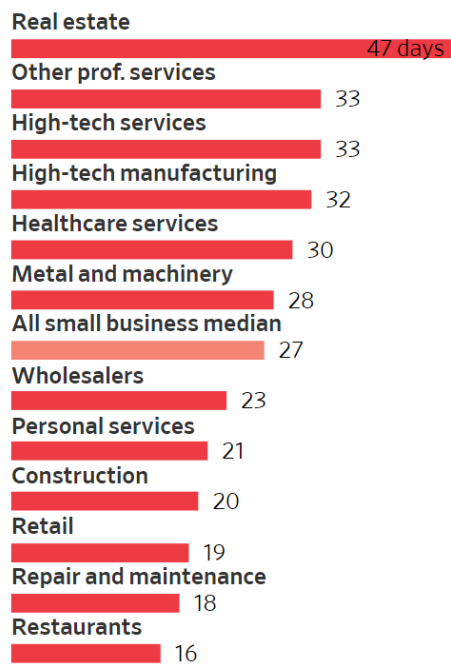
Sources: [Monthly Budget Review for May 2020](#), Congressional Budget Office; Department of the Treasury.

Note: The value for May 2020 is CBO's estimate.

## APPENDIX D. Small-Business Cash Robustness

Some types of businesses can last being closed down longer than others. According to the J.P. Morgan Chase Institute, the median small business holds just 27 days' worth of cash in reserve. Certain professional firms and high-tech businesses on average could last a month or more without running out of money. By contrast, the average smaller business such as a restaurant or retail shop can only last half as long.

### Days of bills a typical business could pay from its cash balance, without inflows



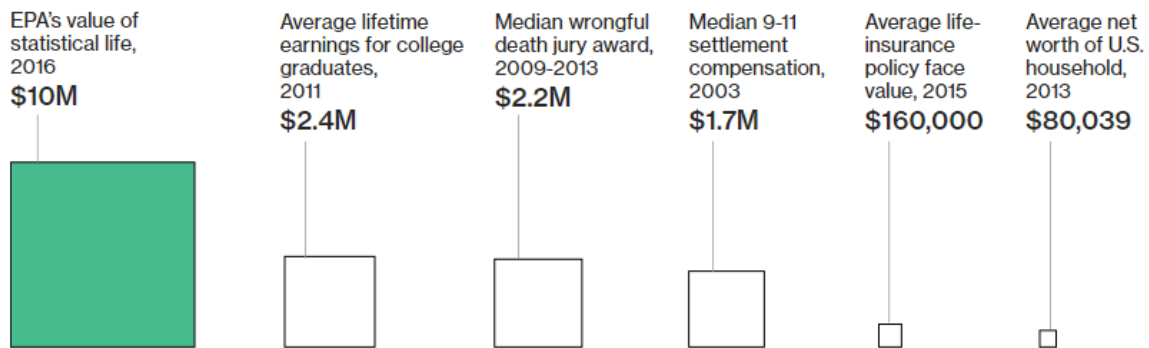
Source: J.P.Morgan Chase Institute study from 2016, reprinted by the [Wall Street Journal](#). April 24, 2020.



## APPENDIX E. How Much is Life Worth?

In various parts of life, it is necessary to assign a dollar figure to a human life. This helps economists and organizations weigh tradeoffs and make difficult cost-benefit decisions. The United States government uses a variety of different measures, depending on the agency. The largest measure that the government uses is the figure of \$10 million per life, which is used by the Environmental Protection Agency.

### Life Measured in Dollars, Across Various Contexts



Sources: American Council of Life Insurers; Bloomberg Research; Census Bureau; What is Life Worth?, Kenneth R. Feinberg; North Carolina state case-study, 2009-2013, Campbell Law Review.

## APPENDIX F. Comparison to Other Pandemics

Throughout history, humans have faced devastating pandemics of various sorts. The table below offers a look at COVID-19 in context with other pandemics, both in recent memory and in the more distant past.

**Comparing COVID-19 to Other Pandemics in World History**

| Pandemic                            | Start | End  | Duration (Years) | Estimated Deaths |
|-------------------------------------|-------|------|------------------|------------------|
| Black Death                         | 1347  | 1352 | 5                | 25,000,000       |
| Italian Plague                      | 1623  | 1632 | 9                | 280,000          |
| Great Plague of Sevilla             | 1647  | 1652 | 5                | 2,000,000        |
| Great Plague of London              | 1665  | 1666 | 1                | 100,000          |
| Great Plague of Marseille           | 1720  | 1722 | 2                | 100,000          |
| First Asia-Europe Cholera Pandemic  | 1816  | 1826 | 10               | 100,000          |
| Second Asia-Europe Cholera Pandemic | 1829  | 1851 | 22               | 100,000          |
| Russia Cholera Pandemic             | 1852  | 1860 | 8                | 100,000          |
| Global Flu Pandemic                 | 1889  | 1890 | 1                | 1,000,000        |
| Sixth Cholera Pandemic              | 1899  | 1923 | 24               | 1,000,000        |
| Encephalitis Lethargica Pandemic    | 1915  | 1926 | 11               | 8000,000         |
| Spanish Flu                         | 1918  | 1920 | 2                | 1,500,000        |
| Asian Flu                           | 1957  | 1958 | 1                | 40,000,000       |
| Hong Kong Flu                       | 1968  | 1969 | 1                | 2,000,000        |
| H1N1 Pandemic                       | 2009  | 2010 | 1                | 1,000,000        |
| Covid-19*                           | 2019  | --   | --               | 461,000          |

Sources: Alfani and Murphy (2017), Taleb and Cirillo (2020), Wikipedia, Johns Hopkins University, NBER (March 2020) Schroder Economics Group. May 14, 2020.

\* COVID-19 death toll as of June 19, 2020.