

## **The Covid-19 Recession of 2020**

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As this book went to press in the middle of 2020, the U.S. economy (along with most other economies around the world) was experiencing an economic downturn that was unusual in three ways.

The first unusual feature of the 2020 downturn was its cause. A novel virus, Covid-19, was sweeping the world. The first cases were reported on December 31, 2019, in the Wuhan region of China. The first U.S. case was reported on January 21, 2020 in the state of Washington. The virus proved to be especially infectious and dangerous. By August 1, the virus had killed more than 150,000 people in the United States and more than 650,000 worldwide. To slow the spread of the virus, health experts advised people to avoid close interactions with others. Elected leaders, mostly state governors and city mayors, ordered large segments of the economy to be closed, including movie theaters, sporting events, concerts, restaurants (except for take-out), and non-essential retail stores. Air travel fell by more than 95 percent.

The second unusual feature of the 2020 downturn was its exceptional speed and depth. From February 2020 to April 2020, employment fell from 61.1 percent of the adult population to 51.3 percent, by far the largest two-month drop ever recorded. The unemployment rate in April 2020 was 14.7 percent, the highest level since the Great Depression, when the unemployment rate reached 25 percent in 1933.

The third unusual feature of the 2020 downturn was that it was, in a sense, intentional. The typical recession is best viewed as an accident. Some surprise event shifts aggregate supply or aggregate demand, reducing production and employment. Policymakers are eager to return the economy to normal levels of production and employment as quickly as possible. By contrast, the downturn in 2020 was a recession by design. To curb the Covid-19 pandemic, policymakers compelled changes in behavior that reduced production and employment. The pandemic itself, of course, was neither intended nor desired. But given the circumstances, a large economic downturn was arguably the best outcome that could be achieved.

### **Modeling the Shutdown**

We can look at the economic downturn of 2020 using the model of aggregate supply and aggregate demand. Given the unusual nature of this event, however, the shifts differ somewhat from those that occur during a typical recession. Figure 1 models the events of the 2020 downturn.

Let's first consider the effects on aggregate demand. Starting in March 2020, many places where people buy things, such as restaurants and retail stores, were shut down by government decree. And to reduce the risk of infection, people avoided many businesses that remained open. Such changes in behavior reduce the velocity of money: Dollars remain longer in people's wallets and bank accounts because they are not being spent on goods and services. (From the fourth quarter of 2019 to the second quarter of 2020, *M2* velocity fell 23 percent.) As a result, the quantity of goods and services demanded is lower at every price level, and the aggregate demand curve shifts to the left.

Next, let's look at the effects on aggregate supply. We need to consider both the short-run aggregate supply curve and the long-run aggregate supply curve. But we start with a caveat: Given

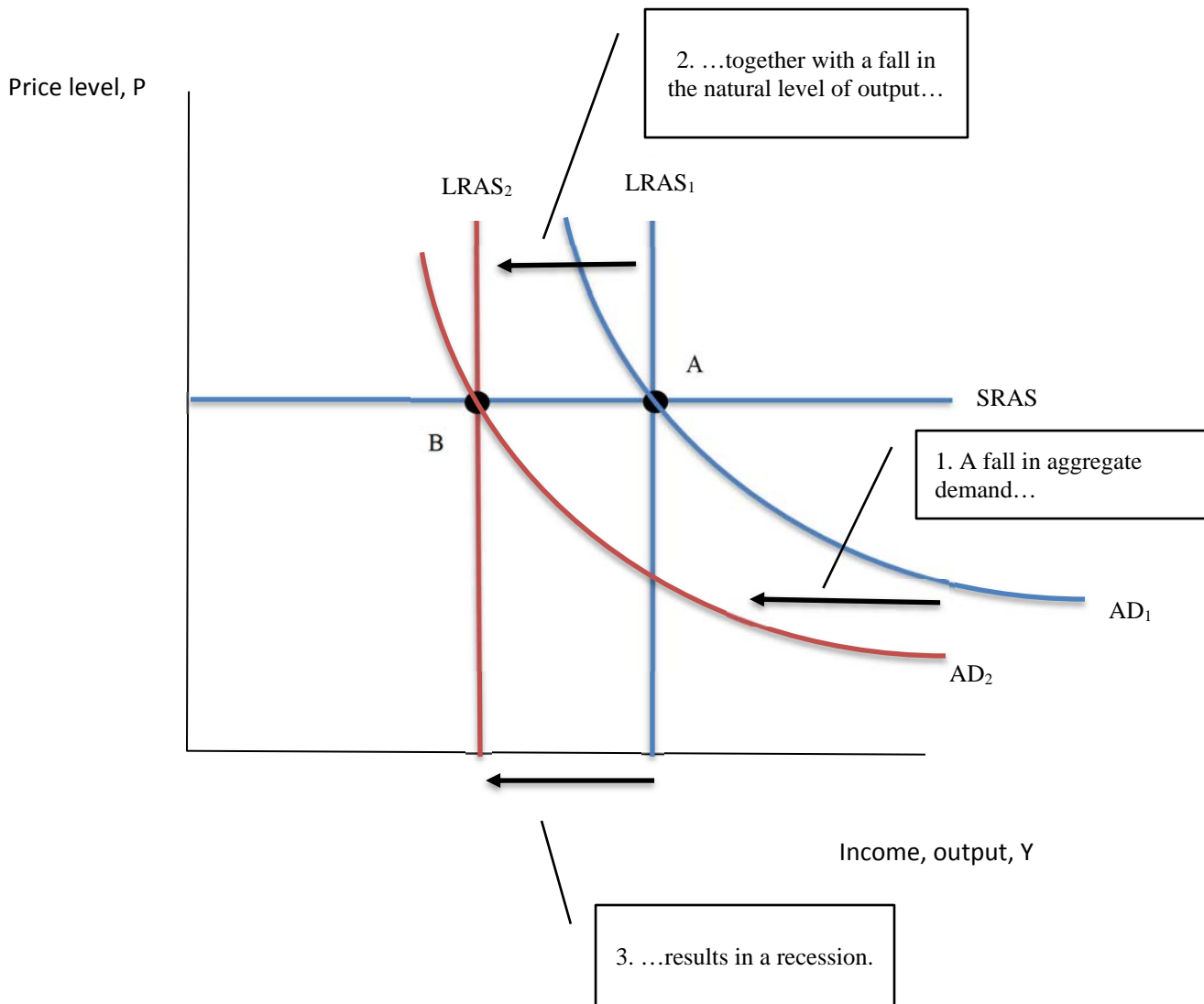
the unusual circumstances during the shutdown, the terms “short-run” and “long-run” are misnomers in this context. For consistency, we keep calling the curves SRAS and LRAS, but it is best to focus less on the time horizon than on the economic phenomena that these curves represent.

The SRAS curve represents the prices at which firms are willing to sell their products. The pandemic did not have any immediate effect on posted prices. As a result, the SRAS curve remains the same.

The LRAS curve represents the natural level of output, which is the production of goods and services when unemployment is at its natural rate. Normally, the natural rate of unemployment is stable, and the natural level of output grows smoothly over time due to population growth and technological progress. The recession in 2020 was an exception. When the health crisis caused many businesses to temporarily close and lay off their workers, it caused a sudden, massive increase in the natural rate of unemployment. That is, the joblessness from the mandatory shutdown of many businesses can be viewed as a new species of structural unemployment. The economy’s potential for producing goods and services, represented by the LRAS curve, was diminished, at least temporarily. In Figure 1, the fall in potential output is represented by the LRAS curve’s shift to the left.

The economy shown in Figure 1 moves from point A to point B (as did the U.S. economy in 2020). The economy experiences a recession in the sense that output falls. But unlike during a typical recession, there is no excess capacity because, given the shutdown, the economy’s natural level of output falls as well.<sup>1</sup>

<sup>1</sup> Note that in this figure, the shift in the AD curve and the shift in the LRAS curve are of equal magnitude. That supposition is reasonable if the closure of businesses during the pandemic reduced their customers’ spending as much as it reduced their ability to meet customers’ demand. But it is also possible that the shifts could differ in size, in which case the economy would find itself at the intersection of the AD curve and the SRAS curve.




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**FIGURE 1**

**The Covid-19 Recession of 2020**

When a pandemic strikes and many businesses are temporarily closed, aggregate demand falls because people are staying at home rather than spending at those businesses. Because those businesses cannot produce goods and services, the economy's potential output, as reflected in the LRAS curve, falls as well. The economy moves from point A to point B.

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## **The Policy Response**

Once the enormity of the downturn became clear, policymakers responded swiftly to mitigate the suffering that would result. On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security (CARES) Act was signed into law. Together with other legislation enacted around the same time, it authorized a combination of spending increases and tax reductions of about \$2 trillion, roughly 10 percent of GDP, making it the largest fiscal response to a recession in history. The CARES Act is sometimes called a stimulus bill, but the goal was not actually to stimulate the economy and end the recession. Policymakers understood that a recession was inevitable given the pandemic. Their goal was to alleviate the hardship people would face during a difficult time and to prevent the downturn from leaving permanent scars on the economy after the pandemic was over.

A large part of the policy response might be called social insurance or disaster relief. All households, except those with high incomes, were given tax rebates of \$1,200 per adult and \$500 per child. Eligibility for unemployment insurance was expanded, and benefits were temporarily increased by \$600 per week. Small businesses were offered loans that would be forgiven, and thus turned into grants, if they did not lay off any workers for the next two months.

To prevent permanent scarring from the recession, the CARES Act had various provisions to promote business continuity. This was part of the motivation for the forgivable loans to small businesses. Not only did workers continue getting paychecks, but they stayed connected to their employers, so normal business could quickly resume when the crisis passed. The CARES Act also provided funds that enabled the Federal Reserve to lend to larger businesses, states, and municipalities. It thus vastly expanded the Fed's role as lender of last resort. The CARES Act also

increased the authority of the Treasury Secretary to make loans and loan guarantees to eligible businesses, states, and municipalities.

Economists generally applauded these policy moves, but critics pointed out potential flaws in the legislation. For many people, the increased unemployment insurance paid more than their jobs did, giving them little reason to return to work. Not enough money was appropriated for small businesses, leading to a scramble to be first in line for the limited funds available. And some businesses that didn't really need the money enjoyed unjustified windfalls from these forgivable loans. (Some companies that received the forgivable loans experienced bad publicity as a result, inducing them to return the money. The restaurant chains Shake Shack and Sweetgreen, for example, each returned \$10 million.) Critics also worried that the discretion given to the Treasury Secretary could lead to crony capitalism, in which credit is extended based on political clout rather than economic fundamentals. Finally, critics thought that the act should have provided more relief to state and local governments. Because these governments often have rules that require a balanced budget, the decline in tax revenue due to the downturn could force cuts in essential public services unless the federal government stepped in to help.

The CARES Act significantly widened the federal government's budget deficit, which had been large even before its passage. According to the Congressional Budget Office, the 2020 budget deficit would be about \$3.7 trillion, roughly 18 percent of GDP, making it the largest fiscal imbalance since World War II. Government debt as a share of GDP was projected to reach its highest level in history. As we discuss in Chapter 18, most economists believe it is appropriate for the government to borrow during crises, such as wars and recessions. But the high debt would nonetheless leave a potentially troublesome legacy for future generations.

## **The Road Ahead**

This book was going to press in the middle of the economic downturn of 2020, and the length of the downturn and the speed of the recovery remained open questions.

An optimist might point out that most of the job losses during the 2020 downturn were temporary layoffs, so people could quickly return to their jobs once it was safe to do so. A pessimist might note that temporary layoffs could turn into permanent job losses if the pandemic persisted and many firms went out of business. As you read this, you may know which of these views showed more foresight.

In the end, the answers would need to come more from microbiology than from macroeconomics. People could not be expected to return to normal economic activity until the pandemic was contained, perhaps with better testing for the virus or the development of a vaccine.