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INSIGHT

COVID-19: Potential Economic Effects

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This Insight discusses the potential economic effects of the coronavirus (COVID-19) on the U.S. economy. For background on the coronavirus, see CRS In Focus IF11421, *COVID-19: Global Implications and Responses*, by Sara M. Tharakan et al.

Channels Through Which the Virus Could Affect the Economy

Although the COVID-19 outbreak presently is most widespread abroad, it will directly affect foreign demand for U.S. exports of goods and services. As discussed in this CRS In Focus, the coronavirus could also disrupt U.S. companies' international supply chains. If COVID-19 becomes widespread in the United States, it could directly reduce domestic economic activity by reducing both supply and demand. On the supply side, hours worked would be reduced by illnesses and fatalities and any work stoppages to prevent the virus from spreading. On the demand side, spending could be reduced by quarantines and other attempts to avoid crowds, such as public event cancellations. In addition, fear and uncertainty could reduce business and consumer confidence, leading to a reduction in spending. A reduction in investor confidence could also tighten financial conditions. For example, the sharp decline in the stock market since late February 2020 was widely perceived to be in response to worsening news about the virus. In general, these macroeconomic effects would be expected to eventually reverse once conditions return to normal, except to the extent COVID-19 causes worker fatalities.

Unknowns in Evaluating the Economic Impact

How large could the economic effects of the coronavirus ultimately be? At this stage, uncertainty is so great that a very wide range of economic outcomes—from little effect on the U.S. economy to a severe downturn—is plausible. The unknowns include the following questions:

- How many people will become infected over the course of the outbreak in the United States and abroad?
- How long will the outbreak last?

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- What public and private measures will ultimately be taken that disrupt normal economic activity (e.g., travel restrictions, closures, shutdowns, cancellations)?
- How easily can businesses find substitutes for supply chain disruptions?
- How many businesses will fail before the outbreak ends?
- How will consumer and investor confidence be affected?
- What fiscal or monetary policy actions will ultimately be taken to offset the economic effects, and how effective would they be in a pandemic? To date, an emergency supplemental appropriation has been enacted (P.L. 116-123), and the Federal Reserve has reduced interest rates by 0.5 percentage points.

Economic Estimates

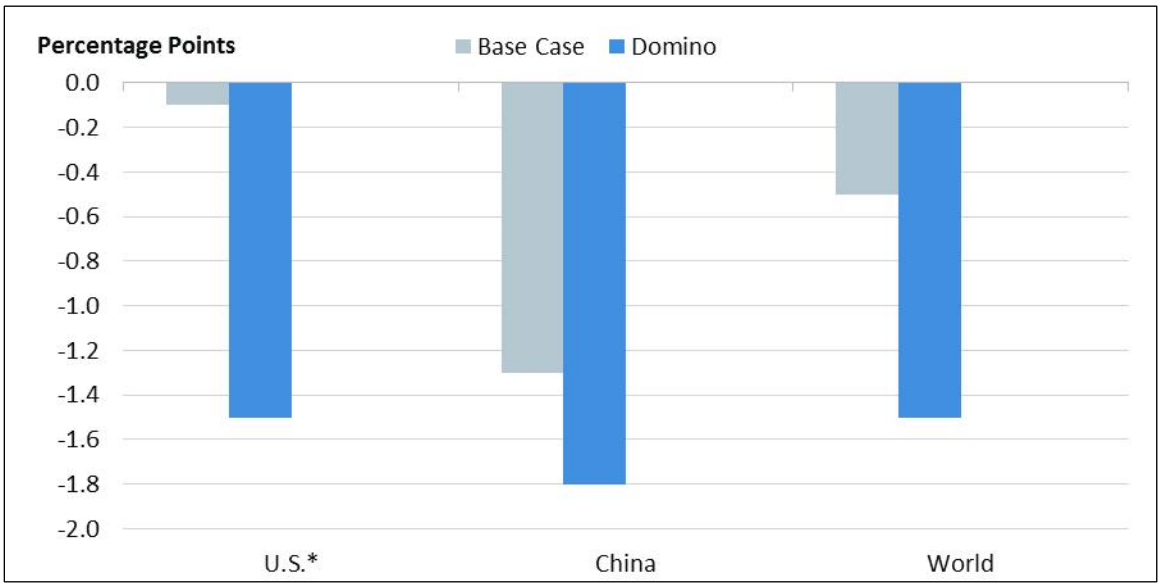
Two recent studies attempt to quantify the potential economic effects of the outbreak. The purpose of these studies is to illustrate how the economy would be affected under different outbreak scenarios rather than to provide the best projection of the outbreak's scope.

OECD. In its base-case scenario—a contained outbreak centered in China—the Organisation for Economic Co-operation and Development (OECD) stated "global GDP growth is projected to slow from 2.9% in 2019 to 2.4% this year, before picking up to around 3¼ per cent in 2021 as the effects of the coronavirus fade and output gradually recovers." In this scenario, U.S. growth is only 0.1 percentage points lower in 2020 and is 0.1 percentage points higher in 2021. Despite the negative impact of COVID-19, the OECD projects a global recession is averted as growth remains positive in all the major economies—including China—except Italy. The base-case scenario assumes the outbreak peaks in the first quarter of 2020 and gradually fades thereafter. (The OECD did not report specific estimates on the number of illnesses or fatalities.) The base-case scenario also incorporates an assumption that monetary stimulus is used around the world to offset the negative effects.

The OECD also presents a "domino scenario" where the virus "spread much more intensively ... through the wider Asia-Pacific region and the major advanced economies in the northern hemisphere." In this scenario, "the level of world GDP is reduced by up to 1¾ per cent (relative to baseline) at the peak of the shock in the latter half of 2020, with the full year impact on global GDP growth in 2020 being close to 1½ per cent." The OECD does not present an estimate for the effect on U.S. growth in the domino scenario, but growth in North America would decline by 1.5 percentage points. **Figure 1** illustrates both scenarios presented by the OECD.

Figure 1. Projected Decline in 2020 GDP Growth Under Two Scenarios

OECD



Source: Organisation for Economic Co-operation and Development (OECD).

Notes: *For the domino scenario, "U.S." is for North America.

McKibbin and Fernando. A Brookings Institution working paper by Warwick McKibbin and Roshen Fernando used a long-standing economic forecasting model developed by one of the authors to simulate economic effects under seven different outbreak scenarios—three that limit the outbreak to China and four in which the outbreak is worldwide. (The paper does not provide the relative likelihood of the various scenarios.) The model projects that "even a low-end pandemic modeled on the Hong Kong Flu is expected to reduce global GDP by around $2.4 trillion and a more serious outbreak similar to the Spanish flu reduces global GDP by over $9 trillion in 2020." The loss in U.S. GDP relative to the 2020 baseline varies between 0.1%-8.4% across the scenarios. The scenarios assume a decline in the labor supply of 0.1%-3.44% in China and 0%-1.3% in the United States.

Table 1. Projected Decrease in 2020 GDP Under Various Scenarios

McKibbin and Fernando

		Decrease in 2020 GDP Relative to Baseline	
Scenario	**COVID-19 Deaths**	**United States**	**China**
Scenario 1	China: 279	-0.1	-0.4
Scenario 2	China: 3,493	-0.1	-1.9
Scenario 3	China: 12,573	-0.2	-6.0
Scenario 4	China: 2,794; U.S.: 236	-2.0	-1.6
Scenario 5	China: 6,985; U.S.: 589	-4.8	-3.6
Scenario 6	China: 12,573; U.S.: 1,060	-8.4	-6.2
Scenario 7	China: 2,794; U.S.: 236	-1.5	-2.2

Source: McKibbon and Fernando

Notes: In Scenarios 1-3, the mortality rate for the rest of the world is negligible. In Scenario 7, the outbreak recurs annually; in the other scenarios, it is a one-time outbreak.

U.S. and global growth had been projected to be moderate before the outbreak. Therefore, the economic effects of COVID-19 could result in a growth slowdown but would have to be large for the economy to contract, as the forecasts above illustrate. The estimated effects presented above are for the whole year; it is expected, however, that the economic effects will be larger in the first half of the year.

Author Information

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