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# The Dynamics of the U.S. Trade Deficit During COVID-19: The Role of Essential Medical Goods

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The COVID-19 pandemic has caused a decline in global trade. From January to June 2020, exports of U.S. goods dropped by almost 25 percent, while imports of goods dropped by about 17 percent (Table 1). The U.S. trade deficit—that is, the gap between imports and exports—increased by about 20 percent, reaching a value of $8.65 billion (Table 2). During recessions, imports tend to drop faster than exports, narrowing the trade deficit, as the figure suggests. For instance, during the Great Recession, exports fell by 24.6 percent and imports by 34.3 percent. However, this time was different and the trade deficit widened. Why?

In this essay, we show that the increased demand for imported essential medical goods from January to June 2020 was an important driving force behind the widening U.S. trade deficit. In particular, the increase in the trade deficit of medical goods accounted for 41.3 percent of the increase in the U.S. trade deficit.

Table 1
**Trade in Goods and in Critical Medical Goods**

| | Exports | | Imports | |
|---|---|---|---|---|
| | Aggregate | Medical goods | Aggregate | Medical goods |
| January 2020 (billions) | $210.45 | $1.38 | $252.49 | $1.72 |
| June 2020 (billions) | $158.25 | $1.51 | $208.95 | $5.42 |
| Change, June vs. January (billions) | –$52.19 | $0.13 | –$43.54 | 3.70 |
| Change, June vs. January | –24.80% | 9.43% | –17.24% | 215.10% |

SOURCE: U.S. Census Bureau and authors' calculations.

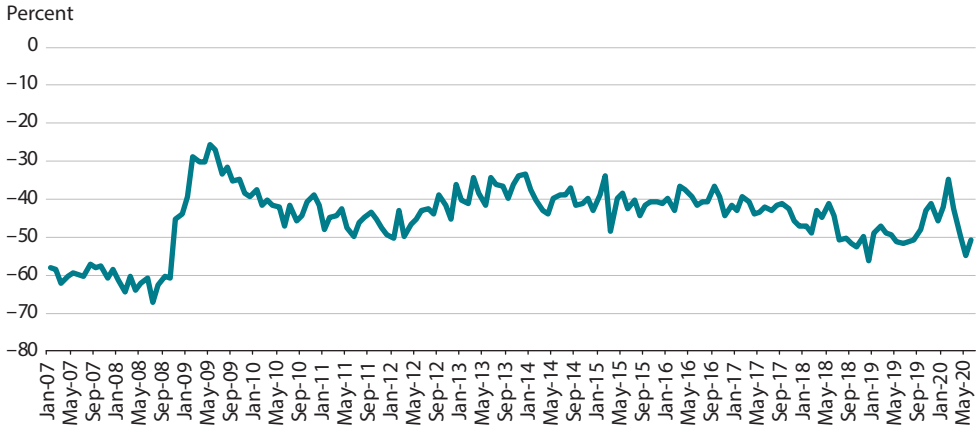
Table 2
**Contribution of Medical Trade Deficit to Total U.S. Trade Deficit**

| | U.S. trade deficit | |
|---|---|---|
| | Aggregate | Medical goods |
| January 2020 (billions) | –$42.04 | –$0.34 |
| June 2020 (billions) | –$50.70 | –$3.91 |
| Change, June vs. January (billions) | –$8.65 | –$3.57 |
| Change, June vs. January | 20.58% | 1,048.01% |
| Contribution of medical goods | | 41.26% |

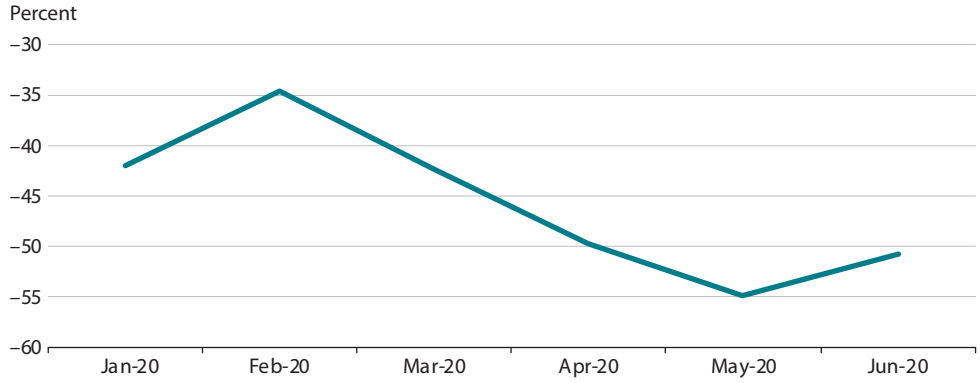
SOURCE: U.S. Census Bureau and authors' calculations.

**U.S. Net Exports of Goods**

**A. U.S net exports of goods (exports minus imports), January 2007-June 2020**




**B. U.S net exports of goods (exports minus imports), January-June 2020**




SOURCE: FRED®, Federal Reserve Bank of St. Louis.

## What Is Behind the Decline in the U.S. Trade Deficit?

On the one hand, the pandemic has caused a large decrease in exports, with industries affected both directly and indirectly through global supply chains. Global lockdowns have decreased supply worldwide, contributing to a sharp decline in U.S. production and exports of goods. The largest declines in exports have occurred in the oil and gas, apparel, petroleum and coke, and auto industries. The auto industry, for instance, has been hit dramatically both by a decline in the production of autos and by disruptions along several parts of the supply chain.

On the other hand, the current pandemic has increased the demand for essential medical goods to combat it, causing shortages worldwide. These products range from personal protective equipment, such as gloves, masks, and gowns, to respirators, vaccines, and medicines. Production of these goods is concentrated in a few countries, and most countries depend heavily on imports of medical products. This is the case for the United States: In 2018, it accounted for one-fourth of world imports of essential medical equipment and 36 percent of its total domestic consumption of essential medical goods was imported.[1] Hence, the United States has been particularly exposed to shortages of medical equipment during the pandemic.

In January 2020, imports of essential medical goods accounted for about 0.7 percent of total imports of goods to the United States, whereas in June 2020 they were almost 2.6 percent[2]—imports of essential medical goods increased by 215 percent during that period. In contrast, U.S. exports of essential medical goods increased by just 9.4 percent. Thus, imports of medical goods have played an important role in the evolution of total U.S. trade from the start of the pandemic, mitigating the decrease in imports.

The pandemic-induced increase in trade of essential medical goods accounted for 41.3 percent of the increase in the U.S. trade deficit from January to June.

### The Impact of Trade In Essential Medical Goods on the U.S. Trade Deficit

In January 2020, the U.S. trade deficit of goods was around $42 billion, with essential medical goods accounting for just 0.81 percent of the total. By June 2020, the U.S. trade deficit in goods had increased to $50.7 billion, with essential medical goods accounting for 7.7 percent of the total. These findings indicate a substantial increase in the importance of trade in essential medical goods in driving the gap between imports and exports for the United States. Indeed, while the total trade deficit increased by a factor of 1.20 between January and June 2020, the deficit of medical goods increased by a factor of 11.5. Putting all these numbers together, we find that the widening of the gap between imports and exports of essential medical goods contributed to 41.3 percent of the increase in the U.S. trade deficit.

### Conclusions

The heavy reliance of the United States on imports of essential medical goods has exposed vulnerabilities of the current trade system, reopening an old debate on the trade-off between comparative advantage and resilience. On the one hand, trade is beneficial, as it allows countries to specialize in the production of those goods in which they have a comparative advantage. On the other hand, relying too much on imports of essential goods is risky when there are global shocks that create shortages of those goods worldwide.

We documented that the heavy U.S. dependence on imports of essential medical goods has been an important contributor to the recent widening of the U.S. trade deficit. Although this set of goods constitutes a small fraction of total U.S. trade, it accounted for a significant share of the change in the trade deficit. This mechanism suggests that relying on imports for the provision of these goods might affect aggregate outcomes. ■

## Notes

[1] Leibovici, Fernando and Santacreu, Ana Maria. "Protectionism and Dependence on Imports of Essential Medical Equipment." Federal Reserve Bank of St. Louis *On the Economy Blog*, April 10, 2020; https://www.stlouisfed.org/on-the-economy/2020/april/covid-19-protectionism-imports-essential-medical-equipment.

[2] The list of medical goods critical to combating COVID-19 correspond to the 10-digit HTS (Harmonized Tariff Schedule) product codes reported in the following article: Bown, Chad P. "COVID-19: Trump's Curbs on Exports of Medical Gear Put Americans and Others at Risk." Peterson Institute for International Economics, April 9, 2020; https://www.piie.com/blogs/trade-and-investment-policy-watch/covid-19-trumps-curbs-exports-medical-gear-put-americans-and. Trade data are from the U.S. Census Bureau, USA Trade® Online.

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