

Globalization, Global Supply Chain Disruptions, and COVID-19

RESEARCH BRIEF

Executive Summary

The COVID-19 pandemic has brought unprecedented disruption to the global economy and world trade. The World Trade Organization predicts that world merchandise trade will decline by 13 to 30 percent in 2020. A new research brief by the Sheila and Robert Challey Institute for Global Innovation and Growth at North Dakota State University shows that regardless of where shutdowns have occurred, the economic disruptions wrought by the pandemic will impact everyone. Tight linkages in global supply chains mean that circumstances in one country can cause economic harm in other countries.

Moreover, the tight linkages in global supply chains magnify the negative consequences of trade barriers. As an example, this research brief highlights some of the far-reaching effects of tariffs. Since tariffs are applied to the entire import value of products, rather than to the value added at a particular stage, the effective tariff percentage applied to a particular country's value of production tends to be much higher than the stated tariff rate. Furthermore, tariffs aimed at foreign competition often amount to at least partially taxing domestic products.

If a 25% tariff is applied to a "Chinese" product that sells for \$100 at the U.S. border, where final assembly occurs in China using \$90 worth of parts from the U.S., Germany, and South Korea, a \$25 tariff will apply. This amounts to a 250% tariff applying to Chinese value-added of \$10.

This research brief shows the important mutual dependencies that exist as a result of tightly connected supply chains, and the damage that can be created through trade barriers. Given the economic damage caused by the pandemic and accompanying shutdowns, factories and production centers across the world need the open trading system in order to re-emerge at full efficiency and bring employment back to pre-pandemic levels. Countries must resist the temptation to turn inward, as pursuing protectionist policies would delay economic recovery and add to the economic harm already caused by the pandemic.