

# The Economic Impacts of Retaliatory Tariffs on U.S. Agriculture

Stephen Morgan, Shawn Arita, Jayson Beckman, Saquib Ahsan, Dylan Russell, Philip Jarrell, and Bart Kenner

## What Is the Issue?

In 2018, the United States imposed Section 232 tariffs on steel and aluminum imports from major trading partners and separately Section 301 tariffs on a broad range imports from China. In response, Canada, China, the European Union (EU), India, Mexico, and Turkey imposed retaliatory tariffs on many U.S. exports, including a wide range of agricultural and food products. Individual product lines experienced tariff increases ranging from 2 to 140 percent. The retaliatory tariffs increased the price of U.S. agricultural exports in these markets relative to alternatives that were either domestically produced or imported from other international sources. Despite opportunities for U.S. producers to sell their products to non-retaliating trade partners, the overall effect was a reduction in U.S. agricultural exports. Given that agricultural production for certain commodities is concentrated in certain States, retaliatory tariffs affected States differently. As of October 2021, many retaliatory tariffs were still in effect with the following exceptions—Canada and Mexico’s tariffs were removed in May 2019, China announced tariff exemptions for some products after the U.S.-China Phase One Economic and Trade Agreement (Phase One Agreement) was signed on January 15, 2020, and in October 2021 the United States and EU reached arrangements to address global steel and aluminum excess capacity which include replacement of Section 232 tariffs with a tariff-rate quota and lifting of the EU’s retaliatory tariffs.



## What Did the Study Find?

The retaliatory tariffs led to a significant reduction in U.S. agricultural exports to retaliating partners. Nationally, direct U.S. agricultural export losses due to retaliatory tariffs totaled more than \$27 billion during 2018 through the end of 2019. Across retaliatory partners, China accounted for approximately 95 percent of the losses (\$25.7 billion), followed by the EU (\$0.6 billion), and Mexico (\$0.5 billion), with Canada, Turkey, and India having smaller shares. We estimated annualized losses for selected commodities from retaliatory tariffs were \$13.2 billion from mid-2018 to the end of 2019.

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At the commodity level, export losses were far reaching but highly concentrated. Soybeans accounted for the largest level of losses making up nearly 71 percent (\$9.4 billion of annualized losses) of the share of estimated trade damages. In comparison, sorghum (\$854 million in annualized losses) and pork (\$646 million in annualized losses) trade losses were the next largest, accounting for over 6 percent and just under 5 percent, respectively, of the total. Overall, specialty crops represented around 6 percent of losses (\$837 million in annualized losses) across fruits, vegetables, and tree nuts.

At the State level, losses were largely concentrated in the Midwest with Iowa (\$1.46 billion in annualized losses), Illinois (\$1.41 billion in annualized losses), and Kansas (\$955 million in annualized losses), accounting for approximately 11, 11, and 7 percent, respectively, of the total losses. The State-level losses were uneven and not directly proportional to the size of State-level exports. States that produced more of the commodities most severely targeted by retaliation—soybeans, sorghum, pork, and cotton—experienced higher losses.

The U.S. market share of China's total agricultural imports, which had fallen from 20 percent in 2017 to 12 percent in 2018, remained significantly depressed in 2019 at 10 percent. This study examined changes in U.S. agricultural exports to China surrounding the signing of the Phase One Agreement in January 2020 and subsequent announcements of China's tariff exemptions starting in March 2020. U.S. exports of products with announced tariff exemptions grew by 118 percent relative to 2019. Other products that did not have announced exemptions also significantly grew—by 83 percent relative to 2019—suggesting that many of these products may also have been granted tariff waivers by request. U.S. agricultural exports to China rebounded and hit record levels in 2020; however, some of this increase was likely driven by factors unrelated to trade policy, including China's pig-herd recovery in the wake of African Swine Fever and resulting increased feed demand. However, U.S. market share has not fully recovered to pre-retaliatory levels 1 year out from the Phase One Agreement signing.

## **How Was the Study Conducted?**

The USDA's Economic Research Service (ERS) was directed to assess the impact of foreign tariffs on U.S. agricultural products by the House Committee on Appropriations (P.L. 116-260). This report provides State-level effects of retaliatory tariffs to ultimately address this charge in response to the Committee's request. To do so, we first reviewed previous research on prospective and retrospective estimation of U.S. agricultural losses caused by retaliatory tariffs. We summarized key results by estimation method, commodity, and State regarding retaliatory tariffs. Trade and tariff data were also compiled to provide a descriptive analysis of the U.S. agricultural exports during the period of retaliatory tariffs.

Second, we drew on product-line estimates for the effect of 2018–2019 retaliatory tariffs from Grant et al. (2021) to investigate the distribution of export losses by State and commodity groups using the ERS State Exports, Cash Receipts Estimates. As such, our analysis provides a detailed look at the effect of foreign retaliatory tariffs on farmers at the State level. After the Phase One Agreement was implemented, the latest detailed trade and tariff exemption data were examined from March 2020 to February 2021.

As retaliatory tariffs are still in effect, the report's estimates do not represent a full account of all current and future economic losses resulting from these actions. Additionally, we estimated the direct losses in U.S. exports to retaliating partners and these estimates have not considered possible offsetting-sales increases to non-retaliating partners (i.e., trade deflection). However, previous research has suggested positive trade deflection effects caused by retaliatory tariffs are small compared with direct losses (Carter and Steinbach, 2020; Grant et al., 2021).