Theme Overview: The Economic Impacts of Trade Retaliation on U.S. Agriculture: A One-Year Review

Jason H. Grant and Sharon Sydow

JEL Classifications: Q17, Q18, Q11, F13, F14
Keywords: Agriculture, Exports, Tariffs retaliation, Trade dispute, U.S.—China trade

Over the past year, U.S. agriculture has been impacted by unprecedented trade retaliation by China and other key trading partners. In total, over $30 billion of U.S. exports of oilseeds, grains, livestock, dairy, horticulture, and other products were subject to retaliatory tariffs imposed in 2018 by China, Canada, Mexico, the European Union (EU), and Turkey. While Canada and Mexico removed retaliatory tariffs in May 2019, India implemented retaliatory tariffs on U.S. apples, pulses, and tree nuts in June 2019, almost one year after India’s initial list was published. These retaliatory tariffs were imposed in response to U.S. actions taken under domestic law to address certain Chinese trade practices for technology and intellectual property (Section 301) and to ensure sufficient domestic capacity of steel and aluminum for national security purposes (Section 232).

Bown and Kolb (2019) provide a comprehensive and up-to-date source for information and data on trade retaliation. To summarize, during 2018, the United States and China undertook several rounds of tariff increases related to the U.S. Section 301 action. The most recent increase in these tariffs took place on September 1, 2019. Separately, China imposed retaliatory tariffs on U.S. apples, pulses, and tree nuts in June 2019, almost one year after India’s initial list was published. These retaliatory tariffs were imposed in response to U.S. actions taken under domestic law to address certain Chinese trade practices for technology and intellectual property (Section 301) and to ensure sufficient domestic capacity of steel and aluminum for national security purposes (Section 232).

Bown and Kolb (2019) provide a comprehensive and up-to-date source for information and data on trade retaliation. To summarize, during 2018, the United States and China undertook several rounds of tariff increases related to the U.S. Section 301 action. The most recent increase in these tariffs took place on September 1, 2019. Separately, China imposed retaliatory tariffs on U.S. exports in April 2018 in response to U.S. tariffs on imports of Chinese aluminum and steel. As a result, some U.S. agricultural exports to China, such as pork, face multiple retaliatory tariffs. On Friday, December 13, 2019, the Office of the U.S. Trade Representative (USTR) announced that the United States and China had reached a Phase One Agreement, which includes commitments by China to implement structural reforms and make substantial additional purchases of U.S. goods and services, including agricultural products. A fact sheet on the Phase One agreement states that China’s imports of U.S. goods and services over the next two years will exceed 2017 levels.

Articles in this Theme:

- The 2018-2019 Trade Conflict: A One-Year Assessment and Impacts on U.S. Agricultural Exports
  Jason Grant, Shawn Arita, Charlotte Emlinger, Sharon Sydow, and Mary A. Marchant
- Tariff Impacts on Global Soybean Trade Patterns and U.S. Planting Decisions
  Joanna Hitchner, Keith Menzie, and Seth Meyer
- Impacts of Retaliatory Tariffs on Farm Income and Government Programs
  Patrick Westhoff, Tracy Davids, and Byung Min Soon
- Tariff Retaliation Weakened the U.S. Soybean Basis
  Michael K. Adjemian, Shawn Arita, Vince Breneman, Rob Johansson, and Ryan Williams
- How Has the Trade Dispute Affected the U.S. Cotton Sector?
  Andrew Muhammad, S. Aaron Smith, and Stephen MacDonald
- Implication of Trade Policy Turmoil for Perennial Crops
  Daniel A. Sumner, Tristan Hanon, and William A. Matthews
- Impact of Retaliatory Tariffs on the U.S. Pork Sector
  Frank Kyekyeku Nti, Lindsay Kuberka, and Keithly Jones
by no less than $200 billion (USTR, 2019). The United States agreed to modify tariffs on imports from China that were imposed based on the findings of the Section 301 investigation. As of this writing, the Phase One Agreement is expected to be signed on January 15, 2020.

Last year, Choices published a theme examining possible economic outcomes of the U.S.–China trade dispute (Marchant and Wang, 2018). In that theme, the authors’ employed various modelling techniques to estimate the ex ante potential impacts in a volume that was released just prior to the retaliatory tariffs being imposed. The purpose of this Choices theme is to examine the ex post actual effects of retaliatory tariffs on U.S. agriculture observed one year later. The contributing authors have compiled comprehensive datasets on market, trade, and price impacts of retaliatory tariffs for several key commodity sectors including, soybeans, cereal grains, cotton, tree nuts, fruits and vegetables, pork, and other food categories.

What has happened to U.S. agricultural markets, both domestic and export, since the imposition of retaliatory tariffs?

Grant et al. conduct a one-year, ex post econometric assessment of trade retaliation on monthly U.S. agricultural exports to quantify the direct effect of retaliatory tariffs and highlight some indirect effects on U.S. exports and competing suppliers’ trade patterns. Their analysis covers a broad range of agricultural products subject to retaliatory tariffs imposed by China, the EU, Canada, Mexico, and Turkey and identifies significant negative trade flow impacts across markets and sectors due to retaliation.

Given the importance of the Chinese market for U.S. soybean exports, the impacts of retaliation on U.S. soybeans are the focus of two articles. Prior to 2018, U.S. soybean exports to China accounted for 31% of U.S. soybean production, up from just 5% in 2000, and nearly 60% of global U.S. soybean exports (USDA, 2019). In this theme, Hitchner, Menzie, and Meyer examine how global soybean trade patterns and U.S. planting decisions have been impacted since China imposed retaliatory tariffs. Adjemian et al. assess the effect of China’s retaliation on U.S. soybean basis (i.e., the difference between a local cash price and a nearby futures price). Westhoff, Davids, and Min Soon consider the impact of these tariffs on major commodities including grains, oilseeds, and other crops; biofuels; livestock; dairy; and poultry on U.S. farm income and government outlays on U.S. farm programs.

Other U.S. agricultural products have also been impacted by trade retaliation. Muhammad, Smith, and MacDonald assess the effect of China’s retaliatory tariffs on U.S. cotton. Sumner, Hanon, and Matthews provide an overview of the U.S. specialty crop sector and examine the impacts of trade retaliation on U.S. tree nut exports. Finally, Nti, Kuberka, and Jones estimate trade impacts on U.S. pork exports to Mexico and China to determine the extent to which other market factors, such as African Swine Fever (ASF), may have affected U.S. pork trade.

The recent retaliatory trade actions have received much attention in the media and policy world. However, a thorough understanding of actual economic impacts is complicated and requires detailed analysis of economic data to assess trade damage estimates, production and planting decisions, basis adjustments, changes in carryover stocks as a result of lost export markets, and price changes. This Choices theme provides a comprehensive first look at the economic impact of the 2018–2019 trade dispute.

For More Information


©1999–2020 CHOICES. All rights reserved. Articles may be reproduced or electronically distributed as long as attribution to Choices and the Agricultural & Applied Economics Association is maintained. Choices subscriptions are free and can be obtained through http://www.choicesmagazine.org.

Author Information
Jason H. Grant (jhgrant@vt.edu) is Associate Professor and Director, Center for Agricultural Trade, Department of Agricultural and Applied Economics, Virginia Tech, Blacksburg, VA. Sharon Sydow (sharon.sydow@usda.gov) is Senior Economist, Office of the Chief Economist, U.S. Department of Agriculture, Washington, DC.

Acknowledgements: Jason Grant and Sharon Sydow wish to thank Kynda Curtis and Alison Davis for accepting this Choices theme proposal on agricultural trade retaliation and for their prompt responses to many editorial questions throughout the process; all authors for their exceptional contributions to this special issue; several peer reviewers for suggested improvements and clarity; and Shawn Arita for helping to move this process from inception to publication.