



August 2019

By Will Sawyer

Lead Economist, Animal Protein

Crystal Carpenter

Senior Economist, Specialty Crops

Kate Linner

Economist, Dairy

Tanner Ehmke

Manager

Inside...

| Introduction | . 1 |
|--|-----|
| How Tariffs Affected Each of the 11 Representative Commodities | 2 |
| Grain and Cotton | 3 |
| Fruits, Nuts, and Vegetables | 4 |
| Animal Protein | 5 |
| Dairy | 7 |
| Conclusion | 8 |

Foreign Tariffs Are Falling on U.S. Farmer, Not Importer

Key Points:

- Who pays the retaliatory tariffs on U.S. agricultural exports is shaped by a number of factors that affect bargaining power between exporters and importers, depending on the agricultural good being traded.
- Bargaining power or lack thereof determines who pays the tariff, and how much. Factors affecting bargaining power differs by product, but ranges from strength of foreign consumer demand for U.S. products to strength of the U.S. dollar.
- In our analysis of 11 U.S. agricultural commodities representing a cross section of agricultural exports in Q4 2018, U.S. producers not the importing country or its consumers paid most of the cost of these tariffs in all but two cases.
- With the prospect of declining bargaining power, U.S. exporters of most agricultural commodities will face still greater pressure to absorb more if not all of the costs of retaliatory tariffs in the future.

Introduction

Over the past two years, the U.S. has clashed with some of its most important trading partners. The tit-for-tat retaliatory tariffs have impacted the economies on both sides. Mexico, Canada, the EU, China, Korea, and Japan have all been targets for trade negotiation and renegotiation by the U.S., and the flow of U.S. agricultural goods have felt the impact.

To understand who pays these tariffs, CoBank took a closer look at key U.S. agricultural exports. We analyzed 11 commodities representing a cross section of agricultural exports in Q4 2018. We found that U.S. producers – not the importing country or its consumers – paid most of the cost of these tariffs in all but two cases (*Exhibit 1*).

1

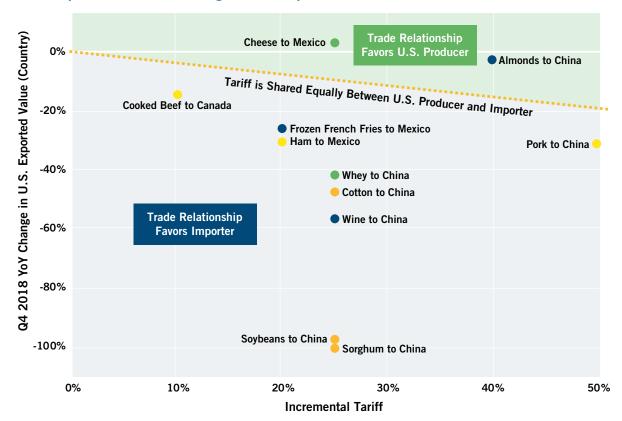


EXHIBIT 1: Impact of Tariffs on U.S. Agricultural Exports

The demarcation line illustrates the point at which the cost of the tariff is shared equally between the U.S. producer and the importing country. Below the line indicates commodities for which the U.S. is paying more than half of the cost of the tariff and the trade relationship favors the importer.

How Tariffs Affected Each of the 11 Representative Commodities

Who pays the retaliatory tariffs on U.S. agricultural exports is shaped by a number of factors that affect bargaining power between exporters and importers, depending on the agricultural good being traded.

These factors include strength of foreign consumer demand for U.S. products, geographic proximity, supply chain efficiencies, dominance in particular markets, shelf life, and tariff levels on competing exports in other countries. Macroeconomic factors affecting bargaining power include strength of the U.S. dollar and transportation rates.

Bargaining power or lack thereof determines who pays the tariff, and how much.

How we conducted the analysis

To answer the question of who pays the tariff when trade disputes target U.S. agriculture, we compared the change in the value of trade with a given importer (country) versus the incremental tariff from that importer. Trade tariffs are levied by the importing country on the value of the imported good, and so we analyzed the change in value traded, taking into account both the change in price and volume. Tariffs have varied over the last two years, but most retaliatory tariffs were imposed during the spring and summer of 2018, so we compared periods before and after the tariffs were imposed – Q4 2017 and Q4 2018.



Grain and Cotton



SORGHUM to China

Incremental Tariff: 25% Q4 2018 YoY Value Change: -100%

- In addition to the implementation of tariffs, China also imposed anti-dumping duties on U.S. sorghum.
- China was the single largest export market for U.S. sorghum, comprising about 90% of all U.S. exports. No other importing countries will be able to fully make up the lost Chinese market.
- China has the bargaining power. It can go elsewhere, such as Australia, for sorghum, or easily substitute sorghum with alternative feed grains like corn, oats, or barley.



SOYBEANS to China

Incremental Tariff: 25% Q4 2018 YoY Value Change: -98%

- China has alternatives outside the U.S. for oilseeds. Brazil, and to a lesser extent other countries like Ukraine and Argentina, were well-positioned to fill the gap left by the U.S.
- U.S. domestic purchases have significantly offset the loss of the China market, but they're not enough: The U.S. increased its export value to the rest of the world by over 60%, especially to the EU. But, total exported value was down by nearly 50%.
- With a record crop out of South America and declining demand due to African Swine Fever (AWF) in China, the U.S. is unlikely to gain back significant export sales in the coming years.



COTTON to China

Incremental Tariff: 25% Q4 2018 YoY Value Change: -48%

- The U.S. is the world's dominant cotton exporter, accounting for more than onethird of global cotton exports. The smaller decline of exports, when compared to sorghum and soybeans, reflects a stronger bargaining position for the U.S.
- The decline in Chinese exports were offset almost entirely by other purchasers.
 This reflects the diverse global supply chain for cotton, but also a shifting supply chain that is moving textile manufacturing out of China to other low-labor-cost countries like Vietnam.







FROZEN FRENCH FRIES to Mexico

Incremental Tariff: 20% Q4 2018 YoY Value Change: -26%

- The U.S. represented 75% of Mexican french fry imports in 2017, which fell to 63% in 2018. Despite the relatively high market share within Mexico, the U.S. accounted for only 16% of world french fry exports in 2017, implying Mexico has other options and more bargaining power. The increased tariffs on U.S. french fry exports made the freight from countries comparatively economical. Canada, Netherlands, and Belgium in particular offset the decrease in shipments from the U.S.
- As long as ocean freight rates remain affordable and the U.S. dollar is strong,
 U.S. french fry exports around the world will be highly sensitive to tariffs even in nearby markets like Mexico where the U.S. has proximity advantage.



ALMONDS to China

Incremental Tariff: 40% Q4 2018 YoY Value Change: -3%

- While the impact of this decline in exported value and overall market share may seem modest relative to other commodities hit with Chinese tariffs, it was a notable decline relative to expectations and the 60% year-over-year (YoY) growth experienced in 2017.
- China accounted for roughly 2% of U.S. almond exports by value in 2017. By comparison, the U.S. accounts for 68% of world almond exports and 97% of China almond imports. With these high market shares, growing Chinese demand, and pre-existing contracts, tariff impacts in the short term were relatively modest compared to other commodities.
- Over time, China has gradually been able to adjust trade flows with tariff impacts becoming more pronounced. U.S. almond exports to China fell 44% YoY in value in Q1 2019, with almonds being replaced by other tree nuts from other exporting nations.
- While U.S. almond exports to China may be in a better position than some other commodities, the growth potential is being hampered both short and long term.



Fruits, Nuts, and Vegetables Continued



WINE to China

Incremental Tariff: 25% Q4 2018 YoY Value Change: -57%

- Even though China only represents 5% of U.S. wine exports by value, it is a key growth market for the U.S. The value of U.S. wine exports to China have increased over 400% over the past decade. Yet despite this increase, the U.S. only accounted for roughly 3% of Chinese wine imports by value in 2017. This makes it relatively easy for Chinese consumers to shift to other markets when tariffs on U.S. wine reduce the economic competitiveness.
- While total Chinese wine imports from all countries were down 22% in Q4 2018, market share increased for Chile and Australia.
- U.S. wine producers have attempted to protect their market share in China by reducing prices. While other factors are also at play, including a shift to more bulk wine, value dropped 57% YoY in Q4 2018 while volume was only down 19%.
- Tariffs are hampering U.S.' ability to take advantage of China's growth in wine consumption during a time when global wine consumption is weak. This is allowing other countries to take advantage and could have long-term ramifications.

Animal Protein



HAM to Mexico

Incremental Tariff: 20% Q4 2018 YoY Value Change: -31%

- Mexico is the largest market for U.S. pork exports by volume, accounting for nearly one-third of U.S. pork exports each year.
- Fresh ham is the primary pork export to Mexico. By some estimates, ham to Mexico accounts for 40% of the U.S.' annual ham production.
- Despite having few options for fresh ham, Mexico significantly reduced its U.S. ham purchases. Instead, it increased domestic pork supplies and relied on other available animal proteins.
- U.S. ham exports should rebound through the summer after Mexico dropped its tariff on U.S. pork in mid-May.



Animal Protein Continued



PORK to China

Incremental Tariff: 50% Q4 2018 YoY Value Change: -32%

- In the summer of 2018, China increased its tariff on U.S. pork by 50%. As a result, U.S. pork meat export value to China declined by 32% YoY in Q4 2018.
- While Mexico's 20% tariff was significantly less than China's 50% tariff, the value of U.S. exports declined by a very similar amount. This reflects China's reliance on pork for protein consumption as well as the rising pork prices in China in late 2018.
- The outbreak of ASF in China has drastically transformed its and the world's pork supply and demand in the last year, yet the continued trade dispute between the U.S. and China will mean trade flows of U.S. pork to China will be driven more by politics than economics.



COOKED BEEF to Canada

Incremental Tariff: 10% Q4 2018 YoY Value Change: -15%

- Canada is a relatively small purchaser of U.S. beef, accounting for less than 10% of U.S. beef exports. However, it is a more important customer on a value basis as these products include beef jerky, meatloaf, meatballs, cooked ground beef, and prepared meals with beef.
- These products have cemented supply chains, which make it difficult for both the U.S. and Canada to substitute these products with those from other markets, especially for a tariff of just 10%.
- This tariff was also removed in mid-May, helping to improve U.S. beef exports for the remainder of 2019.



Dairy



WHEY to China

Incremental Tariff: 25% Q4 2018 YoY Value Change: -42%

- U.S. whey exports experienced sharp declines YoY during Q4 2018, along with the rest of the dairy complex which dropped over 47%.
- China has long held the position as the largest whey importer in the world due to the utilization of whey and lactose in hog feed. The ASF outbreak, which first arose in August 2018, raised concerns that this would further hamper dairy exports to China since whey historically has been two-thirds of total dairy export value. However, whey's share of Chinese dairy exports has continued to hold firm, suggesting that despite outbreak concerns, the larger factor in reducing demand was the 25% tariff rate.
- Despite the export value lost, whey prices have stayed firm, in part due to the strength of global demand for cheese which has driven Class III milk to its highest price since December 2014.
- Long term, it will be years until China is able to be self-sufficient in dairy
 production. When the tariffs are lifted, U.S.' export value should rise again despite
 China's diversification of dairy importing countries.



CHEESE to Mexico

Incremental Tariff: 25% Q4 2018 YoY Value Change: +3%

- Global cheese demand growth has long been the bright spot in the complex.
 Mexico is no exception as the largest U.S. dairy importer with \$1.4 billion in sales in 2018 and an 80% share of Mexico's dairy imports.
- Despite the tariff, Mexico saw an increase in export volume and value of 2.6%. This
 growth was driven by the geographic and supply chain advantage the U.S. holds,
 the existing 25% tariff that Mexico has with the EU, and the strong base of quesostyle production in the U.S.
- The Mexican tariffs were lifted in May, ensuring the Mexico will continue to serve as a vital player in the U.S. dairy export market.



Conclusion

U.S. farms are taking the brunt of the retaliatory tariffs placed on their products, reflecting the lopsided balance of power between U.S. producers and their importing customers. The commoditized nature of agricultural products, inventories with long shelf lives, and ease of identifying and sourcing suitable substitutes are among the factors that give importing customers the upper hand. In some instances, the U.S. is able to take on less of a share in the cost of retaliatory tariffs due to geographic and supply chain advantages, and/or dominance in particular markets.

The more time that tariffs are in place, the more time our competitors have to take U.S. market share and cement trade relationships. With the prospect of declining bargaining power, U.S. exporters of most agricultural commodities will face still greater pressure to absorb more – if not all – of the costs of retaliatory tariffs in the future.

CoBank's Knowledge Exchange Division welcomes readers' comments and suggestions.

Please send them to KEDRESEARCH@cobank.com.

Disclaimer: The information provided in this report is not intended to be investment, tax, or legal advice and should not be relied upon by recipients for such purposes. The information contained in this report has been compiled from what CoBank regards as reliable sources. However, CoBank does not make any representation or warranty regarding the content, and disclaims any responsibility for the information, materials, third-party opinions, and data included in this report. In no event will CoBank be liable for any decision made or actions taken by any person or persons relying on the information contained in this report.