U.S. Soybean Exports to China Crushed Amid Rising Trade Tensions

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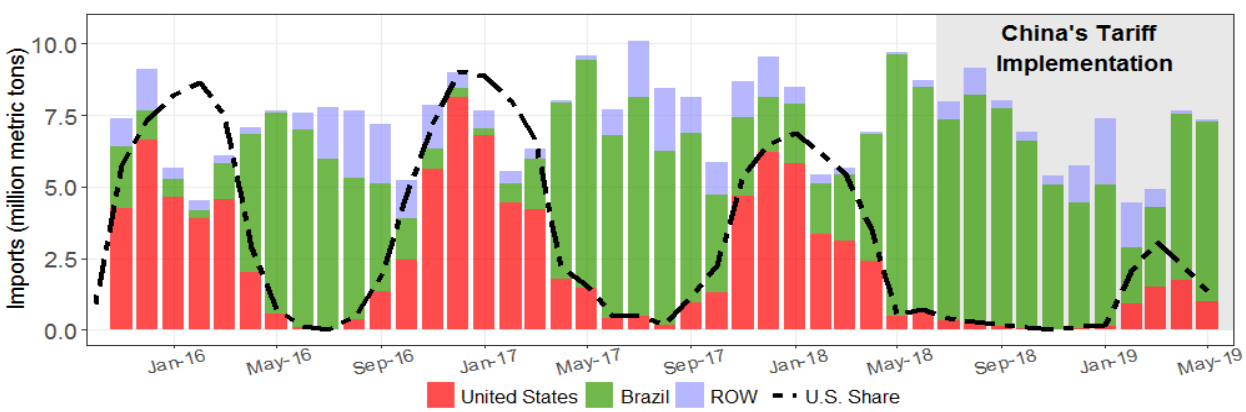
U.S. soybean farmers have faced multiple headwinds since 2018, given slowing global demand, rising stock levels, and lower prices for their commodity. As exports to their largest market, China, dropped by 75% (y/y) in 2018 amidst rising trade tensions, U.S. soy farmers have sought new ways to stay competitive. This has included participating in new U.S. government aid programs, slashing prices, and finding new markets. Even if trade tensions subside, it has been observed that (1) pricing is not the only determinant of competitiveness in China's market; (2) alternative suppliers (e.g., from Brazil) can serve as at least temporary substitutes; and (3) China's state-owned enterprises are highly responsive to their government's changing positions on soy.

Soy's Significance in U.S.-China Trade. Soybeans are the largest and most concentrated[1] segment of global agricultural (ag) trade. While the U.S. and Brazil together collectively accounted for 80% of global soy supply, they export it at different times of the year. Given hemispheric temperature differences, the U.S. supplies most soy from October to March, while Brazil mostly supplies it in the rest of the year. Soy is the U.S.' largest ag export, averaging $20.9 billion per year (16% of U.S. ag exports) from 2014-18.[2]

China accounts for approximately 60% of global soybean imports,[3] and purchased more than half of all U.S. soy exports in the last 5 years. Such high demand for U.S. soy occurred despite China's precipitous 2018 drop in U.S. imports, following the escalation of bilateral trade tensions. While U.S. soy exports to China amounted to $10.5 billion (62% of U.S. soy exports) in 2016 and $12.2 billion (57%) in 2017, it fell to $3.1 billion (18%) in 2018. The $9.1 billion, or 75% y/y, drop arose from rising trade tensions.

Brazilian Soy Dominates China's 2018 Market. Data on monthly soy trade volume (Fig 1) highlight the drop-off in China's soy imports from the U.S. after the escalation of trade tensions.[4] As shown, the cyclical nature of China's purchases of U.S. soy that usually pick up in October did not do so in 2018. Instead, China substituted Brazilian soy for its usual U.S. purchases, and did so despite a significant price drop of the U.S. commodity (explained below). After a long period of low U.S. prices, and after trade negotiators reached a temporary truce, some U.S. soy was reintroduced on China's market in 2019.[5]

Figure 1: China's Monthly Soybean Imports by Country



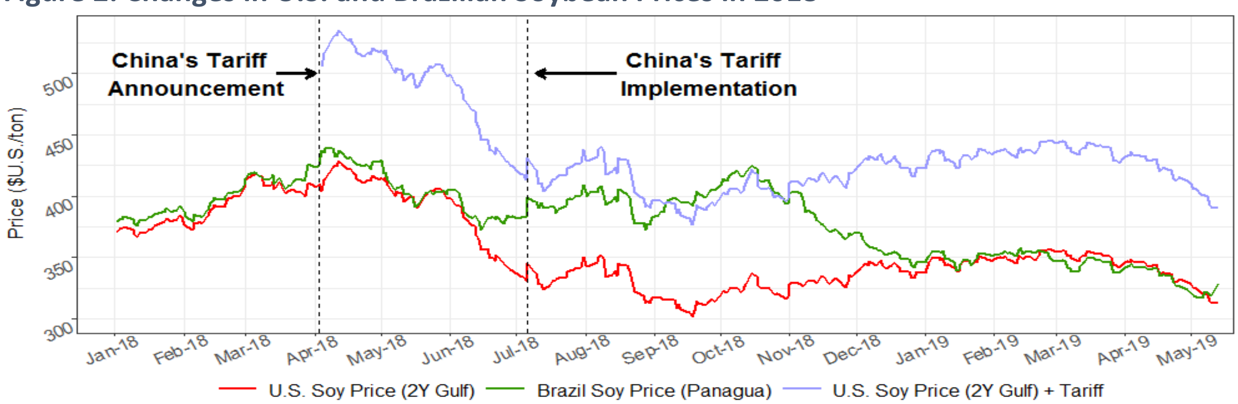
Source: Global Trade Atlas

[1] Most concentrated from supply standpoint, as U.S. & Brazil are main sources. USDA, "Interdependence of China, U.S., and Brazil in Soybean Trade," June 2019.
[2] USITC's Dataweb, accessed June 2019.
[3] USDA, "Interdependence of China, U.S., and Brazil in Soybean Trade," June 2019.
[4] Trade tensions surrounding soybeans started on April 3rd, 2018, when USTR released a $50 billion list of products subject to Section 301 tariffs.
[5] Reuters, "Exclusive: China Makes First Big U.S. Soybean Purchase Since Trump-Xi Truce", December 12, 2019.

Maintaining U.S. Soy's Competitiveness. To maintain U.S. soy industries' competitiveness amid plummeting Chinese demand, several measures were taken in 2018. First, the U.S. Department of Agriculture initiated a series of ag support programs whose combined value amounted to roughly $12 billion.[6] These have included (1) a program to help U.S. ag producers meet lost sales of soy and other products; (2) a "Market Facilitation Program" to help U.S. farmers address tightening Chinese customs procedures whose delays affect the marketability of perishable crops; (3) a "Food Purchase and Distribution Program" to purchase unexpected surpluses of soy and other ag products for redistribution to charities; and (4) a "Trade Promotion Program" to help U.S. farmers develop new export markets.

Because of these new programs and in response to private initiatives, U.S. soy farmers also began exporting to new markets in 2018. As such, the $9.1 billion drop in U.S. exports to China in 2018 was partially offset by a $4.7 billion increase in exports to Mexico, Egypt, the EU, and others in that year.[7] In 2018, U.S. soy farmers also dropped their prices by as much as 24% (commensurate with tariff) between China's April tariff announcement and its July tariff implementation. This price drop was not only higher than historical norms, but did not lead to increases in U.S. exports to China. This is striking since the U.S. soy price even after the tariff imposition was at near parity (and even below) competing country prices.

Figure 2: Changes in U.S. and Brazilian Soybean Prices in 2018



Source: International Grains Council

Implications. Distortions in U.S.-China soy trade arising from bilateral trade tensions have uncovered three important trends. First, U.S. soy prices do not appear to be the only determinants of competitiveness in China's market. After all, in the China market, U.S. soy prices remained at near parity with Brazilian soy prices (since U.S. price drops were roughly proportional to tariff hikes), but were hardly purchased in 2018. Second, and perhaps relatedly, Chinese state-owned enterprises (SOEs) still appear to be efficient and effective implementers of Chinese policy in this sector. This was shown by immediate 2019 increases in soy imports (Figure 1) once U.S. and China struck a trade war truce in December 2018. Almost immediately, Chinese SOEs, including Sinograin and Cofco, purchased $500 million of U.S. soybeans.[8] Third, it is conceivable that if trade frictions continue, new suppliers and purchasers will surface. This was demonstrated by the U.S.'s export diversification in 2018, and China' s small but new purchases from unconventional suppliers, such as Russia, the Ukraine, and Kazakhstan.[9]

Sources: *USDA World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates, June 2019; Global Agricultural Trade System Online, USDA, Accessed July 2019; and USDA, "USDA Assists Farmers Impacted by Unjustified Retaliation," July 24, 2018.*

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[6] USDA, "USDA Assists Farmers Impacted by Unjustified Retaliation," July 24, 2018.
[7] U.S. exports to Argentina were also large, due to the price dynamics. (Spoils of Trade War, Reuters, 2018).
[8] Reuters, "Exclusive: China Makes First Big U.S. Soybean Purchase Since Trump-Xi Truce", December 12, 2019.
[9] Wall Street Journal, "A Surprise Winner From the U.S.-China Trade Spat: Russian Soybean Farmers", February 21, 2019.