U.S. Agricultural Exports to China: The Ups and Downs of U.S. Feed Grains

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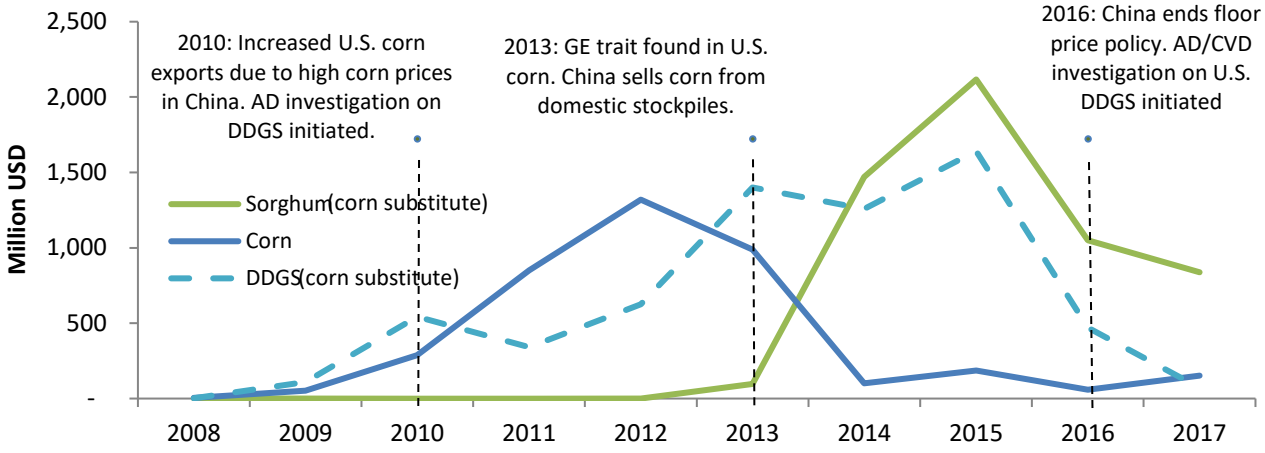
U.S. feed grains exports—— corn, distiller's dried grains with solubles (DDGS), and sorghum——have experienced significant interrelated shifts resulting from Chinese policy decisions aimed at achieving self-sufficiency in certain commodities in the last decade. This Executive Briefing on Trade (EBOT) is one of a series by the Agriculture and Fisheries Division in the Office of Industries, examining how U.S. agricultural exports to China have changed since the March 2011 USITC report, *China's Agricultural Trade: Competitive Conditions and Effects on U.S. Exports (publication no. 4219).This EBOT explores Chinese policy decisions that caused the sudden and short-lived increase of U.S. feed grain exports to China during this time.*

Early years (pre-2010)

Before 2010, U.S. corn exports to China were negligible (figure 1) due to a number of Chinese polices that aimed to support both Chinese corn farmers and consumers. China has long maintained a policy goal of 95 percent self-sufficiency in corn, along with certain other grains, which are deemed essential to feed the country's population. Additionally, in 2008, China implemented the "temporary reserve" policy for corn, among other grains, which established a floor price and mandated government purchases for domestic reserves when the Chinese market prices fell below that price. This policy shielded Chinese producers from low corn prices, but also created market distortions which would impact future trade. Although China's self-sufficiency policy included a willingness to increase certain animal feed imports, such as corn, DDGs and sorghum, other policies deterred corn imports, particularly an opaque allocation process for the corn tariff rate quota (TRQ). [1]

Figure 1. Exports of U.S. corn, sorghum, and DDGs to China, 2008−17



Source: USITC DataWeb/USDOC (accessed March 7, 2018).

[1] China has a WTO TRQ of 7.2 million metric tons (MT) for corn. The in-quota duty is 1% and the duty on out-of-quota is 65%. Historically, it has had a low fill rate (i.e. lower imports through the TRQ relative to the committed TRQ levels) due to a non-transparent allocation process and is subject to an ongoing WTO dispute filed by the United States in 2016. In 2012, for example, the fill rate for the corn TRQ was 72 percent. For more, see USITC, "China's Agricultural Trade," 3/11; USTR, "2015 USTR Report to Congress on China's WTO Compliance," 107-108. USTR, "China – Tariff Rate Quotas," 4/3/2018.

Unintended consequences: elevated domestic prices (2010–12)

From 2011–12 global corn prices were high, and domestic corn prices in China increased significantly, driven by demand from an expanding livestock industry, as well as the price floor policy. To counter the rapid price increase, Chinese officials started to sell off corn from the country's reserves. Nevertheless, demand for feed grains continued to be strong. High domestic prices for corn, distorted by the policy, created an incentive to find substitutes to Chinese corn, including U.S. corn and DDGS. From 2010 to 2012, the export volume of U.S. corn increased at a fast pace as a result. At the same time, Chinese growers continued planting corn, which led to greater accumulations of corn in the country's stockpiles, and a lack of space to store the harvested grain. The temporary reserves program, combined with other policies, such as direct subsidies to farmers and banning corn exports, had allowed China to accumulate the world's largest corn reserves, well above the minimum of 25 percent of consumption established by its government. In 2013, however, global corn prices began to drop in response to record global production.

The downfall of U.S. corn exports to China (2013–14)

In 2013, China rejected a series of U.S. shipments that were found to contain an unapproved strain of genetically engineered (GE) corn. These rejections brought market uncertainty and led to a 90 percent reduction of U.S. corn exports to China from 2013–14. In 2014, China started to sell lower-priced domestic corn from its reserves. Despite the fact that the GE corn variety was approved in China at the end of 2014, U.S. exports did not resume. This is explained, in part, by continued uncertainty about domestic Chinese policy conditions. Nonetheless, high transportation costs in China, as well as long distances between corn growing regions and end-users in the country, created an opportunity for imports of corn substitutes. As a consequence, U.S. exports of DDGS, which had earlier decreased as a result of an anti-dumping (AD) investigation (2010), and sorghum both experienced strong and nominally increasing growth until 2015.

China shifts its policy… again (2016–present)

In 2016, China ended the temporary reserves policy, which had proved too costly, and began encouraging reduced corn plantings. Additionally, the Chinese government expressed its intention to allow agricultural imports, albeit under tight control.[2] However, U.S. feed grains have continued to face headwinds in the Chinese market, as AD and countervailing duties (CVD) investigations against U.S. DDGS (2016) and sorghum (2018)[3] have prevented U.S. feed grains from entering China. Additionally, certain U.S. grains are currently subject to retaliatory tariffs from the Chinese government, which continues to add to the uncertainty in the Chinese market.

Sources: iGrow, "U.S Corn Exports to China," 1/14/15; DimSums, "China's Corn Price Support Problem," 11/29/14; Gale, "U.S. Exports Surge as China Supports Agricultural Prices," 10/24/13; Tomson, "US sorghum exports to China continue to decline," 11/29/17; Demaree, "U.S. groups 'seek help' for China's DDGS trade barriers," 2/9/17; Su, "China's big grain reserves," 4/20/15; Stanway, "China corn reserves eyed as crop area to fall," 5/5/16; Reuters, Mason, "U.S. sorghum ship heads to Cran Canaria," 4/25/18; Wu et al, "Of maize and markets," 12/16; Gale et al, "How tightly has China embraced market reforms in Agriculture?" 6/1/09;; Hornby, "China's rotten grains highlight troubled policy,"4/19/15; Maguire, "Corn bulls shouldn't get too excited," 12/18/14;;; Sapp, "China lobs AD duties," 1/11/17; Dim Sums, "Five Year Plan" 3/26/16; Dim Sums, "China Says Ag Imports from U.S. Are Now Good," 6/4/18.

[2] In the 13th Five Year Plan, the Chinese Government expressed that "moderate" agricultural imports are a necessity and that these "do not conflict with domestic agricultural development as long as imports are steady, controlled, spread out over time, and spread out over different sectors."

[3] Sorghum imports also decreased as U.S. growers turned to higher priced alternative crops reducing the availability of supply.