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Brazil Macro Special Report – Commodities & External Sector

Trade War: An Opportunity for Brazilian Agricultural Exports?

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Bottom line: While the trade war in 2018-20 between the U.S. and China had a minor direct impact on Brazil, it indirectly affected Brazilian agriculture exports. The extent of this impact is the object of the present study, as we analyze the main agricultural commodities in which Brazil and the U.S. compete in exporting to China. What we found back then is that the African Swine Fever (AFS) in China - a supply shock - was clearly the dominant factor at play, followed by trade ban lifts (e.g., U.S. poultry in 2019, Brazilian corn in 2022) which also had major impacts on these markets. In summary, we anticipate a limited upside to total Brazilian exports if China levies retaliatory tariffs on U.S. agricultural products. In any case, expectations of a weaker BRL could provide some tailwinds.

The new U.S. administration takes office January 20 promising new import tariffs. As expected, the tariff outlook is uncertain: the U.S. trade policy scope is yet to be determined, and so is the eventual Chinese response. While we recognize that the unpredictable nature of international trade relations leaves numerous variables at play, **the present study attempts to provide insight in the event of retaliatory Chinese tariffs on U.S. agricultural products and the potential impact on Brazilian exports.**

Trade War 1.0: 2018-2020

The trade war between the U.S. and China in 2018-2020 was marked by a series of escalating tariffs and retaliatory measures. At the time, the U.S. imposed tariffs on billions of dollars' worth of Chinese goods, citing unfair trade practices and intellectual property theft. China responded with its own tariffs on U.S. products, targeting key industries such as agriculture and automotive. A partial resolution was reached with the signing of the Phase-1 Agreement in January 2020, which included commitments from China to increase purchases of U.S. goods. While the U.S. did not impose significant new tariffs on Brazilian agricultural products, the U.S. did raise tariffs on steel and aluminum imports from various countries in 2018, including Brazil.

Trade War 2.0: 2025

This time around, the new administration is looking to implement a broad tariff policy, ranging from 10-20% on all imports, with even higher tariffs of up to 60% on goods from China. The U.S. imports several agricultural products from Brazil such as coffee, orange juice, beef, and sugar among others. We believe it is unlikely that tariffs will rise for these products, as it would lead to inflation. Brazil is the main supplier of coffee and orange juice to the U.S., and one of the top suppliers of beef and sugar.

While the trade war in 2018-20 between the U.S. and China had a minor direct impact on Brazil, it indirectly affected Brazilian agriculture exports. The extent of this impact is the object of our study, as we analyze the main agricultural commodities in which Brazil and the U.S. compete in exporting to China: soybean, corn, pork, beef, and poultry.

1. Soybean

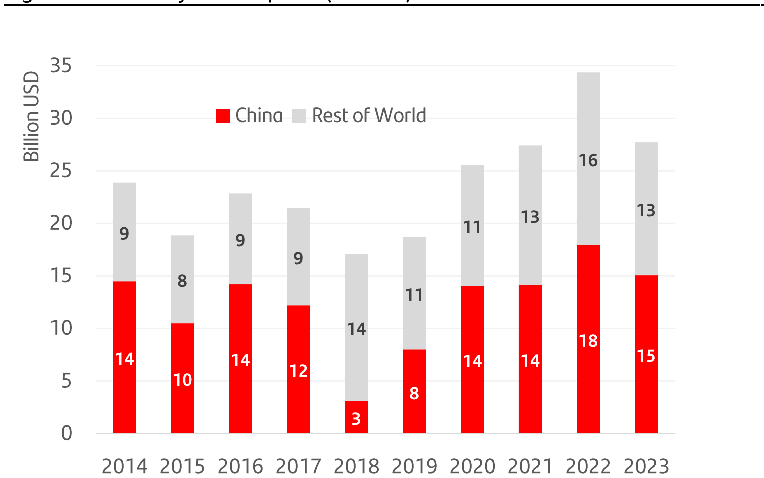
Soybean – the most affected commodity. Before the trade war, China was by far the largest importer of soybean from the U.S. (60% in 2018). In 2018, as China imposed a 25% tariff on U.S. soybean - a significant increase from the previous 3% tariff - exports to China virtually dried up (Figure 1). With the loss of the Chinese market, U.S. soybean farmers were left with a glut of crop, resulting in large stockpiles. This surplus exacerbated price declines (Figure 2) and created financial uncertainty for farmers, who had to either hold onto their crops or sell at a loss. Indeed, the share of U.S. soybean stocks stored on farms jumped during the 2018/19 season (Figure 3). U.S. soybean producers tried to redirect exports to other countries, such as the European Union, Mexico, and several Asian nations. However, these markets were unable to absorb the same volume of soybeans as China.

Phase-1 Agreement (2020). In January 2020, the U.S. and China signed the Phase-1 trade agreement, which included a commitment from China to purchase an additional USD40 billion worth of U.S. agricultural products over two years, including soybean. This deal helped restore some stability to U.S. soybean exports to China, though it did not immediately return the market to pre-trade war levels.

In the meantime, the Chinese market turned to other suppliers, notably Brazil and Argentina. Brazil, which at the time was the world's second largest soybean producer after the U.S., became the dominant supplier, filling the void left by reduced U.S. exports to China. As production in Brazil continued to rise from 2013 to 2024, soybean output grew at an impressive 78% (Figure 4). Indeed, bumper crops from 2022/23 onward enabled Brazil to meet higher export demand (Figure 6), and the coming 2024/25 harvest is expected to set a record.

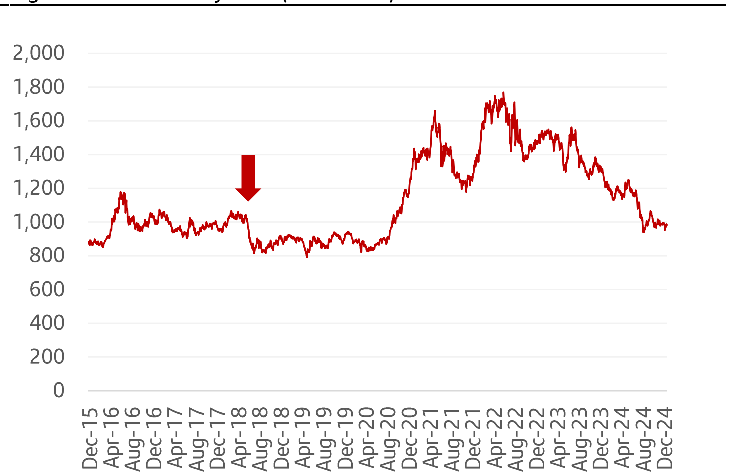
This episode in the soybean market is a good example of a partial equilibrium in economics. The displacement did not cause a shift in the global demand curve for soybean, but it redistributed demand between the exporting countries. The U.S. experienced lower prices and exports, while Brazil saw higher prices and exports.

Figure 1 – U.S. Soybean Exports (USD bn)



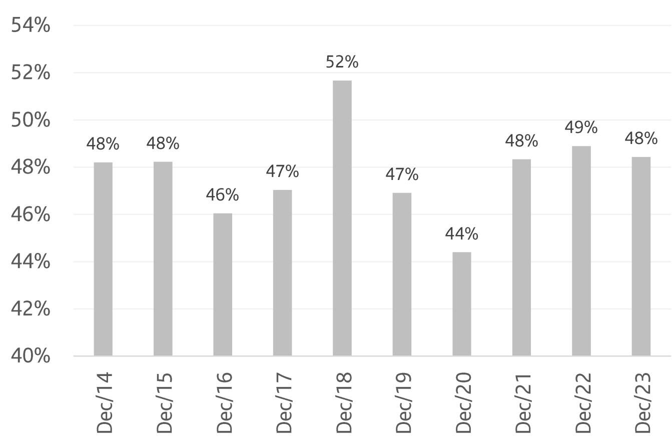
Sources: USDA, Santander.

Figure 2 – CBOT - Soybean (USD cents)



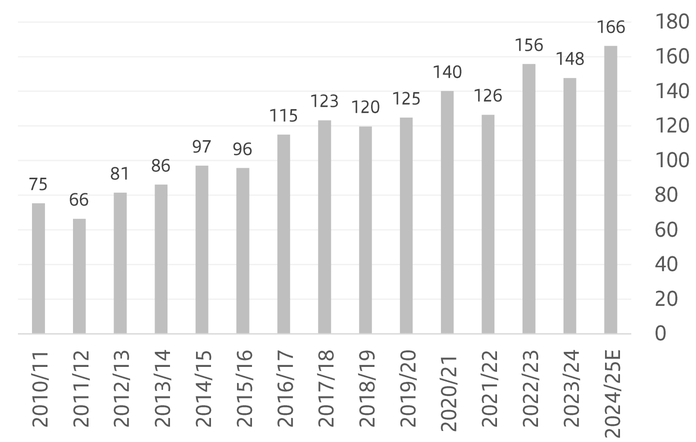
Sources: Bloomberg, Santander.

Figure 3 – U.S. Soybean Quarterly Stocks – On Farms (% of total)



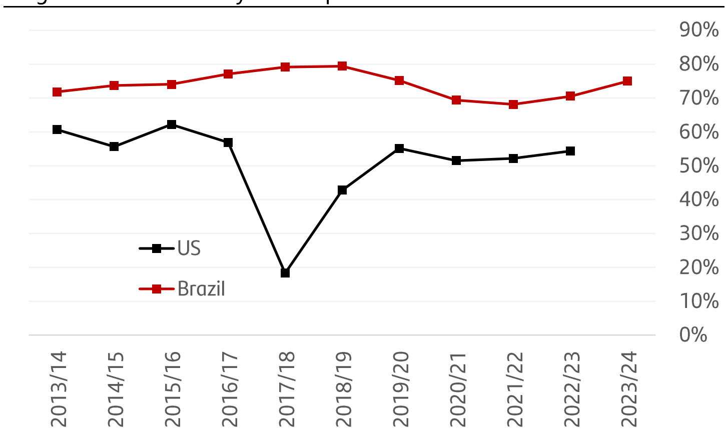
Sources: USDA, Santander.

Figure 4 – Brazil Soybean Production (million ton)



Sources: Conab, Santander.

Figure 5 – Share of Soybean Exports to China



Sources: SECEX, USDA, Santander.

Figure 6 – Brazil Soybean Exports Accumulated in 12 Months (million ton)– Top 5 countries

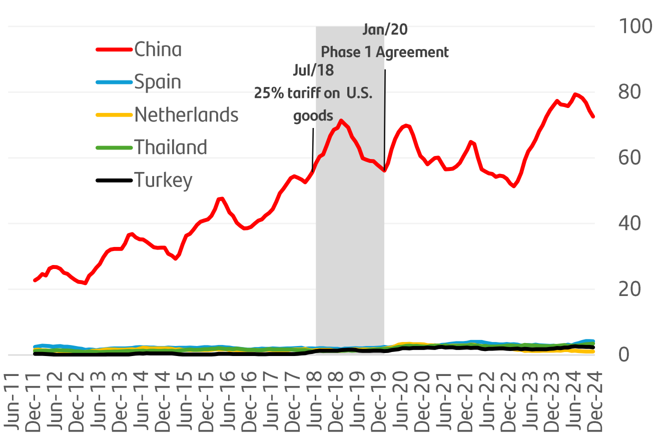
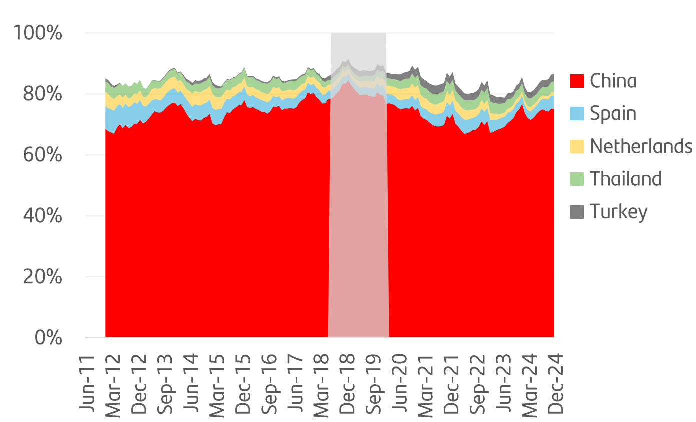


Figure 7 – Brazil Soybean Exports (share) – Top 5 countries



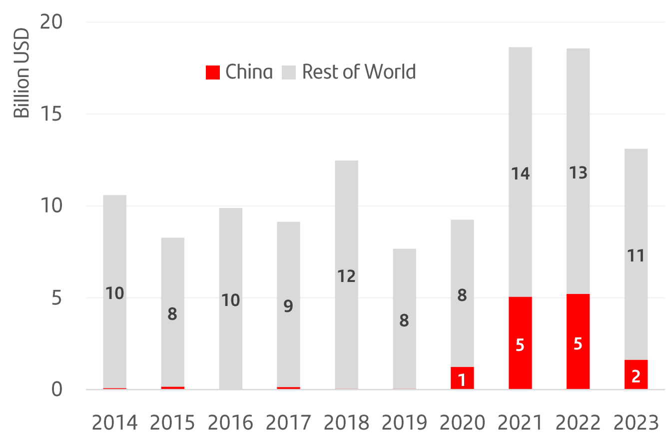
Sources: SECEX, Santander.

Sources: SECEX, Santander.

2. Corn

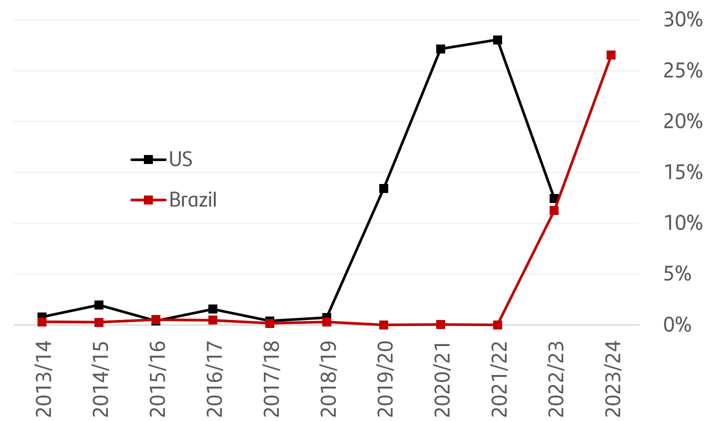
Before the trade war, China was a small market for U.S. corn exports. The U.S. is the world's largest producer and exporter of corn, with much of the U.S. corn supply being used domestically. Back in 2017, China accounted for only 2% of U.S. corn exports (Figure 8), with other countries, such as Mexico and Japan, much larger markets for U.S. corn. As such, when China imposed a 25% tariff on U.S. corn, the impact was less severe compared to soybean.

Figure 8 – U.S. Corn Exports (USD bn)



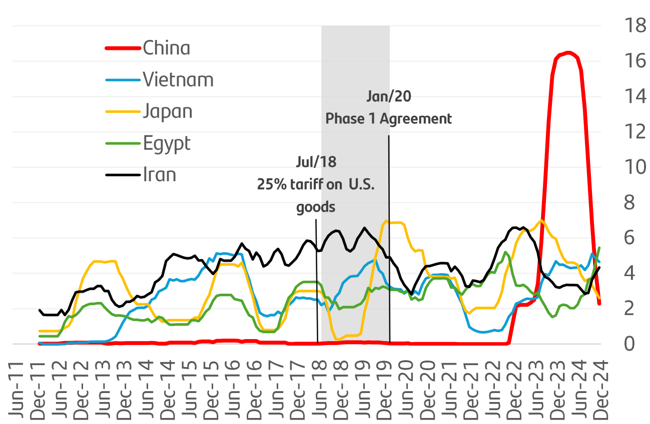
Sources: USDA, Santander.

Figure 9 – Share of Corn Exports to China



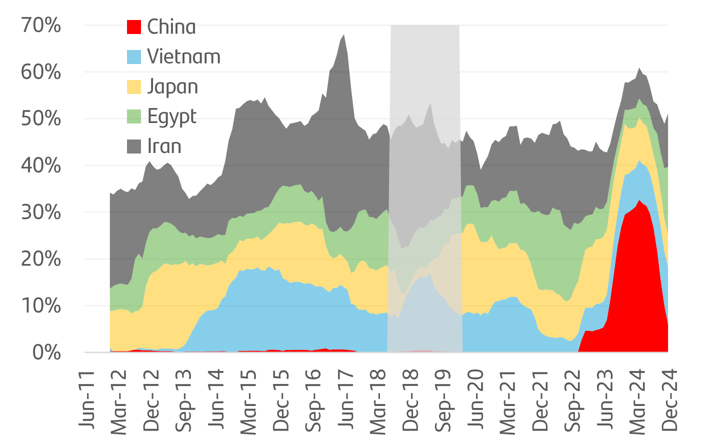
Sources: SECEX, USDA, Santander.

Figure 10 – Brazil Corn Exports Accumulated in 12 Months (million ton) – Top 5 countries



Sources: SECEX, Santander.

Figure 11 – Brazil Corn Exports (share) – Top 5 countries



Sources: SECEX, Santander.

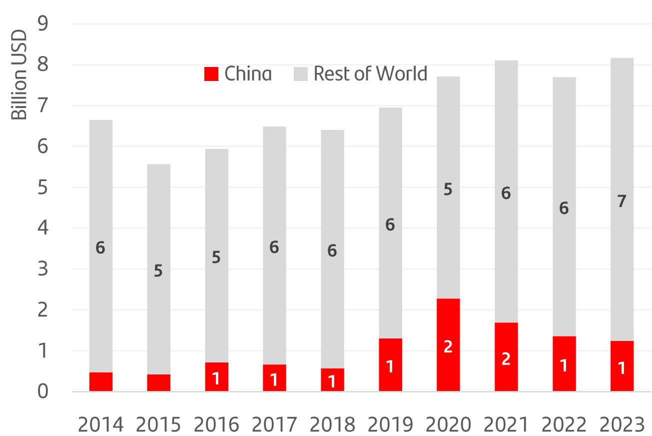
During this period, U.S. farmers had the domestic market to fall back on, especially the ethanol (about 40% of the U.S. corn crop is used for ethanol) and livestock sectors, in which corn is the primary feed for cattle, poultry, and pork. After the Phase-1 deal in 2020, like in soybeans, China began to purchase more U.S. corn.

As for Brazil, until very recently, corn trade with China was minimal. It was only in 2022, after the two countries signed new phytosanitary agreements - which allowed Brazilian corn to meet Chinese import standards - that exports to China surged to an impressive 16 million metric tons in 2023/24 (Figure 10). More recently, however, both the U.S. and Brazil have seen their exports plummet due to diminished appetite from China.

3. Livestock

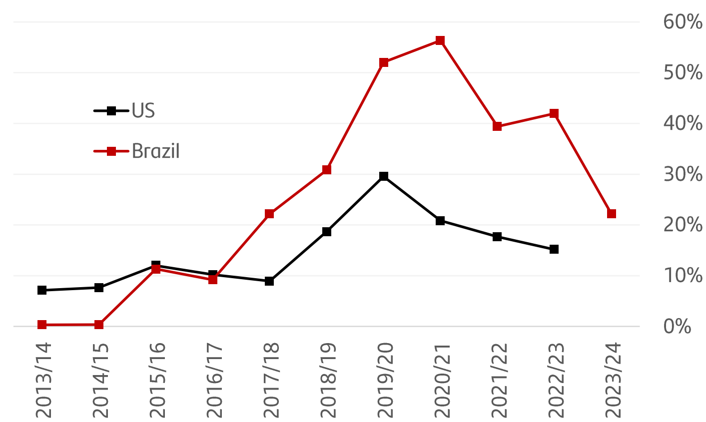
Pork: When the U.S. and China began imposing retaliatory tariffs as part of the trade war, the 25% tariff on U.S. pork led to a decline in U.S. pork exports to China. However, in 2018, China was grappling with the devastating effects of the African Swine Fever (ASF), a highly contagious disease that decimated an estimated 45% of China's pig population. As a result, China's need for pork skyrocketed, leading to a resurgence of U.S. pork exports (Figure 12), with Brazilian pork exports also benefiting from it (Figure 14). **Hence, the primary driver of the increased Chinese pork purchases from Brazil was the ASF crisis, a supply shock.**

Figure 12 – U.S. Pork Exports



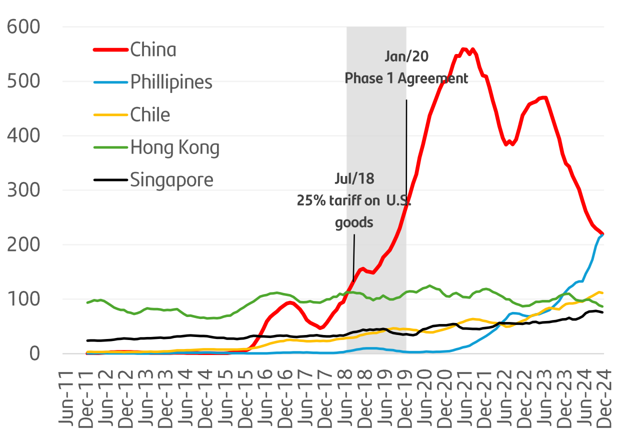
Sources: USDA, Santander.

Figure 13 – Share of Pork Exports to China



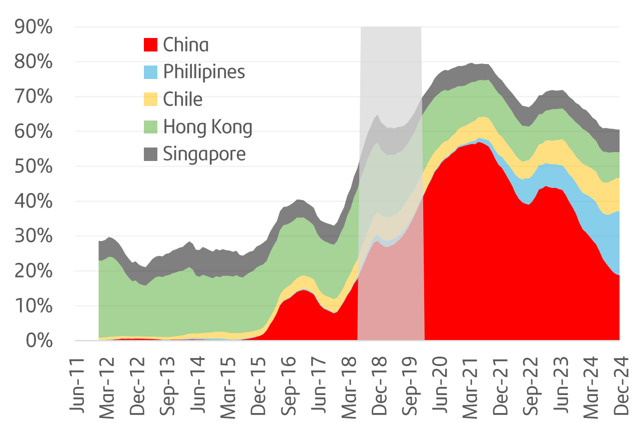
Sources: SECEX, USDA, Santander.

Figure 14 – Brazil Pork Exports Accumulated in 12 Months (thousand ton) – Top 5 countries



Sources: SECEX, Santander.

Figure 15 – Brazil Pork Exports (share) – Top 5 countries



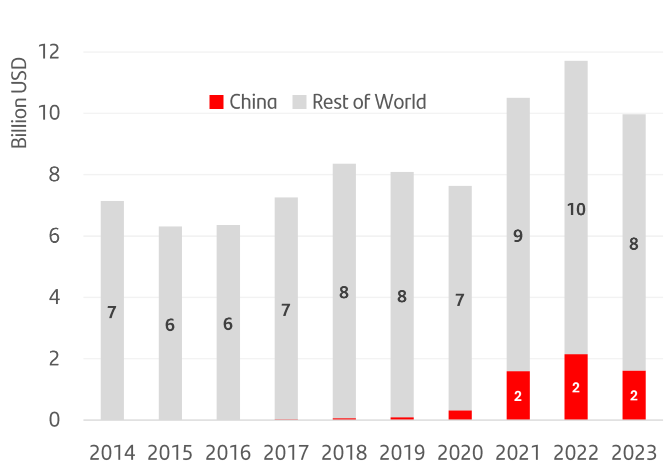
Sources: SECEX, Santander.

Beef: By 2017, U.S. beef exports to China had started to grow steadily, though they still represented a small portion of total U.S. beef exports when compared to the largest export markets such as Japan and Mexico. However, the beef industry had seen its share of challenges in gaining traction in China due to competition from other beef-exporting nations, such as Brazil, Australia, and Argentina.

The U.S. beef market is much more oriented toward domestic consumption than some other agricultural products, with beef making the protein bulk of U.S. households.

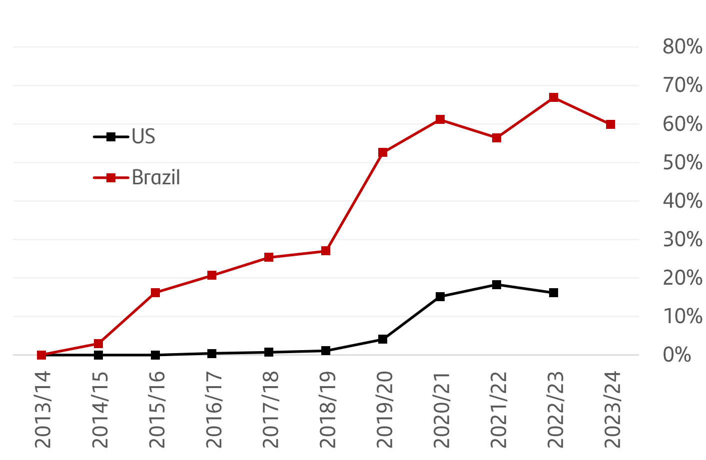
With the ASF crisis in China and the subsequently shortage of domestic pork production, Chinese demand for alternative protein sources increased substantially. The U.S. saw a boost in beef exports to China (Figure 16), and so did Brazil (Figure 18). In 2018 and 2019, the Chinese government expedited the approval process for more than 60 Brazilian meat processing plants to export beef to China. Worth noting, back in the day Brazilian beef was cheaper relative to its international peers (Figure 20). **As with pork, the primary driver of the increased Chinese beef purchases from Brazil was the ASF crisis.**

Figure 16 – U.S. Beef Exports



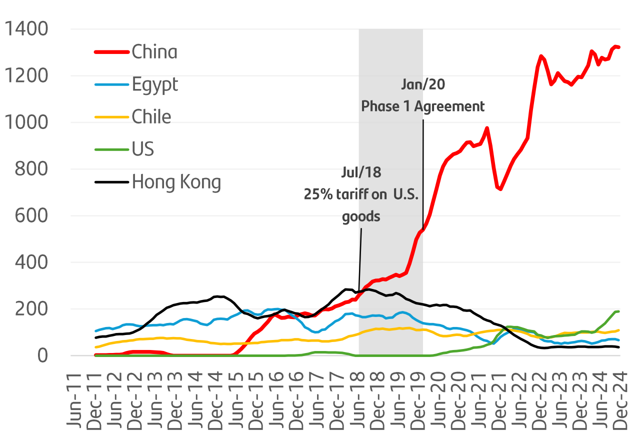
Sources: USDA, Santander.

Figure 17 – Share of Beef Exports to China



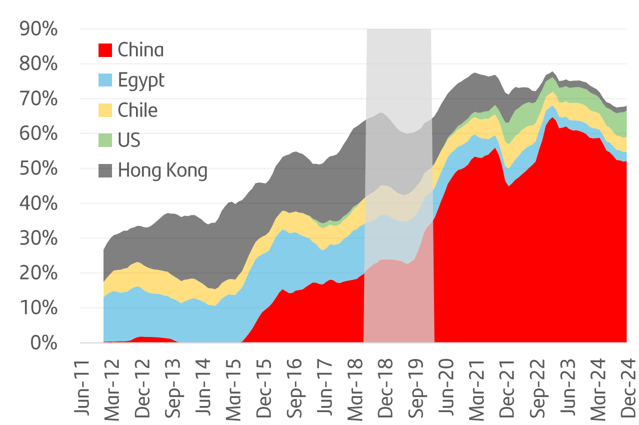
Sources: SECEX, USDA, Santander.

Figure 18 – Brazil Beef Exports Accumulated in 12 Months (thousand ton) – Top 5 countries



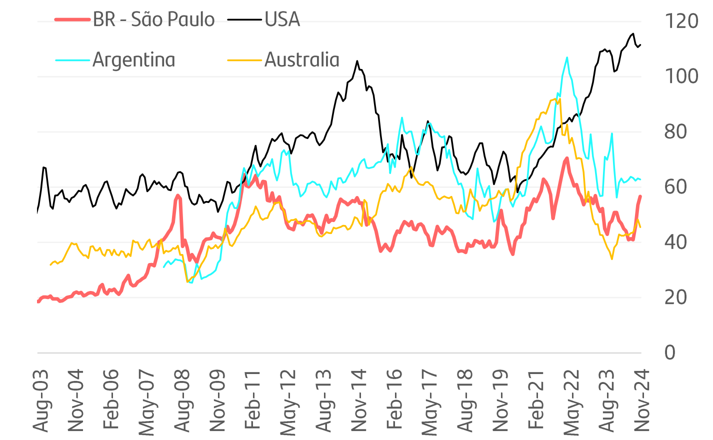
Sources: SECEX, Santander.

Figure 19 – Brazil Beef Exports (share) – Top 5 countries



Sources: SECEX, Santander.

Figure 20 – Cattle International Prices (USD/@)

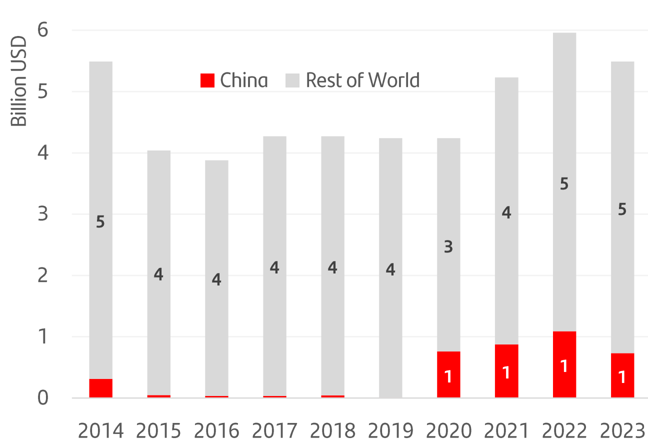


Sources: Athenagro, Santander.

Poultry: Before the trade war, the tariff rates on U.S. poultry were relatively low, typically ranging 10-15%, depending on the specific product. However, the Chinese government banned U.S. poultry exports in January 2015 due to concerns over an outbreak of avian influenza (bird flu) in the United States in late 2014. When China lifted the ban in 2019, U.S. poultry exports surged significantly (Figure 21). And again, the ASF crisis in China prompted Chinese consumers to seek alternative protein sources, benefiting U.S. and Brazilian producers (Figure 23). **Once again, as with pork and beef, the primary driver of the increased Chinese poultry purchases from Brazil was the ASF crisis.**

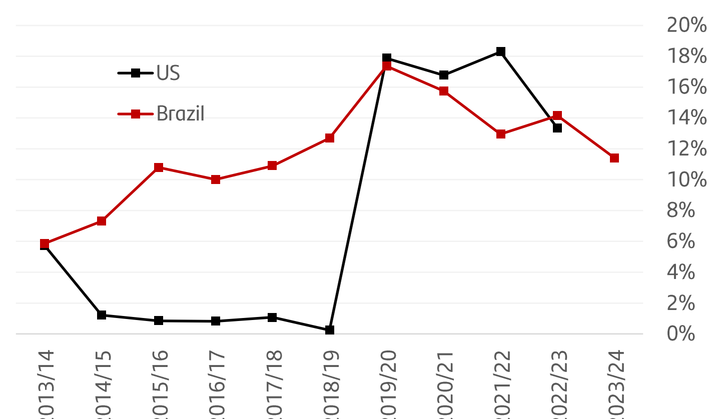
This episode in the protein market is a good example of a general equilibrium in economics. A supply shock (ASF crisis) in the pork market can ripple through other interconnected markets: beef and poultry. Consumers in China, facing a shortage of pork, substituted pork with other proteins.

Figure 21 – U.S. Poultry Exports



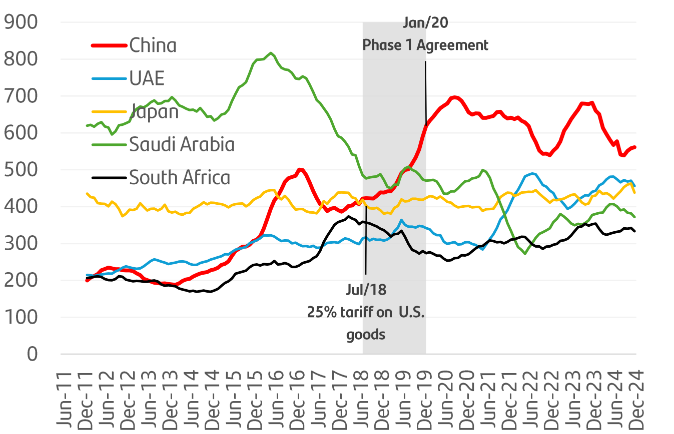
Sources: USDA, Santander.

Figure 22 – Share of Poultry Exports to China



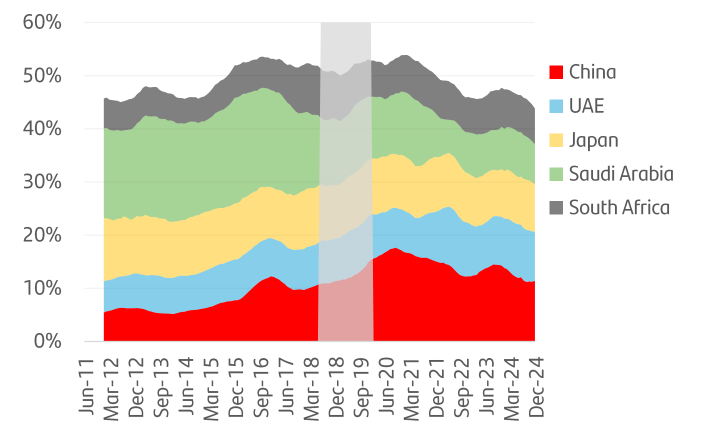
Sources: SECEX, USDA, Santander.

Figure 23 – Brazil Poultry Exports Accumulated in 12 Months (thousand ton) – Top 5 countries



Sources: SECEX, Santander.

Figure 24 – Brazil Poultry Exports (share) – Top 5 countries

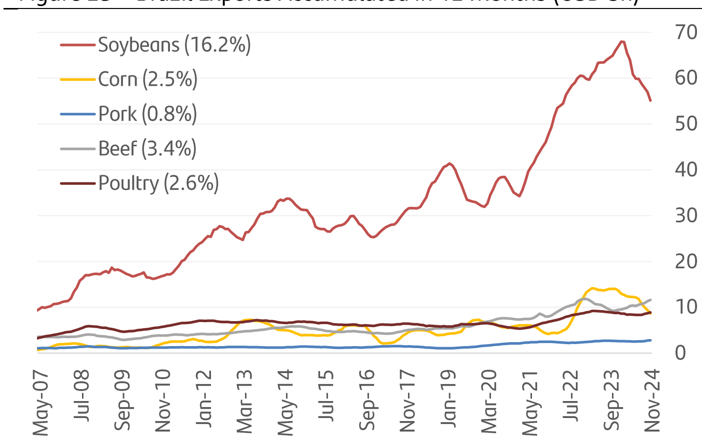


Sources: SECEX, Santander.

Soybean: A One-Man Show in Brazilian Agricultural Exports

Do exports of all these agricultural commodities need to increase for us to see an improvement in the trade balance? Data from Secretariat of Foreign Trade (SECEX) shows that these five agricultural commodities account for roughly 25% of total exports (accumulated in 12 months): soybean (16.2%), beef (3.4%), poultry (2.6%), corn (2.5%), and pork (0.8%). It is evident that for higher Chinese tariffs on U.S. agricultural products to have a substantial impact on Brazilian exports, soybean exports would need to be the driving force behind the surge (Figure 25). **While the outlook for the upcoming 2024/25 Brazilian harvest is promising, we anticipate that soybean prices will remain below USD10/bushel, offsetting the total export value.**

Figure 25 – Brazil Exports Accumulated in 12 Months (USD bn)



Sources: SECEX, Santander.

Takeaways

For soybean, the increase in Chinese tariffs on the U.S. in 2018 has indeed led to a significant decline in U.S. exports to China and a surge in Brazilian exports. However, even if the volume of exports increases this time - given the upcoming bumper crop in 2024/25 – we expect subdued prices should offset the total value of exports.

For corn, the impact of Chinese tariffs was negligible as China was a small market for the U.S., while Brazilian exports became relevant only in 2022, when Brazil met Chinese import standards. However, given China's recent record corn harvests, the country's future demand may not meet expectations.

And for proteins (pork, beef, poultry), the main driver of the impressive surge of Brazilian exports was the ASF in China, not the increase in Chinese tariffs itself. Hence, we highlight the opportunity posed by the recent outbreak of foot-and-mouth disease (FMD) in Germany, which has led to export bans from several countries.

The 2018-2020 period showed that the AFS in China - a supply shock - was clearly the dominant factor at play, followed by trade ban lifts (e.g., U.S. poultry in 2019, Brazilian corn in 2022) that also had major effects in these markets**. In summary, we anticipate a limited upside in total Brazilian exports due to an eventual retaliatory Chinese levy on U.S. agricultural products.** In any case, expectations of a weaker BRL, if proved correct, could provide some tailwinds to Brazilian exports.

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