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INSIGHT

Tariffs and the Infant Formula Shortage

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The United States is experiencing a shortage of infant formula. The shortage is localized to the United States. Some analyses argue that high tariffs on formula impeded the development of foreign sources of infant formula for the U.S. market and exacerbated the U.S. shortage. As a result, tariffs are a focus of congressional attention, and legislation addressing tariffs has been introduced. Below are answers to key questions about trade in infant formula.

How Are Imports of Infant Formula Classified?

Subheading 1901.10 of the Harmonized Tariff Schedule of the United States (HTSUS) covers formula marketed *both for infants and young children*. Infants are defined in FDA regulation as individuals aged not more than 12 months old, whereas a *child* is defined as an individual older than 12 months but younger than 12 years.

Defining Infant Formula

The Federal Food Drug and Cosmetic Act defines infant formula as "a food which purports to be or is represented for special dietary use solely as a food for infants by reason of its simulation of human milk or its suitability as a complete or partial substitute for human milk."

While both infant and children's formula are considered food products, infant formula is subject to additional oversight. The current shortage applies primarily to infant formula, particularly for use in infants with specific health needs. Because HTSUS 1901.10 includes both infant formula and children's formula, some recent discussions on the impact of tariffs have relied on trade data that included both types of formula. The HTSUS codes that have been used to classify infant formula between 2012 and 2021, and which were used for the data in this Insight, can be found in the shaded text box to the right.

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Does the United States Import Infant Formula?

The United States imports little infant formula relative to its domestic production and consumption. Between 2012 and 2021, the United States produced an estimated average 524 million kilograms ($2.3 billion) of infant formula annually. An industry analysis calculated average demand over that time at approximately $2 billion annually, leaving the United States with an average surplus of $300 million annually. During that time, the United States exported an average of 33.5 million kilograms ($277.1 million) annually and imported an average 3.2 million kilograms ($13.4 million) (**Figure1**). Imports of infant formula increased over the past decade from approximately 1.3 million kilograms ($3.8 million) in 2012 to 4.3 million kilograms valued ($28.8 million) in 2021(**Figure 2**). In 2021, the $28.8 million in imports satisfied approximately 1.5% of the estimated domestic demand of $1.8 billion.

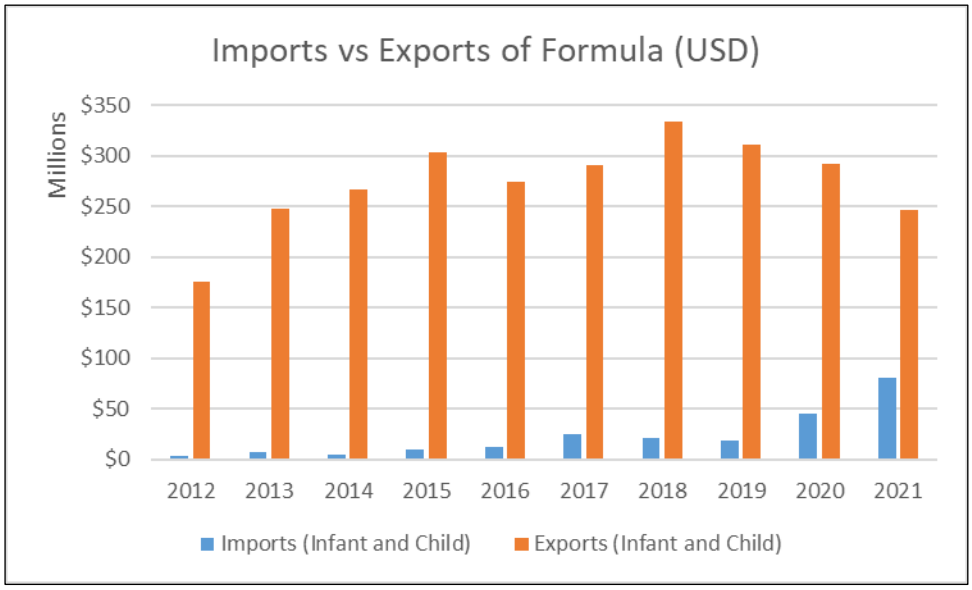
In 2021, the largest source of imports of infant formula was Ireland (2.3 million kilograms, $17.2 million) followed by Chile (1.2 million kilograms, $3.3 million) and the Netherlands (0.5 million kilograms, $7.1 million). Those three countries represented 93% of all imports (by quantity) (**Table 1**). They similarly represent the top three sources of U.S. imports of infant formula between 2012 and 2021 (**Figure 3**). In 2021, the United States imported no infant formula from Canada. Although Mexico is a large source of U.S. imports of *children's* formula (98% of imports by quantity in 2021), it is a relatively minor source of *infant* formula (0.4%). Whereas imports of children's formula were relatively rare prior to 2020, they are more common in the two years since (**Figure 4**).

HTSUS Codes for Infant Formula (2012-2021)

1901.10.05
1901.10.10
1901.10.11
1901.10.15
1901.10.16
1901.10.21
1901.10.26
1901.10.29
1901.10.30
1901.10.31
1901.10.33
1901.10.35
1901.10.36
1901.10.40
1901.10.41
1901.10.44
1901.10.45
1901.10.49
1901.10.55
1901.10.60
1901.10.75
1901.10.80
1901.10.85
1901.10.90
1901.10.95

Figure 1. Imports and Exports of Formula (Infant and Young Child)

2012-2021 (millions of U.S. dollars)

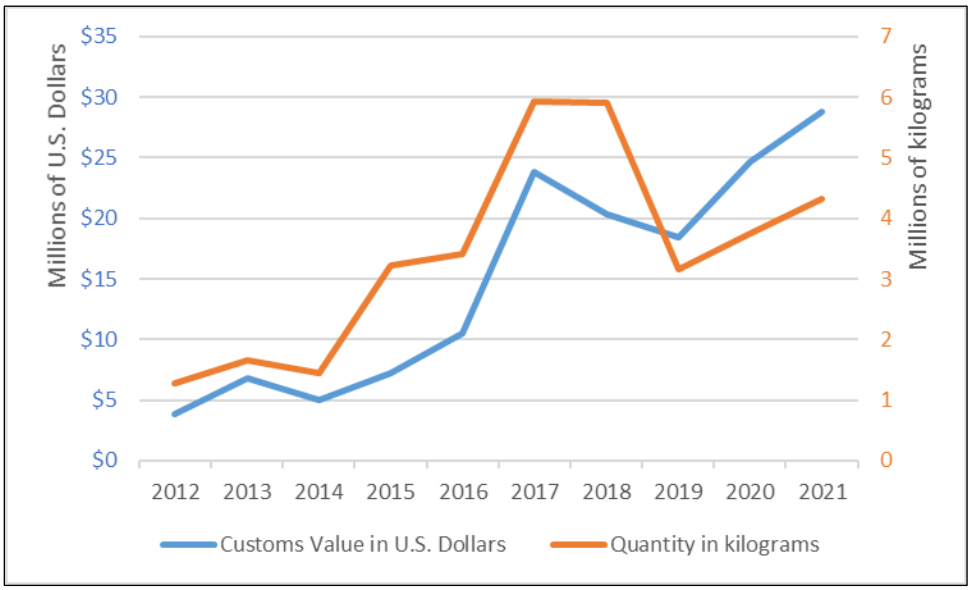


Source: U.S. Census Bureau.

Notes: U.S. export data is not as granular as the import data and it is difficult to disaggregate infant from child formula in export numbers. However, surveys conducted by CRS of imports of U.S.-made formula in other national statistics suggests that most U.S. exports are of infant formula.

Figure 2. Imports of Infant Formula

2012-2021 (Customs Value and Quantity)

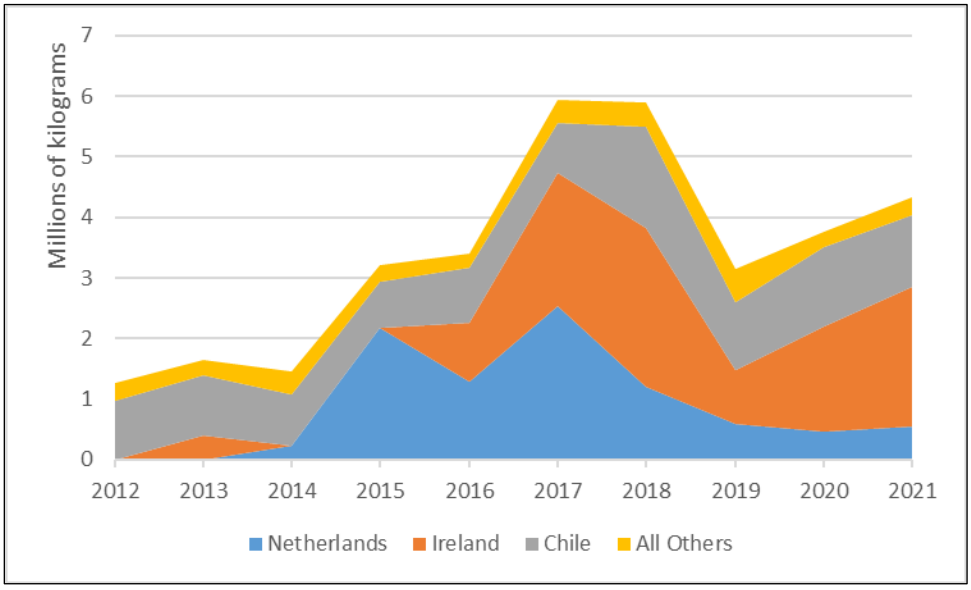


Source: U.S. Census Bureau.

Notes: Infant formula only. See shaded box for HTSUS codes.

Figure 3. Sources of Imports of Infant Formula

2012-2021 (millions of kilograms)

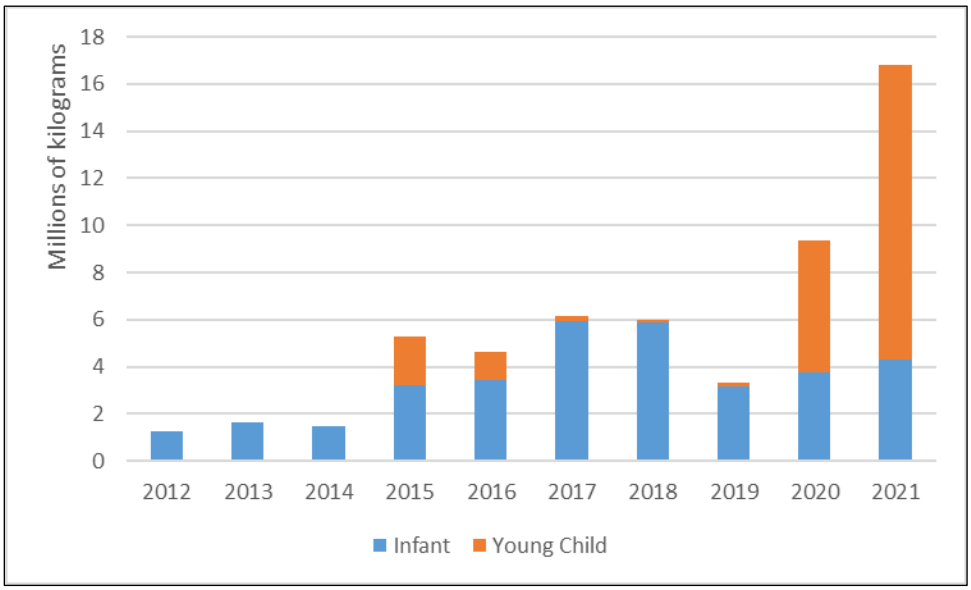


Source: U.S. Census Bureau.

Notes: Infant formula only. See shaded box for HTSUS codes.

Figure 4. Imports of Formula (Infant and Young Child)

2012-2021 (millions of kilograms)



Source: U.S. Census Bureau.

Notes: As many sources have not distinguished between formula suitable for infants and formula suitable for young children in their figures, both are included here for illustrative purposes.

Table 1. Sources of Imports of Infant Formula in 2021

Country	Quantity of Imports (kilograms)	Value of Imports (U.S. Dollars)	Average Cost per Kilogram (U.S. Dollars)
Ireland	2,297,934 kg	$17,191,723	$7.48
Chile	1,179,763 kg	$3,296,057	$2.79
Netherlands	551,802 kg	$7,092,049	$12.85
Brazil	183,171 kg	$325,245	$1.78
Venezuela	43,143 kg	$110,104	$2.55
Serbia	36,486 kg	$35,272	$0.97
Mexico	18,377 kg	$514,488	$28.00
Australia	8,244 kg	$230,838	$28.00
Greece	1,620 kg	$15,034	$9.28
Denmark	518 kg	$6,728	$12.99
El Salvador	480 kg	$6,000	$12.50
United Kingdom	9 kg	$2,223	$247.00
Sum	4,321,547 kg	$28,825,761	$6.67 (average)

Source: U.S. Census Bureau.

Notes: Infant formula only. See shaded box for HTSUS codes.

What are U.S. Tariffs on Imports of Infant Formula?

The most-favored-nation (MFN) tariff rate for infant formula ranges from 14.9% to 17.5% depending on the content. Once a certain threshold of imports is reached, the duties on most common infant formulas increase to $1.035 per kilogram + 14.9%. In addition, once another threshold is reached, certain low-priced formulas may be subject to additional tariffs. Certain infant formulas enter duty free from some free trade agreement (FTA) partners. Between 2012 and 2021, the United States imported approximately $149 million in infant formula, $29 million (19.4%) of which entered duty free. The average effective calculated duty rate on the remaining imports was 25.1%.

Did the United States-Mexico-Canada Agreement (USMCA) Place Additional Tariffs on Imports of Formula from Canada?

The USMCA did not place additional tariffs on imports of formula from Canada. However, the USMCA included a new requirement that Canada monitor its global exports of formula and provide that information to the United States. If Canada's exports of formula exceed approximately 40,480 metric tons (40,480,000 kilograms) globally between August 1, 2021 and July 31, 2022 (the dairy year), Canada is obligated to impose an export charge of CAD 4.25 (approximately $3.31) per kilogram. In the 2020-2021 dairy year, Canada exported approximately 1,022 metric tons (1,021,910 kilograms) of formula globally. As such, none of Canada's exports over the past two years have been subject to the charge. Canada would have to export nearly 40 times more formula than it currently does to become subject to the charge.

What Impact Have Tariffs had On the Shortage?

It is difficult to assess the impact U.S. tariffs have had on the current shortage. The U.S. infant formula market, as mentioned above, is highly saturated, with domestic producers exceeding U.S. domestic demand by a considerable margin. That, coupled with the FDA's nutritional requirements and the U.S. Department of Agriculture's Special Supplemental Nutrition Program for Women, Infants, and Children's (WIC) sole-sourcing contracting, may make the United States a relatively unattractive market for foreign manufacturers, particularly of low-cost infant formula. As such, Congress might consider encouraging mutual recognition agreements on regulatory testing and certification, or other policy instruments to reduce these trade barriers, in addition to potentially lowering tariff rates.

Non-tariff barriers may have weighed more heavily on the decision by foreign producers not to enter the U.S. market than the tariffs. Of the three major sources of U.S. imports of infant formula, one (Chile) has duty-free access to the U.S. market. Despite that duty-free access, imports from Ireland, which does not have duty-free access to the U.S. market, have grown at a faster pace. Nevertheless, the additional cost tariffs add to imports of infant formula, particularly low-cost formula, may play a role. In 2021, the average cost of infant formula from Ireland and the Netherlands, which is subject to tariffs, was $7.48 and $12.85 per kilogram, respectively; the average cost of infant formula from Chile, by contrast, was $2.79 per kilogram (**Table 1**).

Author Information

Christopher A. Casey
Analyst in International Trade and Finance

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