

Public Comment:
Federal Trade Commission Inquiry into the Infant Formula Crisis

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Overview

This comment begins by describing the market structure for commercial milk formulas (CMFs) globally and in the US, with implications for US trade policy. It also will argue that policymakers should pay special attention to a unique feature of the market: a primary competitor with CMF producers to serve the demand for infant nutrition is human breastmilk. This introduces important public health issues crucial to understanding and supporting resilience in supply chains for infant nutrition. Our main messages are as follows:

- National markets for CMFs are highly concentrated across many countries, including the United States.
- Import barriers—both tariff and non-tariff—are likely contributors to the high level of concentration in the US domestic market.
- While it may favor large firms, the WIC program forces competitive behavior among oligopolistic producers of CMF by generating head-to-head, price-based competition.
- Given risks of unintended consequences in service to small and especially vulnerable markets, prior to any redesign of WIC policymakers could consider four courses of action to address market power and resilience in supply chains for infant nutrition:
 - **Designing a whole-of-government approach to support parents who wish and are able to breastfeed their infants.** The US Breastfeeding Committee and the World Health Organization provide a host of recommendations for ways to do this. Breastmilk is the biggest potential competitor to sales of CMFs by any company.
 - **Reducing barriers to imports of CMFs.** This is likely to increase competition in the US commercial market for CMFs. It is consistent with continued (or enhanced) competitive bidding within the WIC auctions. Availability of imports could also provide a buffer in times of domestic production shocks such as the one the US is experiencing now.
 - **Revisiting US trade policy toward CMFs more broadly,** including the US role in the design of international standards. The US so far has been hostile at the World Trade Organization and Codex Alimentarius Commission toward efforts by countries to prevent aggressive marketing of CMFs, which can interfere with public health measures to support and protect breastfeeding for parents who wish to undertake it.
 - **Exploring ways to support expanded human donor milk banks** that do not create new harbors for monopoly power could also ensure greater resilience in the supply of breastmilk for the most vulnerable infants.

The US and global market for infant formula

Definitions. The American Academy of Pediatrics recommends that babies consume only breastmilk until they are 6 months old and continue to receive breastmilk through at least one year of age.¹ CMFs as an industry category include infant formulas manufactured as breastmilk substitutes (0-12 months). Russ (2022) estimates that about 2.5 million infants (0-12 months) derive a significant portion of their nutrition from CMFs.

CMFs also include products for toddlers and young children (13 months and up, also referred to as “follow-up formula,” “toddler formula,” etc.) that are not formulated to serve as breastmilk substitutes, but are often packaged, shelved, and advertised alongside breastmilk substitutes, in a practice sometimes referred to as “cross-marketing” with breastmilk substitutes. Many toddlers and young children drink CMFs designed for children 13 months and older, though the World Health Organization has declared that this is not medically or nutritionally necessary, since they are generally able to drink cow’s milk by that age (absent allergy or other special conditions).^{2,3} In addition, there is a risk that advertising of CMFs for children 13 months and up.

Market concentration. A comparison of market concentration in the United States relative to other national markets provides useful context. According to data from Euromonitor, two firms accounted for 78.5 percent of US domestic CMF sales in 2019. We use data for 2019 because the pandemic changed the marketing landscape in some places.⁴ These two largest suppliers of formula to the US market are Abbott Laboratories and Reckitt Benckiser. Figure 1 shows that it places the US as 10th (in the top third) among member countries of the Organization for Economic Cooperation and Development for which data exist.

Globally, the 2-firm concentration ratio is much lower, with Nestle and Danone together accounting for 30.4 percent of sales worldwide. They are closely followed by Reckitt Benckiser Group (Mead Johnson), Abbott Laboratories Inc, Feihe International Inc, and Royal FrieslandCampina, together known as the “Big 6” CMF producers. At 58.9 percent, the total sales share of Nestle and Danone in Western Europe is somewhat higher than for the world as a whole (30.4 percent). Yet the differential is not nearly as big as for the combined global versus domestic shares of Abbott and Reckitt Benckiser: 78.5 percent in the United States versus 18.5 percent in the world as a whole.

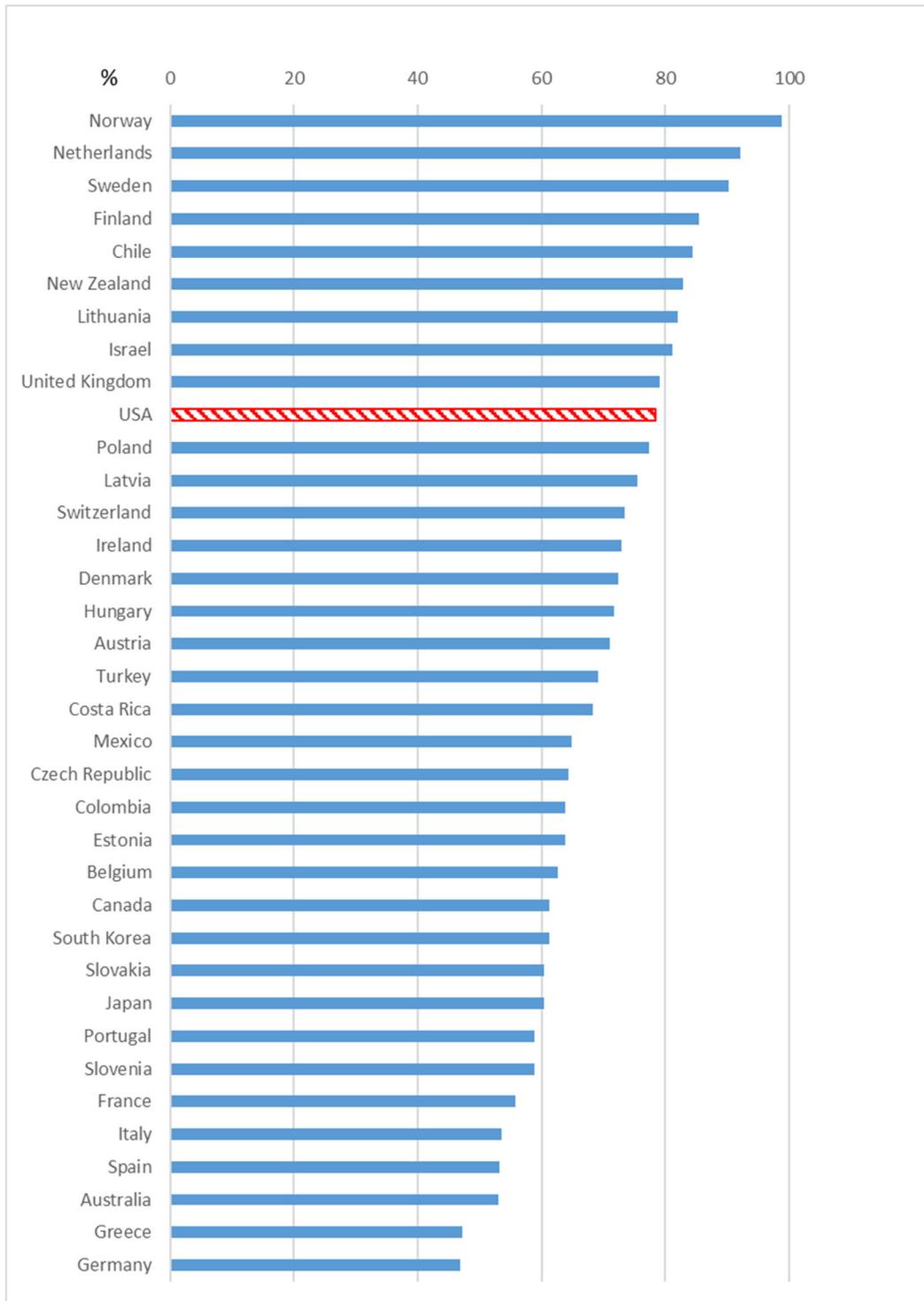
¹ Eidelman, Arthur I., MD; Richard J. Schanler, MD; Margreete Johnston, MD; Susan Landers, MD; Larry Noble, MD; Kinga Szucs, MD; Laura Viehmann, MD. 2012. Breastfeeding and the Use of Human Milk. *Pediatrics* 129(3): e827-e841. <https://doi.org/10.1542/peds.2011-3552>

² WHA 39.28 Resolution on Infant and Young Child Feeding, Thirty-Ninth World Health Assembly Agenda Item 21, 16 May 1986. https://apps.who.int/iris/bitstream/handle/10665/163189/WHA39_R28_eng.pdf?sequence=1&isAllowed=y

³ How to Tell if Your Baby Is Ready to Stop Drinking Formula. Cleveland Clinic Health Essentials: Nutrition. 21 September 2021. <https://health.clevelandclinic.org/how-to-tell-if-your-baby-is-ready-to-stop-drinking-formula/>

⁴ Ching, Constance, Paul Zambrano, Tuan T. Nguyen, Manisha Tharaney, Maurice Gerald Zafimanjaka, and Roger Mathisen. 2012. Old Tricks, New Opportunities: How Companies Violate the International Code of Marketing of Breast-Milk Substitutes and Undermine Maternal and Child Health during the COVID-19 Pandemic. *International Journal of Environmental Research and Public Health* 18(5): 2381 <https://doi.org/10.3390%2Fijerph18052381>

Figure 1: 2-Firm Concentration Ratio across OECD Countries, 2019



Source: Euromonitor Passport

Notes: The 2-firm concentration ratio is calculated by the authors as the sum of the share of sales for the two largest firms in the national market. All member countries of the Organization for Economic Cooperation and Development (OECD) are included for which data are available.

The much larger differential in the domestic versus world sales shares of the top two firms in the United States as compared to the top two firms in Europe may be a clue that barriers to US imports of formula contribute to the elevated US 2-firm concentration ratio.

US trade policy and infant formula

US trade policy—both implicit and explicit—contributes to concentration in the domestic US market in three ways. First, it reduces competition by limiting imports. The US charges a high tariff (17.5%) on imports of CMF products from many countries, with an overall cap applied to aggregate imports of certain CMF products.⁵ Second, it employs other special provisions, like the clause in US-Mexico-Canada Trade Agreement (USMCA) applying a charge to Canadian exports of formula once they reach a certain threshold and other policies designed with the goal of protecting US dairy producers from imports of milk products subsidized by foreign governments.^{6,7}

Third, the US imposes a complex set of regulatory barriers that make it challenging for producers from Europe to meet US standards without incurring additional costs.⁸ One industry media outlet suggests this may be impeding sales by European producers like Nestle in the United States.⁹ Nestle accounts for 10 percent of CMF sales in the United States, well below its average sales share of 26.8 percent in other countries in the Euromonitor data. Nestle has a market share below 10 percent in only 12 of the 78 states for which data are available. 10 of these 12 are developing countries.

However, the design of US trade policy does not stop with its impact on domestic producers' market share of formula sales. It also helps CMF producers compete with breastmilk globally, possibly with much broader implications for global health. Baker et al. (2021) explain the variety of ways that CMF-related interests exert influence to compete with breastmilk as a supplier of infant nutrition.¹⁰ Russ et al. (2021)¹¹ document specifically how the US and other dairy-exporting countries work to shape

⁵ See Chapter 19 (Additional Note 1 on p.1 and the tariff rates on p.6) of the US Tariff Code:

<https://hts.usitc.gov/view/Chapter%2019?release=2022HTSARev5>

⁶ Office of the United States Trade Representative. Market Access and Dairy Outcomes of the USMC Agreement. United States-Mexico-Canada Trade Agreement Fact Sheet. <https://ustr.gov/trade-agreements/free-trade-agreements/united-states-mexico-canada-agreement/fact-sheets/market-access-and-dairy-outcomes> (See also Article 3.A.3, Item 5 of the Agreement:

https://ustr.gov/sites/default/files/files/agreements/FTA/USMCA/Text/03_Agriculture.pdf)

⁷ James, Sallie. 2006. Milking the Customers: The High Cost of U.S. Dairy Policies. Cato Trade Briefing Paper No. 24.

<https://www.cato.org/sites/cato.org/files/pubs/pdf/tbp-024.pdf>

⁸ United States Customs and Border Protection. 2021. Philadelphia CBP Seizes Nearly 600 Cases of Infant Formula Unapproved for Import to the United States. News Release (5 April). <https://www.cbp.gov/newsroom/local-media-release/philadelphia-cbp-seizes-nearly-600-cases-infant-formula-unapproved>

⁹ Kulisch, Eric. 2022. American Shipper News. How US Trade Policy Is Making the Baby Formula Shortage Worse. <https://www.freightwaves.com/news/protectionism-red-tape-hinder-baby-formula-resupply-analysts-say>

¹⁰ Baker, Phillip, Katheryn Russ, Manho Kang, Thiago Santos, Paulo Neves, Julie Smith, Gillian Kingston, Melissa Mialon, Mark Lawrence, Benjamin Wood, Rob Moodie, David Clark, Katherine Sievert, Monique Boatwright, and David McCoy. 2021. Globalization, first-foods systems transformations and corporate power: a synthesis of literature and data on the market and political practices of the transnational baby food industry. *Globalization and Health* 58 (May).

¹¹ Russ, Katheryn, Phillip Baker, Michaela Byrd, Manho Kang, Rizki Nauli Siregar, Hammad Zahid, and David McCoy. 2021. What you don't know about the Codex can hurt you. *International Journal of Health Policy and Management* 10 (December): 983-997.

international food safety standards for CMFs at the Codex Alimentarius Commission and press the application of these standards under World Trade Organization Agreements in ways that make it easier for CMF producers to engage in inappropriate marketing of CMF products. Russ et al. (2022) show that the energy behind these efforts may have contributed to conflict between the US and World Health Organization in the years leading up to the pandemic.¹²

Supporting and protecting breastfeeding

The health benefits of breastfeeding are well-established.¹³ About half of babies born in the US receive exclusive breastfeeding in first 3 months, and one-quarter through 6 months do.¹⁴ Thus, breastfeeding serves a substantial portion of US demand for infant nutrition. Even though these rates are far below the recommendations of the American Academy of Pediatrics and place the US in the lowest quartile of breastfeeding rates globally, breastfeeding still presents stiff competition for CMF sales.

No parent should ever be pressured or shamed into nursing their infant. Some parents may face difficulties providing breastmilk due to disrupted lactation or not wish to provide breastmilk for a host of reasons. However, many parents do wish to provide breastmilk to their infants and find it very difficult under the current structure of medical care and labor market policies that are short on paid parental leave. Others may receive so much more information about CMFs and so little support or knowledge to embark on the work of nursing that they never start, or stop before they planned to.¹⁵

The United States can do better. There are evidence-based programs that communities can implement to support nursing parents, but they require a broader and more committed interface between public health specialists and economic policymakers (including those focusing on competition policy) than has occurred in the past. The US Breastfeeding Collective and the World Health Organization provide a host of recommendations for ways to do this. The WIC program has also done a great deal of work to ensure it supports parents who wish to breastfeed.

Conclusions

While WIC auctions may favor large firms who can supply an entire state's program needs, the global market for CMF is already quite concentrated. As these auctions also force oligopolistic producers of CMFs to compete head-to-head in price-based competition for state procurement contracts, the benefits may be quite large. Changing the auction framework may have unintended consequences that should be carefully explored and modelled prior to any proposed redesign, as the stakes for vulnerable

¹² Russ, Kathryn, Phillip Baker, Manho Kang, and David McCoy. 2022. Corporate lobbying on US positions toward the World Health Organization: Evidence of intensification and cross-industry coordination. *Global Health Governance* 17(1): 38-83.

¹³ Victora, Cesar G, MD; Rajiv Bahl, MD; Aluisio J K Barros, MD; Giovanny V A Franca; Susan Horton; Julia Krusevec; et al. 2016. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. *Lancet* 387(10017): 475-490. [https://doi.org/10.1016/S0140-6736\(15\)01024-7](https://doi.org/10.1016/S0140-6736(15)01024-7)

¹⁴ Breastfeeding Report Card: United States, 2020. Centers for Disease Control and Prevention. <https://www.cdc.gov/breastfeeding/data/reportcard.htm>

¹⁵ World Health Organization and United Nations Children's Fund (UNICEF). 2022. *How the marketing of formula milk influences our decisions on infant feeding*. <https://www.who.int/publications/i/item/9789240044609>

families are very high. On the other hand, there is no need to delay confronting the consequences of current US trade policies for competition in the market for infant nutrition, or to enhance national infrastructure to support and protect breastfeeding. Both moves can help address distortions and risks from concentrated market power to enhance the resilience of first food systems within the United States. Both moves offer clear wins for US families.