

Assessing Economic Impact That Would Follow Loss of U.S. Beef Exports & Imports

Executive Summary of report prepared for Kansas Beef Council, Oklahoma Beef Council, and Texas Beef Council

Dr. Glynn T. Tonsor (agri.food.analytics@gmail.com)

&

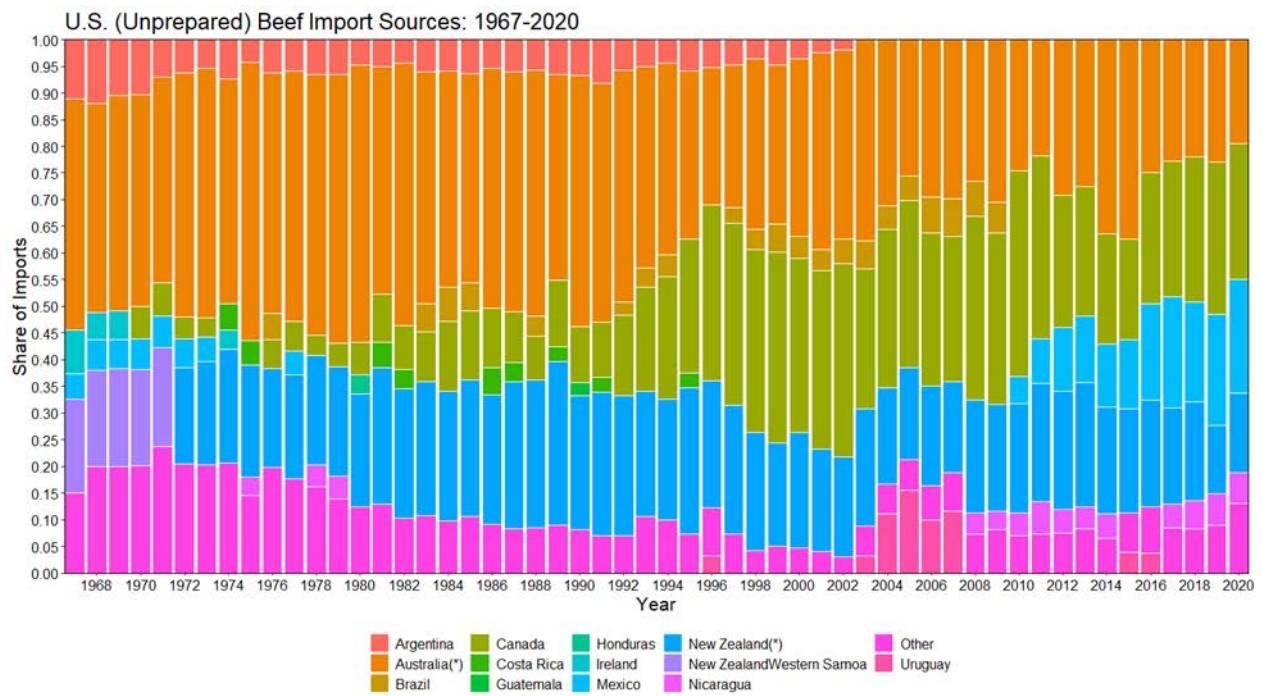
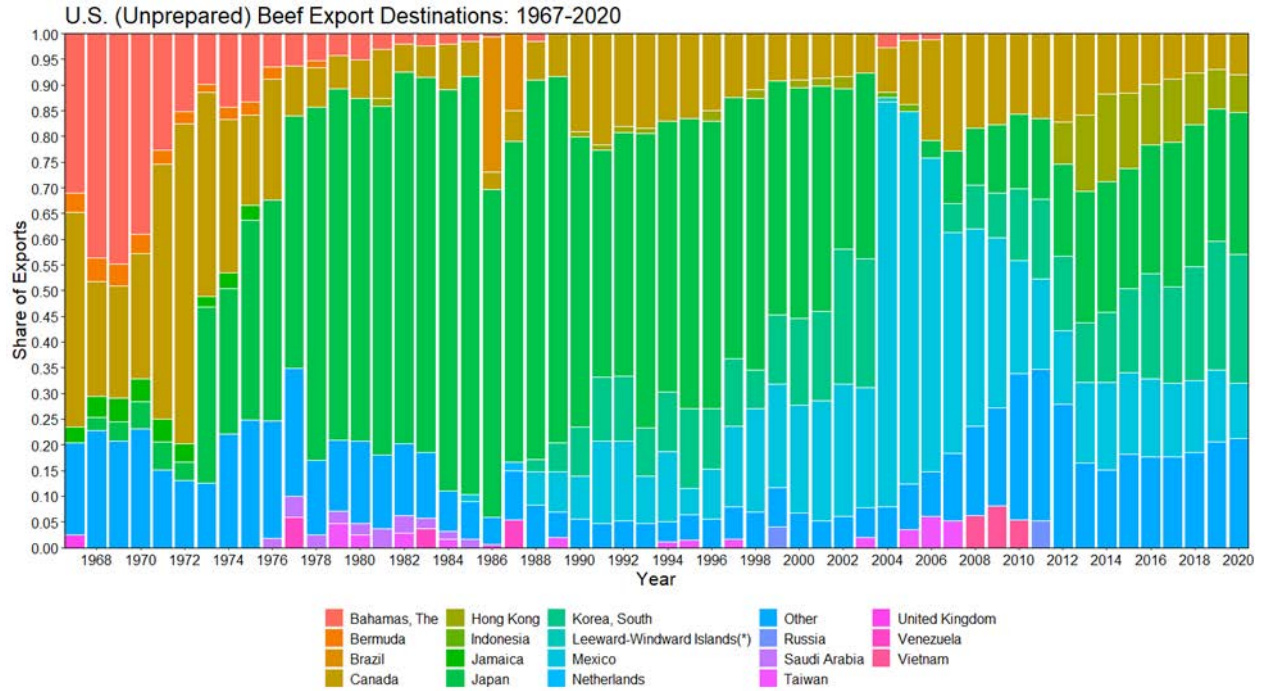
Dr. Derrell S. Peel (derrell.peel@okstate.edu)

June 4, 2022

This report summarizes a focused effort by Drs. Tonsor and Peel to assess the economic impact that would follow ceasing both U.S. beef exports and imports. The study focuses on beef trade enabling a deeper and achievable assessment, leaving trade of cattle, hides, and other aspects of the broader industry to other projects. This project outlines why the U.S. trades beef internationally, summarizes historical beef trade data, quantifies national fed and feeder cattle market impacts that could follow loss of beef trade, allocates national impacts to state-level impacts, and provides additional thoughts for future considerations.

Main findings (and some key figures discussed in the full report) include:

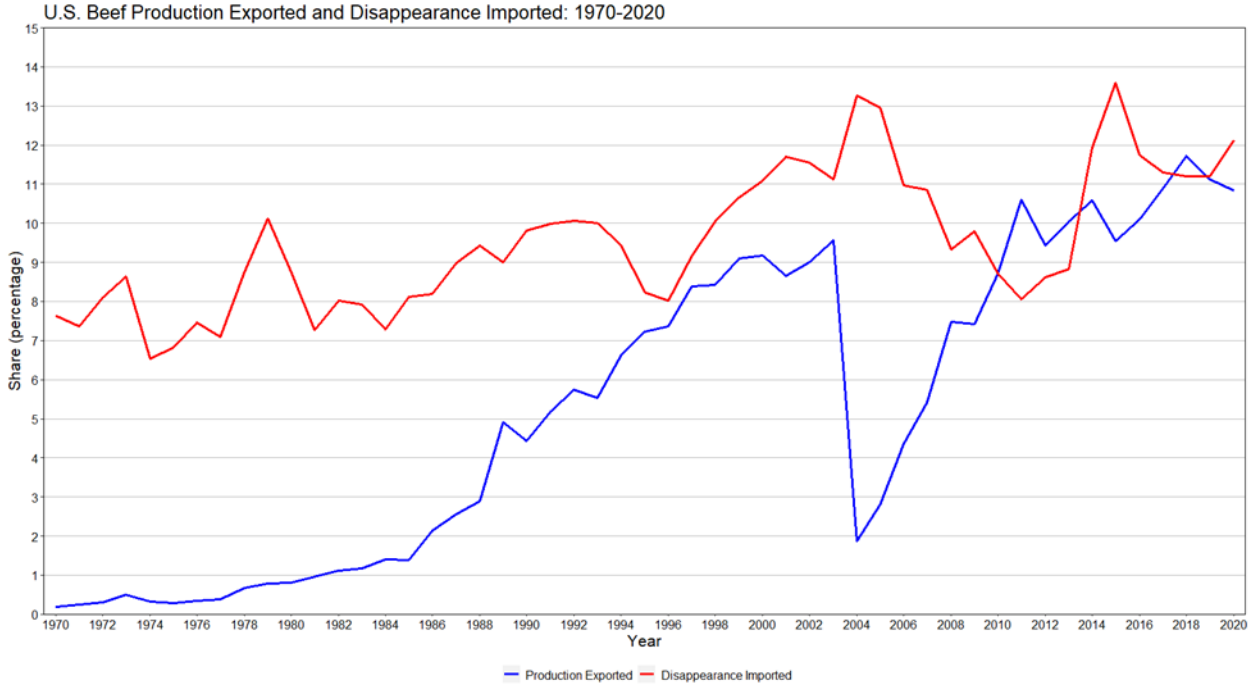
- It is hard to over-state the complex and ever-growing role of beef exports and imports. Exports and imports are, to a large extent, conducted by different firms for different reasons precisely because they are mostly different sets of products. Beef exports and imports combine to provide opportunities to increase value to the U.S. industry by exporting products that have more value in foreign markets and importing products that can be sourced more economically in international markets.
- The mix of countries the U.S. exports beef to has developed resulting in a more diverse, less concentrated export portfolio. Conversely, sources of U.S. beef imports have comparatively fluctuated less over time.



Implied trade prices clearly show the U.S. receives a higher \$/lb. value for exports than it pays for imports reflecting core differences in product type and the role of each transaction in adding economic value. From 2016 through 2020, the U.S. experienced average annual

unprepared beef exports of 2.05 billion pounds, export value of \$6.4 billion, and implied export price of \$3.13/lb. Conversely, 2016-2020 average annual unprepared beef imports were 2.30 billion pounds, import value was \$5.8 billion, and implied import price was \$2.52/lb. These statistics clearly indicate participation in the global market provides a net economic gain.

- Export volume as a percentage of domestic production has grown substantially in recent decades while imports as a share of domestic disappearance have varied much less.



- If both U.S. beef exports and imports declined by 10% prices and quantities of feeder cattle and fed cattle would decline significantly. The cumulative, net present value of impacts over 10 years would be an economic loss of \$12.9 billion to feeder cattle sellers and \$6.8 billion to fed cattle sellers.

- Extrapolating the considered 10% beef trade loss case to a more extreme, full 100% loss scenario would suggest catastrophic impact, broadly approximated at \$129 billion for feeder cattle sellers and \$68 billion for fed cattle sellers reflecting a much smaller overall industry. While the methods used here are not precise for such extreme situations, the take-home point holds: *entirely ceasing U.S. beef export and import trade would be economically catastrophic.*

As an over-arching summary, the economic importance of beef exports and imports is substantial and growing with time. In the absence of beef trade, the entire industry would shrink significantly. Given persistent misunderstanding and market dynamics in the global marketplace in which the U.S. operates, periodic updated assessments are encouraged. Additional enhancements in trade data quality, timing, and precision are encouraged consistent with ever-growing economic importance of beef trade.

This report focuses on impacts of losing international beef trade on domestic feeder and fed cattle sellers and does not consider spillover impacts on other sectors such as allied industries including input suppliers (row crops, feed, materials, etc.), local labor markets, and agricultural lending. As such, this assessment likely understates the total impact involved with the possibility of losing U.S. international beef trade. Nonetheless, the substantial economic role of beef trade is clearly documented here and worthy of associated appreciation.