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Structural Changes in the Mexican Beef Cattle Industry: Implications for the U.S. Beef Industry

Sahar Angadjivand, Agricultural Economist, Economic Research Service, USDA, sangadjivand@ers.usda.gov

Keithly Jones, Agricultural Economist, Economic Research Service, USDA, kjones@ers.usda.gov

Derrell Peel, Professor, Oklahoma State University, derrell.peel@okstate.edu

Kenneth Mathews, Agricultural Economist, Economic Research Service, USDA, kmathews@ers.usda.gov

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Sahar Angadjivand
Keithly Jones
Derrell Peel (Oklahoma State University)
Kenneth Mathews

Objectives

Rapid changes are taking place in Mexico's beef processing sector that could have implications for the U.S. cattle sector, cattle inventory, beef production, trade, and beef prices. Here, we aim to:

- Highlight the recent expansion of Mexican fed cattle and beef processing operations.
- Investigate the factors influencing the expansion in Mexico's beef processing sector.
- Explore the potential impact that further growth would have on feeder cattle exports to the United States as well as Mexico's ability to sustain its fed cattle expansion.

The Mexican cattle industry has been growing, with a new emphasis on grain fed cattle.

Photo credit: Sahar Angadjivand, USDA, ERS.



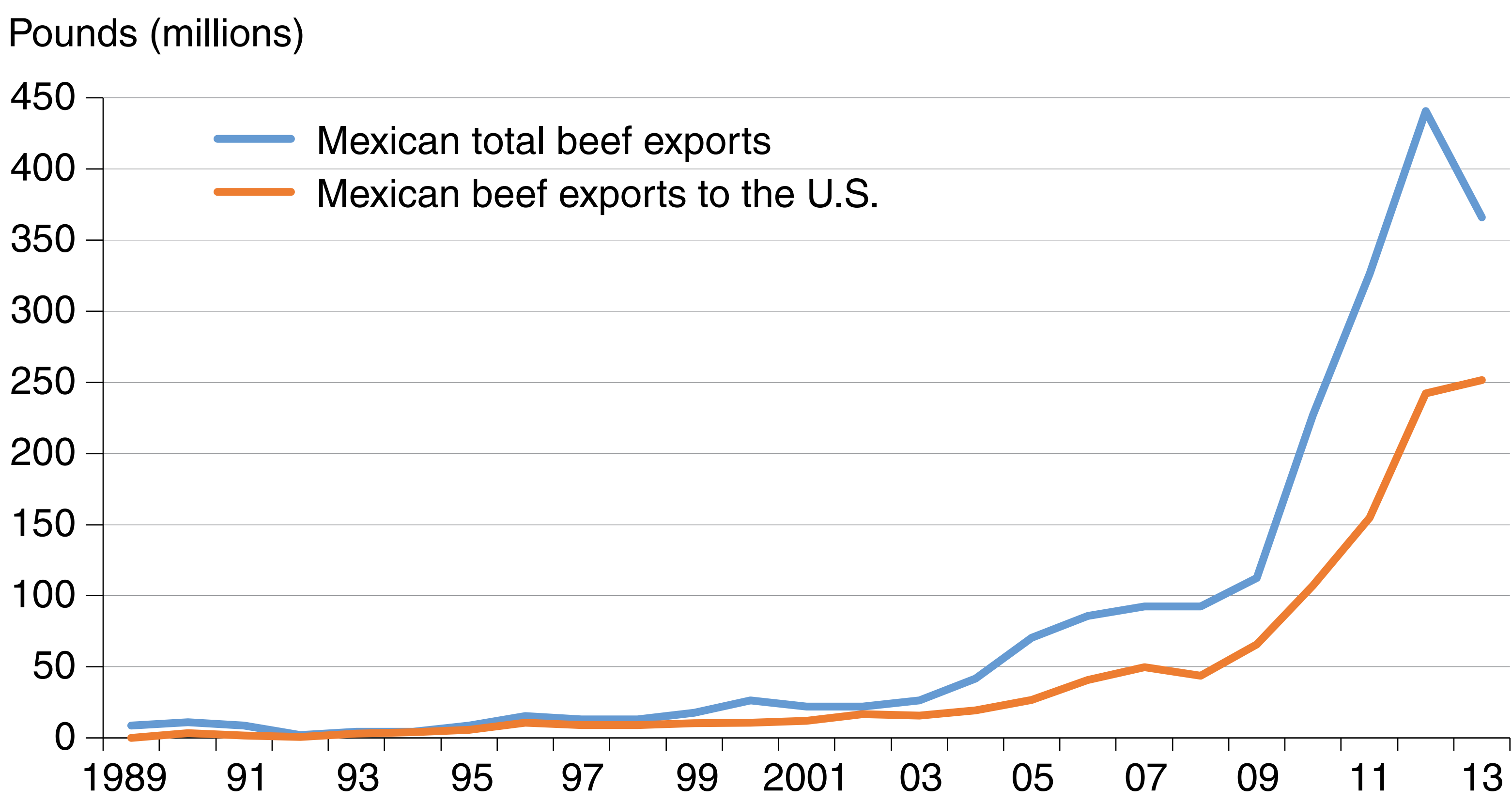
Overview of Mexico's Cattle Industry

In 2013, nearly half of all cattle imported by the United States came from Mexico (USDA, ERS). Historically, the Mexican cattle industry has served as a key exporter of feeder cattle to the United States for finishing, importing an average of more than a million head annually over the past decade. The Mexican cattle that come to the United States tend to be in the range of 300-500 pounds and are typically well suited for U.S. pasture or stocker programs. However, with the growth in the Mexican beef processing operations, live cattle exports to the United States may not be sustainable.

Although Mexican per capita beef consumption has declined in recent years, production has shown slight increases. This situation is largely due to a rapid expansion in beef exports, primarily to the United States. Currently, Mexico is expanding its beef processing sector, resulting in an expansion of its own fed cattle sector. The expansion of Mexico's fed cattle sector suggests that fewer feeder cattle will be available for future exports to the United States.

Mexican beef exports have exponentially increased over the past decade

The recent spike in exports is driven by the adoption of beef packing technologies and expansion of the beef processing sector.



Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution Online, and USDA, Economic Research Service.

The beef sector has expanded in the U.S. and internationally. To ensure high-quality meat products many Mexican packing plants are monitored by the Mexican Government ("Tipo Inspeccion Federal" or TIF).

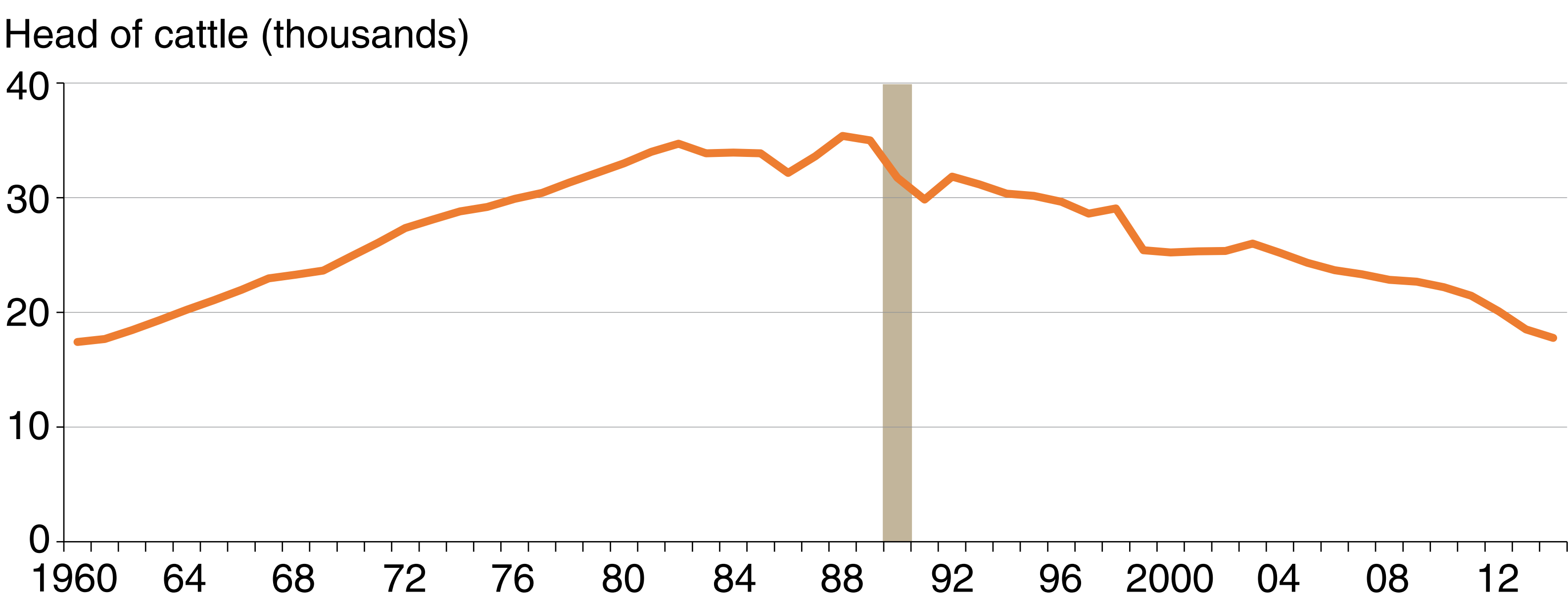
Photo credit: Sahar Angadjivand, USDA, ERS.

Factors Influencing the Expansion of Mexico's Beef Processing Sector

Mexico's beef processing expansion began shortly after the land reforms of the early 1990s. Land reform resulted in privatization of holdings, which in turn led the least efficient cattle ranches to close and the Mexican cattle inventory to decline rapidly. At the same time, productivity increased and continued to rise with the expansion of Mexican feeding operations. Currently, feedlots are expanding their capacity and are typically situated close to slaughter houses and packing facilities (where the Mexican Government oversees many operations).

Mexican cattle inventories have not recovered since the land reforms of the 1990s

Mexican cattle inventory reached 35 million head. However, steady decline shows no recovery from the land reforms.



Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution Online and USDA, Economic Research Service.



Effects of the Changes on the U.S. Cattle Industry

The decline of Mexico's cattle inventory, coupled with the expansion of its feeder cattle operations, has negative implications for the U.S. cattle industry. For most of the past decade, Mexico has consistently supplied the United States with approximately 1 million head of stocker and/or feeder cattle annually. The lower inventory makes it less likely Mexico will have enough feeder cattle to satisfy its growing internal demand, while maintaining previous supply levels to the United States. Two key factors support this argument: (1) Given the current difficulties with retaining heifers to rebuild Mexican herds, it is unlikely the Mexican cattle inventory can increase significantly through herd-rebuilding in the near future. (2) Mexico has never been a large importer of live cattle. In 2013, Mexico imported 30,000 head of cattle and, since 2003, has not imported more than 100,000 in any one year.

Mexico and the United States have operated as an integrated market, with Mexico consistently supplying feeder cattle to the U.S. fed cattle market. With Mexico's fed market absorbing feeder cattle that otherwise would have been sold to the United States, a completely different dynamic for the U.S. cattle industry is created.

As the Mexican fed market increases its demand for domestic feeder cattle, the supply of animals to the U.S market is expected to decline, which could have serious implications for the U.S. fed cattle market. Loss of live imports from Mexico would affect:

- **Stocker operations primarily in the 12 Southwestern and Western States:** Texas would be most affected since it is the primary destination. Because stocker operations run on very small margins, lacking the optimal number of cattle could affect business survivability.
- **Southern feedlots:** These rely on Southern stocker cattle and feeder cattle from Mexico.
- **U.S. beef production:** Loss of 1 million cattle from Mexico would be a loss of approximately 780 million pounds beef—as much as 3 percent of U.S. beef production.

Mexico feeder cattle operations have expanded their processing operations, especially in Northern Mexico.

Photo credit: Dr. Derrell Peel, Oklahoma State University.



REFERENCES

Galyean, M., C. Ponce, and J. Schutz. October 2011. "The future of beef production in North America." *Animal Frontiers* (1) 2: 29-36. www.animalfrontiers.org/content/1/2/29.full.

Peel, D. June 21, 2013. "Changes in U.S.-Mexican Cattle and Beef Trade." University News Release. www.agweb.com/article/changes_in_u.s.-mexican_cattle_and_beef_trade/.

Peel, D. "The North American Beef Cattle Industry." 2009. Oklahoma State University: AGECE-580-2. <http://pods.dasn.okstate.edu/docshare/dsweb/Get/Document-1997/AGECE-580web.pdf>.

Peel, D., Johnson, and Mathews. August 2011. *Trade, the Expanding Mexican Beef Industry, and Feedlot and Stocker Cattle production in Mexico*, LDP-M-206-01, U.S. Department of Agriculture, Economic Research Service Outlook Report. <http://www.ers.usda.gov/media/118317/ldpm20601.pdf>.

Skaggs, R., R. Acuna, L. Torell, and L. Southard. First Quarter 2004. "Live Cattle Exports from Mexico into the United States: Where do the Cattle come from and where do they go?" *Choices Magazine*. www.farmdoc.illinois.edu/policy/choices/20041/2004-1-05.pdf

U.S. Department of Agriculture (USDA), Economic Research Service (ERS). "Livestock & Meat International Trade Data." Data product. Washington, DC. www.ers.usda.gov/data-products/livestock-meat-international-trade-data.aspx#U01CwPldXvE.

USDA, Foreign Agricultural Service. November 2013. "2014: Record Global Meat Trade." *Livestock and Poultry: World Markets and Trade*. <http://usda.mannlib.cornell.edu/usda/fas/livestock-poultry-ma/2010s/2013/livestock-poultry-ma-11-08-2013.pdf>.

