Concentration of U.S. Red Meat Exports

Glynn T. Tonsor (gtonsor@ksu.edu)
Kansas State University Department of Agricultural Economics – March 2018

Worldwide last week, media focused on several announcements regarding trade between the U.S. and China. One announcement of elevated interest to U.S. livestock producers is China’s statement of intent to increase tariffs on U.S. pork products. This fact sheet provides historical context on where China fits into the broader portfolio of U.S. pork exports and illustrates how U.S. red meat export portfolios have notably diversified. All data utilized here is maintained by the Livestock Marketing Information Center and originates from the United States Department of Agriculture. The entire assessment is based on export volume, rather than export value.

Historical U.S. Pork Exports to China

It is useful to start with clarification of how much U.S. pork exports have grown over the past 30 years. In 2017 total pork exports exceeded 5.6 billion pounds which reflects remarkable growth from 109 million pounds exported in 1987.
During this period, the volume of pork exports to China went from 0 in 1987 to 381 million pounds in 2017 (peaking at 669 million pounds in 2011). As a share of total exports, U.S. pork exports to China increased notably to a peak of 14% in 2011 and have since declined to 7% in 2017.

U.S. Red Meat Export Portfolio

It is key to further appreciate adjustments in diversification of exports over time. That is, understanding the extent of impact from changes in trade with one country can be enhanced when considering how U.S. red meat exports are now spread across a broader set of countries, in a more uniform manner than was previously the case.

The Herfindahl-Hirschman Index (HHI) is an often-used measure of market concentration where lower values reflect less concentration and a value of 1 reflects reliance on one sole country. The HHI is derived here by squaring the market share of each country importing U.S. product and summing the squares. The following figure illustrates the HHI for both U.S. beef and pork exports since 1987.
The HHI for both industries declined significantly over the 1987-1997 period. Since then, the beef industry has experienced further declines after experiencing a painful reversal in 2004-2006 following loss of Asian markets in response to the December 2003 BSE event. Meanwhile, the pork industry has modestly diversified further since 1997.

Summary

The main point of this fact sheet is to succinctly summarize aspects of historical U.S. red meat exports to provide context on recent media discussions around pork trade. The Chinese market for U.S. red meat indeed remains highly valued both today and for the foreseeable future. However, a key point illustrated here is the U.S. export portfolio is more diverse than in the past, and hence likely less impacted by any changes in trade with any single country. This context should be held in current and future discussions around U.S. meat exports.