6-6-2019

Beef packing finds balance

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Abstract

There are roles for all sizes of players in the beef packing industry.

Disciplines

Agricultural and Resource Economics | Agriculture

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This article is published as Schulz, Lee. Beef packing finds balance. Wallaces Farmer, June 6, 2019. Posted with permission.

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RECENT CHANGES: The U.S. beef industry has emerged with packing plant capacity in much better balance relative to cattle supplies.

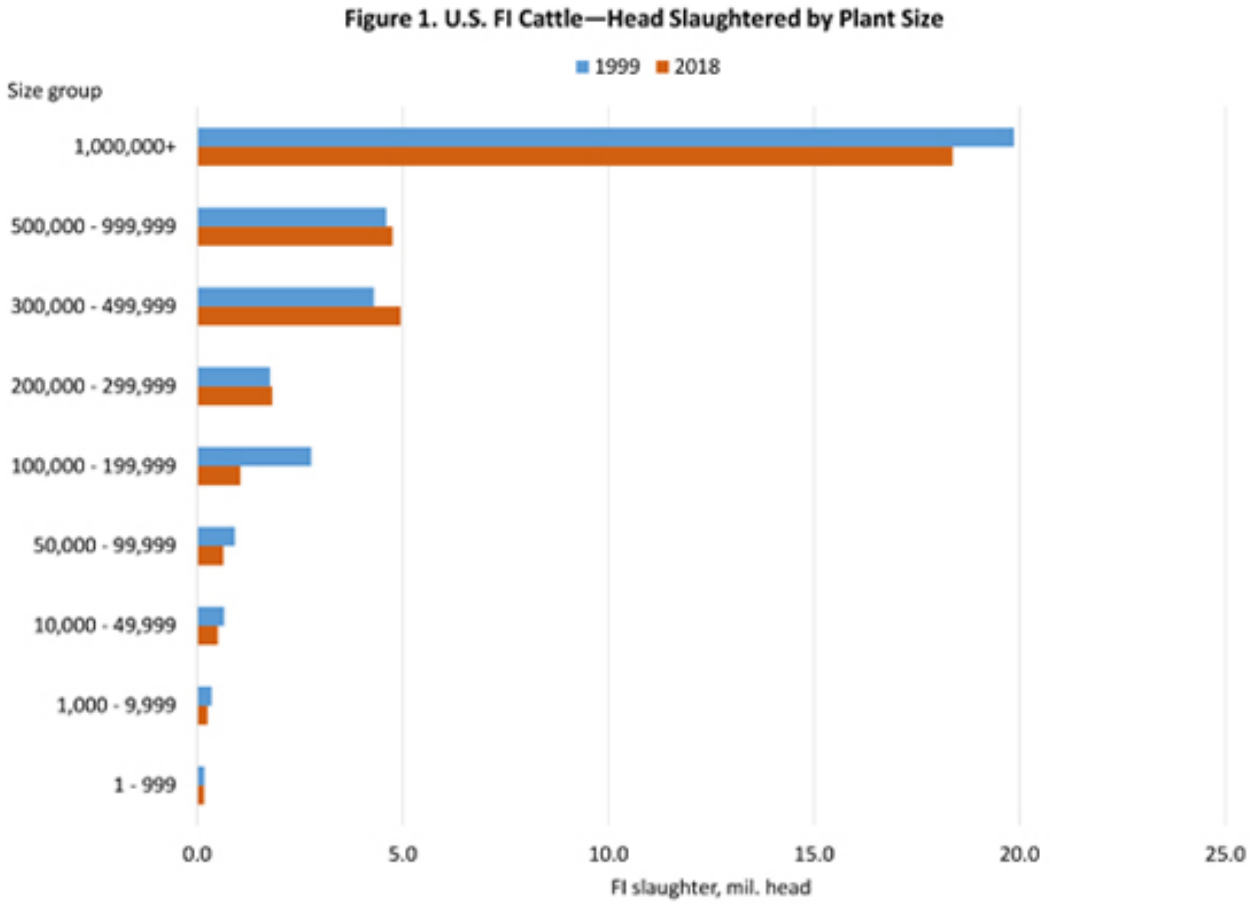
Beef packing finds balance

There are roles for all sizes of players in the beef packing industry.

Lee Schulz | Jun 06, 2019

In 1999, packing plants that slaughtered more than 1 million cattle per year slaughtered 19.9 million head, or 56.1%, of the federally inspected cattle slaughter (Figure 1). In 2018, plants with over 1 million head per year capacity slaughtered 18.4 million head, or 56.5%, of the FI slaughter. Their volume is down, and it's a stretch to characterize a 0.4% rise in market share over 20 years as a takeover.

The relatively small rise in market share by the giants suggests that smaller slaughter facilities, in aggregate, are maintaining market share. In 2018, packing plants that slaughtered between 1 and 9,999 head slaughtered 427,300 head, or 1.3%, of the FI cattle slaughter annually, 3.5% for plants slaughtering between 10,000 and 99,999 head, and 38.7% for plants slaughtering between 100,000 and 999,999 head. This compares to 1.5%, 4.4% and 38.0%, respectively, in 1999.

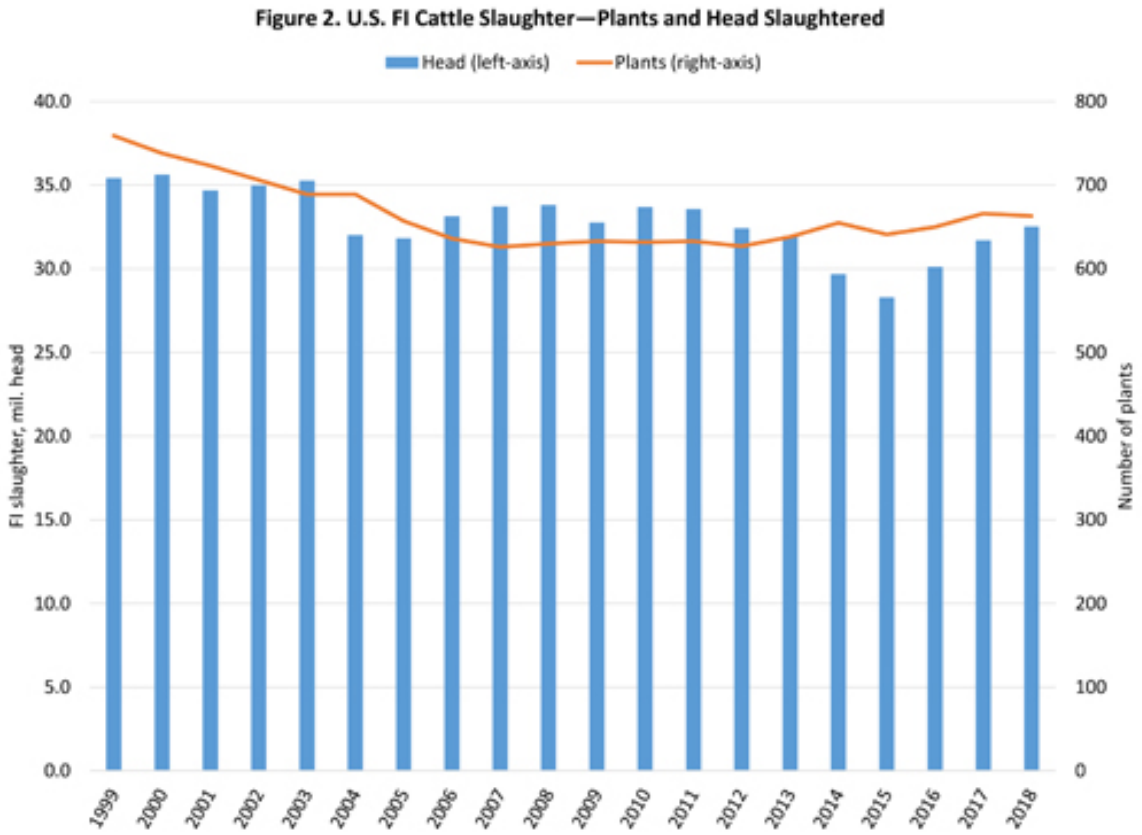


A combination of packing plant closures, mainly in cattle-deficit regions of the U.S., and rising cattle inventories overall has brought balance to the business today. *(Source: USDA's National Agricultural Statistics Service)*

Packing plants of all sizes have important roles in the beef industry. Finding a role is all about responding to beef customer and consumer interests, and providing a constant supply of consistent, high-quality beef at competitive prices.

Packing capacity trends

The U.S. has fewer FI cattle slaughter plants than it had 20 years ago. But the number has held relatively stable in recent years. In 1999, the U.S. had 759 FI cattle slaughter plants. Plant numbers bottomed at 626 in 2007 and 627 in 2012, before settling up at 663 in 2018 (Figure 2).



The relatively small rise in market share by the giant packers suggests the smaller slaughter facilities, in aggregate, are maintaining market share. *(Source: USDA's National Agricultural Statistics Service)*

In 2018, 72.7% of FI slaughter plants each slaughtered between 1 and 999 head annually, 15.2% slaughtered between 1,000 and 9,999 head, and 10.1% slaughtered between 10,000 and 999,999. Plants that each slaughtered over 1 million head only comprised 2% of the total number of U.S. FI cattle slaughter facilities. This compares to 73.0%, 14.4% and 10.7%, respectively, in 1999.

Packing capacity in line with supply

After a prolonged and painful period of underutilization (overcapacity) in the mid-2010s, the industry has emerged with national, if not regional, packing plant capacity in much better balance with available cattle supplies. This balance has been accomplished by a combination of plant closures in primarily cattle-deficit regions and by rising cattle inventories.

Getting packing capacity in line with expected cattle supplies should spread fixed costs of existing packing plants over a more optimum level of cattle slaughtered. That should decrease cost per head of cattle slaughtered.

It is important to note that these data are not granular enough to clearly look at structural changes in meat packing. For example, slaughter level does not address changes in meat packing firm size from divestitures, internal growth, mergers and acquisitions, levels of concentration and packing plant efficiency gains. The data simply speak to the number of FI packing plants and plants by size.

2018 red meat production record high

Commercial U.S. red meat (beef, veal, pork, and lamb and mutton) production totaled 53.417 billion pounds in 2018, up 2.7% from 2017 and a record level. All categories were larger. Commercial beef production during 2018 was 26.873 billion pounds, up 2.6% from 2017 and second to only the 2002 record level. Commercial cattle slaughter totaled 33.005 million head, up 2.5% from 2017. Federal inspection comprised 98.5% of the total.

In 2018, the top 10 states for commercial red meat production, in order, were Nebraska, Iowa, Kansas, Texas, Illinois, Minnesota, North Carolina, Colorado, Missouri and Indiana. These states had 77.0% of the commercial red meat production in 2018. Iowa had 14.4% of the overall total.

USDA provides FI cattle slaughter data in NASS' annual Livestock Slaughter report. However, no cattle slaughter (steers, heifers, cows and bulls) data are available for Iowa. Data are not published when an individual plant's data could be divulged. If not published, these data are still included in U.S. and region totals. USDA reviews the data annually to determine the publishable data. Iowa cattle slaughter data was last released in 2003.

Iowa is included in Region 7, with Kansas, Missouri and Nebraska. Region 7 accounts for 44.6% of the total U.S. cattle slaughter. Just over 53% of the steer and heifer slaughter occurs in these four states, with 21.1% of the beef cow slaughter, 2.1% of the dairy cow slaughter and 21.3% of the bull slaughter. The next largest regions for cattle slaughter are Region 6 (AR, LA, NM, OK, TX) with 17.9%, Region 8 (CO, MT, ND, SD, UT, WY) with 11.0%, and Region 5 (IL, IN, MI, MN, OH, WI) with 10.2%.

How USDA compiles slaughter data

USDA's National Ag Statistics Service compiles and publishes official slaughter data. Slaughter estimates provide USDA and the livestock industry with basic data to project future meat supplies and producer prices. Ag economists in both the public and private sectors use this information in economic analysis and research.

USDA considers survey data, previous inventory estimates, slaughter, exports and imports when setting an initial livestock inventory estimate — such as the Cattle, Hogs and Pigs report. In subsequent periods, USDA revises previous estimates to improve period-to-period and item-to-item relationships. To make such revisions, USDA factors in data received after original estimates are made. If USDA makes revisions, it's often the actual slaughter data that drive the revisions.

Federal law requires packing plants to provide slaughter data. As such, livestock slaughter estimates are based on a census of operating plants, and therefore, the data have no sampling error. USDA compiles primary data for the commercial livestock slaughter estimates from the daily reports provided electronically by inspectors from USDA's Food Safety and Inspection Service at federally inspected plants. Those counts are combined with data from state-administered non-FI plants to derive total commercial slaughter estimates. Data include the number of head that were slaughtered daily under FI by species and class, as well as daily live and dressed weights.

USDA summarizes federally inspected data weekly and then accumulates the data to a monthly total for the monthly release. Non-federally inspected data are summarized monthly only. USDA releases an annual summary publication in April. The 2018 annual summary was released on April 24.

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