
Livestock Market Comments

Capacity Utilization in Cattle Feeding

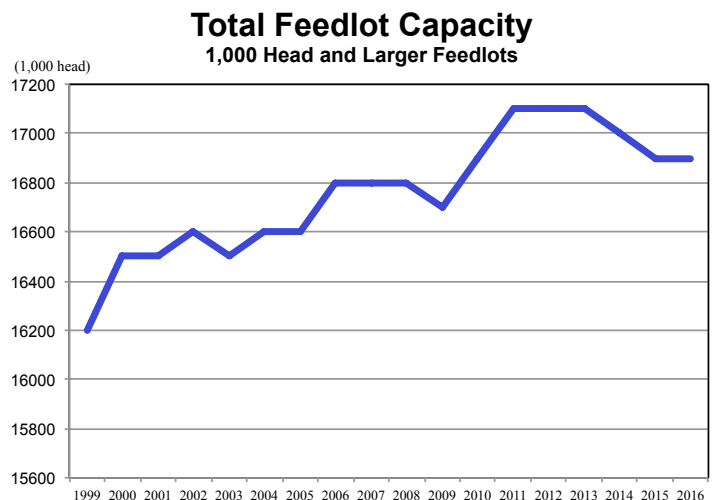
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Over capacity has been an issue in cattle markets for the last several years as cattle numbers declined cyclically and severe droughts forced even more liquidation. Over capacity in feeding contributed to feeder prices being bid up to record highs as feeders competed for tight supplies of cattle. The same issue has occurred in the packing sector. It takes time for excess capacity to be wrung out of the system and that happens through financial losses and industry exit. (A similar example might be occurring now, for example, in China with over capacity in their manufacturing and steel making sectors.) This week's Livestock Market Comments and One Big Thing Podcast examines capacity in the cattle feeding sector of the industry.

Feedlot Capacity

NASS' February Cattle on Feed report (released February 19th) contains an estimate of the feedlot capacity of the nation's feedlots with over 1,000 head capacity. The report indicated a 2016 capacity of 16.9 million head, the same as the year before. Reported capacity has declined 200,000 head, or 1.2 percent since the early part of the decade. Yet total capacity in over 1,000 head feedlots has grown from 16.2 million in 1999.

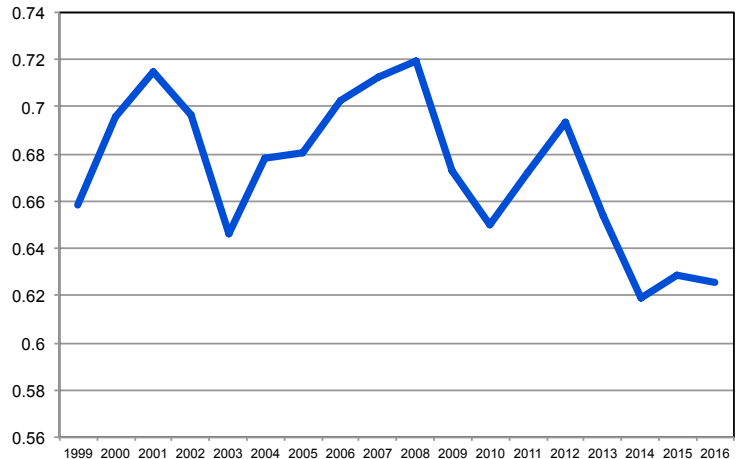


Measurements of capacity utilization can be calculated in a number of ways. One is simply to look at the number of cattle on feed divided by the total capacity. Comparing January 1 cattle on feed to capacity indicates a capacity utilization of 62.6 percent at the beginning of 2016. That is down just slightly from 62.9 percent in 2015. Since 1999, capacity, by

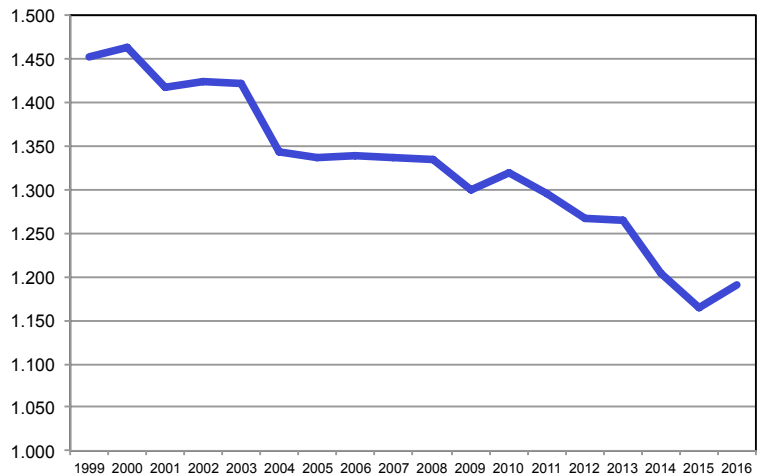
this measure peaked in 2008. This measure varies by the number of cattle in the U.S., cyclical herd growth and liquidation, and the timing of feedlot placements.

Perhaps a better way to measure capacity utilization is by dividing annual feedlot marketings by capacity. The available feedlot capacity is not just used once during the year but, can be thought of a flow variable (cattle go in and out) with a turnover rate that is greater than one (or 2). This measure of utilization has steadily declined since 2000, reaching 1.18 in 2015. By this measure, feedlot marketings have become a smaller proportion of available, or potential capacity. A number of factors have contributed to this decline including fewer cattle, longer feeding times, and slower turnover rates. Heavier finished weights may include the effect of more days on feed. Increased feeding of dairy calves for long periods of time to get to slaughter weight, which has occurred over the last couple of years would contribute to reduced capacity utilization by this measure.

Feedlot Capacity Utilization
Jan. 1 on Feed/Capacity



Feedlot Capacity Utilization
Annual Feedlot Marketings/Capacity



Number of Feedlots

The total number of feedlots is related to capacity. As the market has reacted to unprofitable overcapacity conditions, feedlots would be expected to exit the industry, or shut down operations, even though the physical structure is still in existence and could be re-opened if conditions allowed. The Cattle on Feed report indicated that the total number of feedlots has declined from 29,090 to 27,189 in 2015. However, this number represents an important methodological change in the

report. The major change in the data reflects, largely, a change in the number of under 1,000 head feedlots. The result is a revised 2014 number that indicates 28,127 feedlots were in existence whereas the old method reported 72,000 feedlots. Part of the change reflects an attempt to avoid counting backgrounders as feedlots with feedlots being defined as those taking cattle to their finished weights. The methodological change is the result of using the census approach in the annual survey. Anyone using this data in the future will see a huge change in the data beginning in 2013.

Future

As the number of cattle increases cyclically the capacity utilization should increase also. To the extent that over capacity fueled part of the calf price increase, reduced over capacity will result in lower calf prices as supplies expand. Using an increase in 2016 cattle slaughter of 2.4 percent as an estimate of this year's fed cattle marketings indicates a capacity utilization of 1.19. The cattle inventory report indicated a growing cow herd (up 3.5 percent) and 5.3 percent more calves and yearlings outside of feedlots. The end result is a higher capacity utilization rate in coming years.