

7-17-2018

Hog expansion accelerating

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Hog expansion accelerating

Abstract

Livestock Outlook: Pork output growth is poised to surpass gains in pork demand.

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PUSHING CAPACITY: The U.S. inventory of hogs and pigs on June 1 was 73.5 million head — the highest June 1 inventory since USDA estimates began in 1964.

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Livestock Outlook: Pork output growth is poised to surpass gains in pork demand.

Lee Schulz | Jul 17, 2018

Pork producers have been expanding for well over three years. In 2014, the porcine epidemic diarrhea virus outbreak hiked baby pig death losses. In late 2014 and early 2015, producers retained 2% to 3% more sows to be sure to produce enough pigs to

fill finishing barns. PEDV eased, but producers kept expanding modestly. Over the past 13 quarters year-over-year, breeding herd growth averaged 1.4%.

Rounding the figures, with rising litter sizes, a 1% larger breeding herd increases pork production about 2.5% a year. That about matches growth in total use. The industry can sustain growth of about 2.5% and still maintain hog prices generally at or above total cost of production. Positive returns to owner management, labor, etc., spur national herd growth.

Even before the trade war with China heightened demand uncertainty, producers had been growing the breeding herd a bit more than the sustainable 1%. A little too much growth results in forecasted annual returns for farrow-to-finish producers near breakeven in 2018 and small losses projected in 2019. Intuitively, expectations of future losses should slow, or stall, expansion. But pork producers appear to be defying economic logic. Based on producer surveys, USDA estimated the June 1 breeding herd at 6.32 million head. That's up a surprising 3.5% from June 1, 2017, and up a husky 5.7% from June 1, 2016. The trade was expecting a 1.7% rise. The surge raises concerns that pork production may begin to outpace demand.

What's causing the breeding herd surge? USDA's Quarterly Hogs and Pigs Reports provide valuable and timely market data. But sometimes numbers need to be put into context, especially when unexpected situations, like the breeding herd surge, happen.

The "kept for breeding inventory" in USDA's Hogs and Pigs Report is a sub-inventory of the all hogs and pigs inventory. The breeding herd number is an estimate of all the sows, gilts (both bred and open) and boars that comprise the breeding stock.

2 explanations for surge

A breeding herd surge can be an actual big growth in numbers, or "catching up" from earlier underestimates. The 3.4% rise in the June 1 market hog inventory far outpaces the 1% growth in pigs saved per litter. That suggests the breeding herd was

probably larger in previous quarterly reports than USDA tallied from producer surveys. This is especially true since growth in number of pigs saved per litter has averaged 1% the last three quarters.

Still, USDA's track record on Hogs and Pig Reports has been pretty good, especially relative to pig numbers and reported hog slaughter numbers. So, playing catch-up on the breeding herd estimate, if that's the case, will only make numbers more consistent going forward. It is still the best survey the industry has.

States with the most robust expansion over the past year as measured by the largest increases in the breeding herd include: Illinois and South Dakota at 40,000 each; North Carolina at 30,000; Missouri and Texas at 20,000 each; Pennsylvania at 15,000, and then a host of states at 10,000. Non-coincidentally, the large increases happened to occur where new packing plants have been constructed.

Capital investment maintains inertia

Profits since 2014 have fueled both herd expansion and investment in new and remodeled facilities. Sow units that were on the drawing boards in recent years are now likely in production.

The Hogs and Pigs Report survey asks producers how many sows and gilts they have for breeding, including unweaned gilts intended for breeding. It's certainly possible that more gilts have entered the breeding herd than previously reported by producers and reflected in reports.

Large investments in gestation and farrowing facilities boost capacity. Small losses will not push producers to idle facilities. Producers lose less by maintaining full production, as long as expected prices cover variable costs and leave something to apply to fixed costs.

Spreading fixed (building, equipment) and quasi-fixed (labor) costs over more units of output boosts economic efficiency. Sow farms can reduce average fixed costs per head by stocking and farrowing more sows. In fact, recent numbers suggest they are.

The latest breeding herd utilization rate (March through May sows farrowing and March 1 breeding herd) was 50.3%, up from 49.4% last year and the highest since 2012. To achieve and keep up this pace, producers may have needed to add or retain more breeding females.

Coordinating investment

Pork producers have made significant investments in many facets of production, from breeding operations to finishing, to packing and processing, to even pork marketing, with many adopting an integrated business model capturing many stages of production. Looking solely at profits for one sector, i.e., farrow-to-finish, only tells part of the story. Thinking about throughput helps explain why vertically integrated firms may be adding sows.

Throughput, defined in terms of pork production, is the pounds of pork “put through” the supply chain and delivered to customers within a specified time. Businesses with high throughput levels can take market share away from lower throughput firms because the former can produce pork more efficiently than their competitors. Economic theory says these firms will keep increasing production until their marginal cost equals expected marginal revenue.

Implications of the larger breeding herd

The bigger U.S. swine breeding herd likely will not have an impact on nearby market prices. But it is bearish to the deferred hog market. Retaining more females for breeding will yield larger pig crops, thus boosting future market hog supply, slaughter numbers and pork production.

USDA estimates quarterly sows farrowing three times. The second estimate for intentions of sows farrowing for the March through May quarter was presented in the March 2018 report at 3.078 million sows. This was 2.1% higher than the previous year. The final March through May sows farrowing estimate in the June report was 3.121 million sows and up 3.6% year over year. This was 43,000 sows more than the estimate made in March. At pigs saved per litter of 10.63, it totals 457,090 more pigs

added to the pig crop than expected. This equates to about an extra day's worth of slaughter in 2018's fourth quarter. While not overly burdensome, it's still another factor that will weigh on the market.

For June through August sows farrowing, USDA reported a modest year-over-year rise of 1.6% and only upped the intention number from the first to second estimate by 5,000 sows or 0.2%. Given the size of the June 1 breeding herd, you'd expect June through August sows farrowing to be about 3.5% higher than the previous year. This would be consistent with a farrowing ratio (sows farrowing divided by breeding herd) of 51.1%, which is in line with the last two June through August quarterly estimates. With a trend increase in number of pigs saved per litter, this implies a 4.5% rise in June through August pig crop, which will roughly reach slaughter during January through March 2019.

This foreshadows the importance of price-risk management. In late 2017, the market was offering opportunities to capture higher prices in 2018. Producers who hedged against the downward price movement that subsequently occurred are in a much more favorable position than markets are currently offering. How much of the 2018 price erosion is due to the trade tussle with China is hard to quantify.

The recent June report has a bearish tone, especially for the deferred hog market and will likely weigh on prices. Still, the market will offer opportunities in the future. It's important to take advantage of those opportunities. Of course, the wild card remains what will happen politically on the tariff and trade front. Some sort of resolution could trigger a price rally.

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