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Hog inventories fall to 11-year low

A recent USDA report caught many livestock analysts by surprise. The report indicated that hogs on farms nationwide numbered 7 percent fewer than a year ago and the lowest for June 1 since 1975. Moreover, the report indicated that the inventory of hogs held for breeding purposes was down 9 percent from a year ago and that producers plan to scale-back the number of sow farrowings for the June-November period by a like percentage. These readings, if accurate, foreshadow continuing cuts in pork production and higher than expected prices and profits for hog farmers through mid-1987.

The unexpected decline in hog inventories mostly reflects a surprisingly large cut in sow farrowings this spring. A survey of producer's intentions taken last December indicated that the two-year slide in hog inventories was at an end because hog farmers were planning to hold December-May sow farrowings even with the year-earlier period. An updated survey in March suggested that the turnaround would be delayed until this summer. That report showed actual December-February sow farrowings were down 1 percent from the year before and—based on producer's intentions in March—that likely sow farrowings would be down 4 percent in the March-May period before returning to the year-earlier level in the June-August period. The latest report now shows that the turnaround may not come until next year. It indicates that actual March-May farrowings were down nearly 8 percent from a year-earlier, resulting in a decline of nearly 5 percent for the entire December-May period. Moreover, producers' farrowing intentions have been scaled back further and now point to declines of 8 percent in the June-August period and 10 percent in the September-November period.

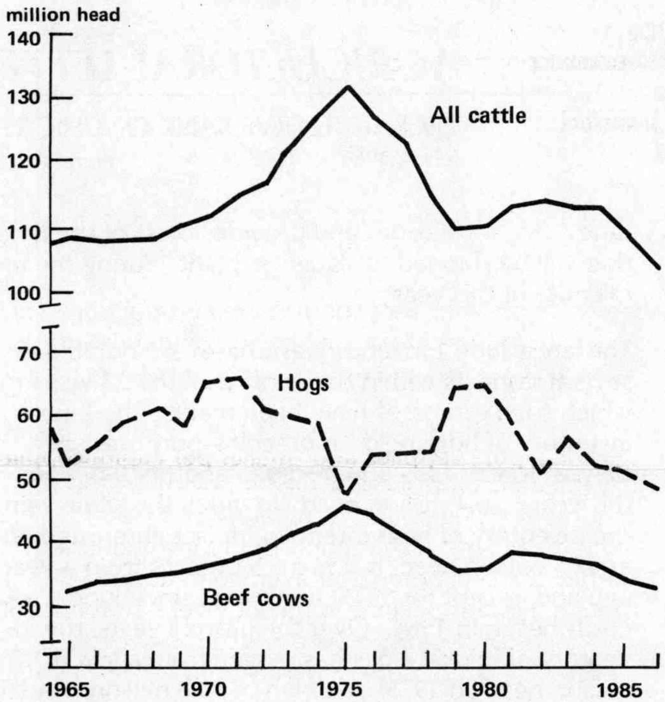
Continued growth in breeding stock productivity offset part of the decline in recent sow farrowings. On average, the sows that farrowed during the December-May period produced 7.73 pigs per litter. That represents a 1.2 percent rise from the same period a year ago and a 5.6 percent rise from the 1980-82 average. With more pigs per litter offsetting a small part of the cut in sow farrowings, the December-May pig crop totaled 41.1 million head, down 3.5 percent from a year ago and the smallest since 1975. The December-May pig crop constitutes the bulk of the June 1 hog inventories and provides most of the hogs that will be shipped to slaughter plants during the remainder of this year.

The latest June 1 inventory estimates are notable in several respects within the context of the 23 years in which such estimates have been made. The June 1 inventory of hogs held for breeding purposes set a 22-year low in 1985 and declined another 9 percent this year to 6.4 million head. In much the same vein, the inventory of hogs intended for slaughter markets, at 42.5 million head, is down 6.5 percent from a year ago and, except for 1975, the lowest since June 1 records began in 1964. Over the past 23 years, the inventory of market hogs has ranged from a low of 40.5 million head (in 1975) to a high of 55.8 million head (in 1980). Relative to the U.S. population, however, market hog inventories are at a new low. At 17.6 market hogs for every 100 individuals in the U.S. population, the market hog-to-population ratio is 6.9 percent lower than a year ago and 6.4 percent below the previous low in 1975. The market hog-to-population ratio is also 28 percent below what it was in 1980 (when market hog inventories peaked) and 35 percent below the highest ratio recorded in 1971.

Interestingly, the cyclical lows now evident in hog inventories are also coinciding with cyclical lows in cattle numbers. As of January 1, the inventory of all cattle—including dairy animals—was at a 22-year low of 105 million head. The 33.6 million head inventory of beef cows, a more relevant measure in terms of underlying beef production capacity, was the lowest since 1966. But relative to the total U.S. population, beef cow numbers at the beginning of this year were 18 percent lower than in 1966 and 34 percent below the beef cow-to-population ratio of 1975 when beef cow numbers were at an all time high. Although historical comparisons of livestock inventories-to-population ratios can mask important trends in increasing livestock productivity and in declining consumer preferences for red meats, it is clear that U.S. cattle and hog farmers have undergone a major retrenchment in recent years. And for the first time in several decades, the retrenchment is occurring simultaneously in hogs and cattle.

Hog farmers in the Seventh Federal Reserve District apparently accounted for a proportionately large share of the most recent phase of the retrenchment in

Hog and cattle inventories lowest in several years



hog numbers. The five District states account for nearly half of the nation's hog inventories, although details for only three District states—Illinois, Indiana, and Iowa—were included in the latest report. The December-May pig crop in these three District states was down 7.3 percent from a year ago. Trends varied widely, however, with Illinois down 14.5 percent, Iowa down 7.5 percent, and Indiana up 3.5 percent. With the smaller pig crop, hog inventories in the three District states have dropped to 21.4 million head, down 10.5 percent from a year ago. The biggest cut was in the inventory of hogs held for breeding purposes, down 12.5 percent. In conjunction with the smaller breeding inventory, hog farmers in the three surveyed District states reportedly plan to hold sow farrowings for the June-November period nearly 12 percent under the same months a year ago.

The latest inventory and farrowing intentions estimates, if accurate, foreshadow continued declines in pork production through mid-1987. After rising 7 percent in 1983, commercial pork production declined 2.6 percent in 1984 and held virtually unchanged in 1985. In the first quarter of this year, pork production lagged the year-earlier level by 1.5 percent. Preliminary evidence based on federally inspected hog slaughter for the 13 weeks ending June 28 suggests that second quarter pork production declined about 5 percent from the year-earlier level.

The June 1 estimates of the inventory of market hogs and the December-May pig crop both serve as reasonable, but not necessarily precise, indicators of second-half hog slaughter and pork production. In line with this, many analysts are expecting year-over-year declines of 6 to 7 percent in hog slaughter during the second half of this year. A decline of that magnitude, coupled with a continuation of the uptrend in dressed weights, would translate into a second-half decline of 4.5 to 6 percent in pork production. However, projected declines in hog slaughter of as little as 3.5 percent, or as much as 8.5 percent, are not unreasonable given the current estimates of the indicators and the variability in the relationship between actual slaughter and these indicators in recent years. In any event, most analysts believe that the fourth quarter decline in hog slaughter and pork production will be considerable larger than that likely to occur in the third quarter.

Other factors that could push the second-half declines in hog slaughter and pork production into the upper half of the forecast range include the possibility of a build-up in the breeding herd and a continuation of the recent, more favorable, trends in imports of hogs and pork products. Most analysts believe that the combination of high hog prices and unusually low feed costs in the months ahead will translate into sizeable profits for most hog farmers. In time, the increased profits will encourage a build-up in the breeding herd and expanded pork production. If producers retain gilts for the breeding herd during the summer and fall, the second-half declines in hog slaughter will be nominally larger than what otherwise would have been the case.

The surge in live hog imports tapered off sharply in the latter half of 1985 and continued to trend lower in the first part of this year. The earlier surge reflected a number of factors, including the high value of the U.S. dollar, growing hog production in Canada—the source of virtually all live hog imports and a large share of pork product imports into the United States—and the desire of domestic packing houses to sustain their output in the wake of declining U.S. hog supplies. The subsequent fall-off in live hog imports stems from countervailing duties imposed by the U.S. in mid-1985 on imports of Canadian live hogs. From 1979 through 1982 live hog imports ranged from 140,000 to 300,000 head annually . In 1983, hog imports jumped to nearly 450,000 head and then surged to a peak of 1.3 million head in 1984. In that year, the number of imported hogs were equivalent to about 1.6 percent of all hogs that moved through domestic slaughter plants, up from 0.2 percent in the late 1970s and early 1980s. For all of 1985, the number of imported hogs declined 7 percent, paced by huge declines in the second half. Through the first five months of this year, live hog imports have dropped back to levels comparable to 1983 and down 73 percent from the peak year-ago levels.

The trend in pork imports has also turned slightly lower. From 1979 through 1981, pork imports ranged from 500 to 550 million pounds (carcass weight). Thereafter, pork imports grew rapidly—especially in 1984—and peaked at about 1.13 billion pounds in 1985. At the peak, pork imports added nearly 8 percent to the pork production coming out of domestic plants, up from about 3.5 percent in the late 1970s and early 1980s. Pork imports continued above year-earlier levels through January, but since then have dropped back. On a year-to-date basis through May, imports of pork products are down nearly 11 percent.

With imports of live hogs now trending toward the greatly reduced 1983 level, and with imports of pork products likely to be unchanged and perhaps slightly lower than last year, changes in domestic pork supplies are more likely to parallel changes in hog production on U.S. farms. This suggests that the current estimates of the June 1 inventory of market hogs, and the December-May pig crop, if accurate, could serve as a more reliable barometer of second-half hog slaughter and pork production than has been the case in the past couple of years.

Current prospects for hog slaughter and pork production in the first half of 1987 must center on the sharply lower inventory of breeding hogs and producers' reported intentions to cut June-November sow farrowings by nearly 9 percent. Assuming producers carry out their latest intentions, and allowing for further growth in pigs per litter, the June-November pig crop may be down 7 to 8 percent from the same period last year. If that were the case, a roughly comparable decline would be expected in first-half slaughter in 1987. However, with improved profit prospects, sow farrowings this fall could exceed the intentions indicated by producers in the recent June 1 USDA survey. If that were the case, hog slaughter next winter and spring might be larger than current sow farrowing intentions indicate. In this regard, it should be noted that actual June-November sow farrowings have exceeded the expressed June 1 intentions in 5 out of the past 6 years. In those 5 years, actual farrowings exceeded intentions by an average of 3.1 percent. The exception was in 1983 when actual June-November farrowings fell 2.3 percent short of intentions. In light of the historical precedents and the near-term favorable profit prospects, some analysts are suggesting that the decline in first half 1987 slaughter may be less than half of that currently indicated by producers' farrowing intentions.

While pork production will be down for the next several months, competitive supplies of poultry will continue to rise and beef production will likely hold close to year-ago levels this summer before declining in the fall. Through late June of this year, federally inspected poultry production had held about 7 percent above year-earlier levels. Beef production was up about 4 percent. For the second-half of this year, the USDA projects poultry production will remain 7 percent above year-earlier levels. For second-half beef production, the USDA is projecting a decline of nearly 4 percent, with most of the drop coming in the fourth quarter. Many other analysts, however, are looking for a smaller decline in second-half beef production. Total meat production in the second-half should be unchanged to down 1 percent from a year ago.

Although consumer demand for red meats is still soft, declining pork supplies and smaller per capita supplies of total meats foreshadow higher hog prices. In the first quarter, hog prices averaged $43.30 per hundredweight. A sharp upturn in May and June pushed the second quarter average to about $47. Although perhaps peaking in recent weeks at about $60, hog prices this summer are expected to average around $55 per hundredweight, and then decline to a fourth quarter average in the low $50s. At these levels, hog prices would exceed year-earlier levels by a significant amount and greatly strengthen profit prospects for hog farmers. Profit prospects for hog farmers will also be significantly enhanced by lower corn and protein prices, which translate into lower feed costs. As corn prices adjusted to the sharply lower support price that is offered under the 1986 feed grain program, the hog/corn price ratio will likely reach the highest levels seen in years. While a favorable hog/corn price ratio may not be the barometer it once was in signaling producer profits and a pending expansion in hog production, it is clear that the profit outlook for hog farmers over the next few months is among the brightest in all of agriculture.

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Selected Agricultural Economic Indicators

	Latest period	Value	Percent change from: Prior period	Year ago	Two years ago
Prices received by farmers *(1977=100)*	June	121	-1.6	-6	-16
Crops *(1977=100)*	June	110	-3.5	-11	-24
Corn *($per bu.)*	June	2.38	-0.4	-10	-29
Oats *($per bu.)*	June	1.14	-5.8	-28	-37
Soybeans *($per bu.)*	June	5.19	-1.1	-8	-35
Wheat *($per bu.)*	June	2.45	-18.9	-21	-29
Livestock and products *(1977=100)*	June	131	0.0	-2	-9
Barrows and gilts *($per cwt.)*	June	51.00	9.9	12	2
Steers and heifers *($per cwt.)*	June	52.30	-3.5	-8	-15
Milk *($per cwt.)*	June	11.90	-0.8	-2	-8
Eggs *(¢per doz.)*	June	50.5	-10.1	-5	-17
Prices paid by farmers *(1977=100)*	April	160	-1.8†	-2	-3
Production items	April	145	-2.7†	-5	-8
Feed	April	112	-0.9†	-7	-22
Feeder livestock	April	147	-2.6†	-9	-7
Fuels and energy	April	160	-14.9†	-20	-21
Producer Prices *(1967=100)*	May	289	0.7	-2	-1
Agricultural machinery and equipment	May	339	0.0	0	1
Fertilizer materials	May	216	-0.2	-6	-11
Agricultural chemicals	May	468	-0.3	2	5
Consumer prices *(1967=100)*	May	326	0.3	2	5
Food	May	317	0.3	3	5
Production or stocks					
Corn stocks *(mil. bu.)*	June 1	4,989	N.A.	76	133
Soybean stocks *(mil. bu.)*	June 1	847	N.A.	39	79
Beef production *(bil. lbs.)*	May	2.11	-0.1	1	2
Pork production *(bil. lbs.)*	May	1.21	-6.3	-9	-6
Milk production *(bil. lbs.)*††	May	11.2	4.6	3	8

N.A. Not applicable
†Prior period is three months earlier.
††21 selected states.

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