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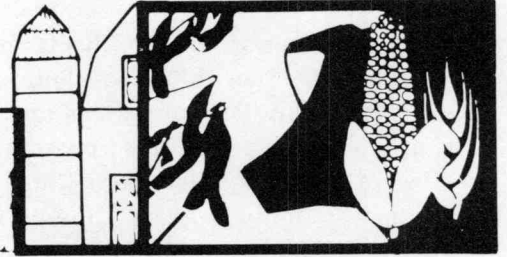
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Wait, Dup Head

FEDERAL RESERVE BANK OF CHICAGO

AGRICULTURAL



LETTER

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HOG PRODUCTION declined sharply this winter according to the USDA's recent *Hogs and Pigs* report. The report indicated that the December-February pig crop for the ten major producing states was down 13 percent from the same period a year earlier, a much larger decline than most analysts had expected. Moreover, the March 1 inventory of all hogs and pigs in these states, which account for about 78 percent of the U.S. total, was off more than 5 percent from the year before and at an eight-year low. A substantial reduction in the number of breeding animals contributed to the drop in inventories, suggesting that cuts in hog production will continue through the summer. While near-term pork supplies will hold close to year-ago levels, substantial declines in hog slaughter are expected in the second half of this year and in early 1985.

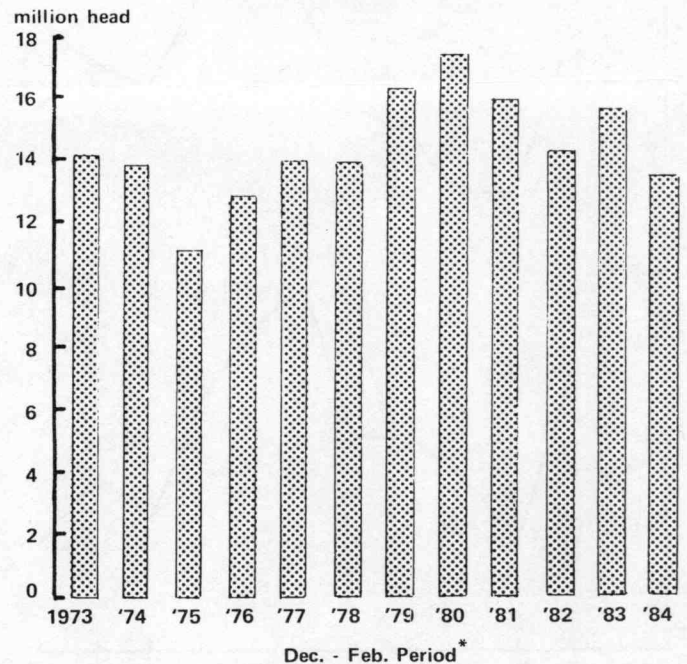
Low hog prices and high feed costs reduced operating margins through much of 1983, prompting some operators to cut back and others to discontinue their hog operations. Since 1980, the number of farms producing hogs has fallen 30 percent. Most of that decline occurred in 1981 and 1982, but the trend continued with a smaller 3.3 percent drop last year. The decline in hog-producing farms since 1980, although distributed across all size groups, has been most pronounced among the smaller operators having fewer than 100 head. Many of these producers have traditionally moved into and out of the industry as economic conditions dictated, but the continued decline of this group as a proportion of total operators and its falling share of total hog inventories is indicative of the efficiencies enjoyed by larger-scale producers.

While operations with fewer than 100 head of hogs accounted for almost 74 percent of all U.S. hog producers in December 1983, their share of inventory amounted to only 11.3 percent of the total. In sharp contrast, the largest hog operations—those with more than 500 head—represented 6 percent of all operations and held 51 percent of the inventory in December 1983. Moreover, this group has been growing steadily in terms of both the proportion of operations it represents and its

share of total inventory. Six years ago, operators with more than 500 hogs represented only 3.5 percent of all operations and 35 percent of the hog inventory.

The USDA's latest *Hogs and Pigs* report shows a sharp downturn in the first quarter pig crop of the ten major producing states. The December-February pig crop, at 13.5 million head, was 13 percent below last winter's crop and the smallest for the period since 1976. The 1.9 million sows that farrowed during the December-February quarter was down nearly 11 percent from a year earlier and 8 percent below producers' intentions as stated in the USDA's December report. A decline in the average litter size to 7.26 pigs per litter during this winter's severe weather contributed further to the marked drop in the pig crop.

This winter's pig crop was the smallest since 1976

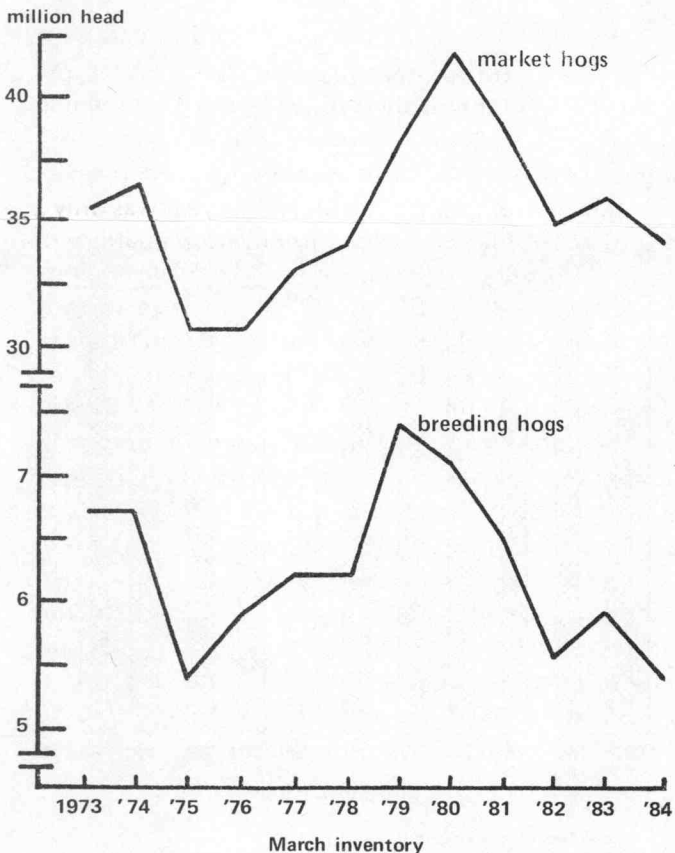


* December of the previous year.

The USDA report suggests that farrowings will continue to register year-to-year declines during the next two quarters. Producer intentions for the March-May period, which pointed to an 8.5 percent year-over-year decline in the December report, now suggest a 10.5 percent drop in farrowings for the period. Moreover, farrowing intentions for the June-August quarter portend a 12.5 percent decline from the level of a year ago. Combined with the smaller than expected December-February pig crop, the sharply lower farrowing intentions for the next two quarters among producers in the ten leading states foreshadow a significant year-to-year fall in hog slaughter. The initial drop is likely to occur late this spring with declines continuing to be registered through the first quarter of 1985.

Hog inventories fell below year-ago levels as a result of the sharp decline in the winter pig crop. The March 1 inventory of all hogs and pigs in the ten states surveyed quarterly stood at 39.5 million head, down 5.5 percent from the year before. Breeding hog inventories registered a decline of nearly 10 percent. At 5.4 million head, it was the smallest March 1 inventory of breeding animals reported since quarterly data for the ten states was first recorded in 1973.

The March 1 breeding hog inventory is at new low



A smaller, but still significant decline was noted in the inventory of market hogs. The March 1 inventory of market hogs was down nearly 5 percent from last year's level. Most of the decline is attributable to the small winter pig crop that cut the inventory of market hogs weighing less than 60 pounds by 12 percent. The inventory of hogs weighing 60 to 119 pounds was down 5 percent from the year before, while that for market hogs weighing 120 to 179 pounds was up 1 percent. Market hogs weighing 180 pounds or more numbered 6 percent more than a year ago, but most of those hogs undoubtedly have already been marketed.

Trends in the three District states included in the quarterly survey were similar to the ten-state group. (Michigan and Wisconsin are not included in the quarterly ten-state survey.) The December-February pig crop in Illinois, Indiana and Iowa was 12 percent below the level of a year ago. While the average number of pigs per litter was down, most of the decline in the three states was attributable to a 10 percent year-to-year drop in the number of sows farrowing. This drop in farrowings was well below the 2.6 percent decline indicated by producers' intentions on December 1.

The March 1 inventory of hogs intended for market in the three District states included in the survey was down nearly 7 percent from the previous year, while the number of breeding animals was down 10 percent. In line with the smaller inventory of breeding stock, hog producers in Illinois, Indiana, and Iowa intend to reduce March-May sow farrowings by 11 percent and June-August farrowings by 14 percent.

Hog slaughter has continued well above the pace of a year ago, but a downturn is imminent. Commercial hog slaughter in the fourth quarter of 1983 was up 17 percent from a year earlier, contributing heavily to the 6.6 percent gain in hog slaughter registered for all of 1983. Preliminary indications for the first three months of this year suggest that hog slaughter continued to outstrip the level of a year ago, but by a smaller margin of about 8 percent. The high levels of sow slaughter noted in the second half of 1983 continued through the first quarter of this year. The persistent pressure on operator margins has held sow slaughter about 20 percent above the first quarter of 1983.

The size of last fall's pig crop and the March 1 market hog inventory suggest that year-to-year gains in hog slaughter will soon end. With the September-November 1983 pig crop unchanged from the previous year's level and the ten-state inventory of market hogs weighing between 120 and 179 pounds just 1 percent larger than a year ago, indications are that hog slaughter

this spring is likely to hold near last year's level. Moreover, the sharp decline in this winter's pig crop and spring farrowing intentions point to a significant year-to-year reduction in hog slaughter during the second half of this year. If the indicators for the ten leading states are reflective of the U.S. total, hog slaughter in the second half of 1984 may be 12 percent below last year's level.

The June-August farrowing intentions of producers in the ten states surveyed quarterly suggest a continued year-to-year decline in the first quarter of next year. However, prospects for higher hog prices and lower feed costs later this year may cause producers to revise their June-August intentions. Nevertheless, some year-to-year decline in hog slaughter is likely to occur in the early months of 1985.

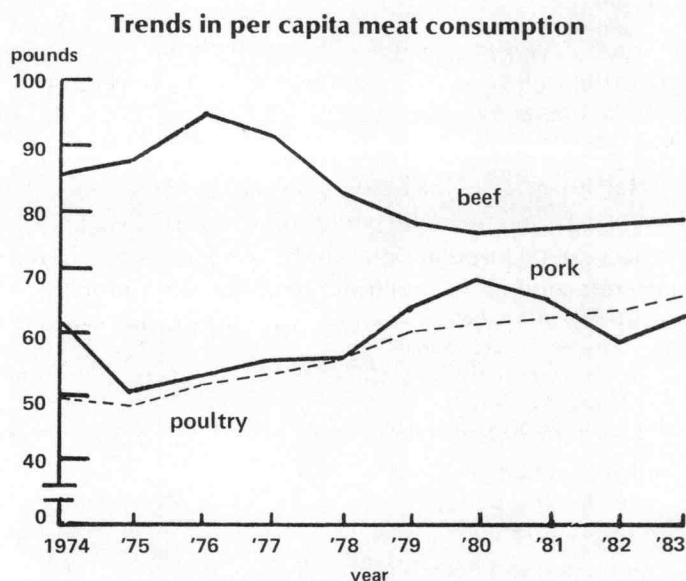
Hog prices have fluctuated considerably in recent months. Prices rose sharply in December and January and averaged \$47.53 in the first quarter, well above the \$42.15 average during the fourth quarter of 1983. Prices in the months ahead will reflect the supplies of pork and other meats as well as consumer demand.

Beef production was up about 4 percent in the first quarter, in part reflecting a pick-up in dairy cow slaughter. However, analysts believe beef production in the second quarter will about equal the year-earlier level and then drop below 1983 levels by 5 to 6 percent in the second half of the year. Poultry production, in contrast, has lagged year-earlier levels thus far in 1984, but an upturn is expected in the second half. Overall, however, the projected decline in beef production and sharp cut in pork production will hold meat supplies well below year-ago levels in the second half of 1984.

In the face of tighter supplies, consumer demand for meat may strengthen somewhat this year. Continued growth in the economy translates into more employment and higher earnings. This too could cause some strengthening in hog prices in the months ahead.

With supplies down and demand likely to strengthen somewhat, most analysts are expecting hog prices to hold at fairly high levels. For the current quarter, prices are likely to range from the high \$40s to the high \$50s per hundredweight. Third quarter prices will likely hold at a higher level, perhaps averaging near \$60 per hundredweight. Prices could decline seasonally in the fourth quarter, but will likely hold well above year-earlier levels.

Per capita meat consumption will likely decline this year due to the tighter supplies and higher prices in 1984. After falling to a four-year low in 1982, per capita meat consumption jumped 3 percent last year to a new high of almost 210 pounds (retail weight basis). Increases were registered in both red meat and poultry consumption. Pork consumption, up 4 percent, received the largest boost, while beef and poultry consumption increased 2 and 4 percent, respectively.



Despite the large gains last year, the upward trend in per capita meat consumption has slowed considerably in recent years. After posting gains of 14 and 15 percent in the 1950s and the 1960s, respectively, consumption rose by only 5 percent in the 1970s. Although at a record level, per capita consumption of all meats last year was only 2 percent above the 1979 level. Moreover, the pattern of meat consumption has changed markedly over time. Beef consumption, although still higher than for any other meat, has declined more than 16 percent from the 1976 peak when it accounted for 46 percent of all meat consumed (compared to 38 percent in 1983). In contrast, per capita poultry consumption jumped 28 percent in the 1970s and, despite a slower growth trend in the 1980s, has surpassed pork. Poultry accounted for 31 percent of per capita meat consumption in 1983. Although there was considerable variation during the period, per capita pork consumption last year was unchanged from the 1970 level, but accounted for less than 30 percent of per capita meat consumption.

Peter J. Heffernan

Selected agricultural economic developments

Subject	Unit	Latest period	Value	Percent change from	
				Prior period	Year ago
Farm finance					
Total deposits at agricultural banks†	1972-73=100	December	287	- 0.3	+10
Total loans at agricultural banks†	1972-73=100	December	299	+ 0.2	+ 7
Production credit associations					
Loans outstanding					
United States	mil. dol.	February	18,300	- 0.1	- 6
Seventh District states	mil. dol.		N.A.	N.A.	N.A.
Loans made					
United States	mil. dol.	February	2,587	-13.3	0
Seventh District states	mil. dol.		N.A.	N.A.	N.A.
Federal land banks					
Loans outstanding					
United States	mil. dol.	February	47,982	-0.1	+ 1
Seventh District states	mil. dol.		N.A.	N.A.	N.A.
New money loaned					
United States	mil. dol.	February	269	-28.9	- 2
Seventh District states	mil. dol.		N.A.	N.A.	N.A.
Interest rates					
Feeder cattle loans††	percent	4th Quarter	13.68	+ 0.6	- 8
Farm real estate loans††	percent	4th Quarter	13.33	+ 0.4	-11
Three-month Treasury bills	percent	3/22-3/28	9.76	+ 6.1	+13
Federal funds rate	percent	3/22-3/28	9.97	+ 3.6	+12
Government bonds (long-term)	percent	3/22-3/28	12.49	+ 2.7	+17
Agricultural trade					
Agricultural exports	mil. dol.	January	3,546	+ 1.3	+14
Agricultural imports	mil. dol.	January	1,694	+26.9	+13
Farm machinery sales^P					
Farm tractors	units	February	7,317	- 2.5	+12
Combines	units	February	620	-43.0	-12
Balers	units	February	318	+14.4	- 2

†Member banks in Seventh District having a large proportion of agricultural loans in towns of less than 15,000 population.

††Average of rates reported by District agricultural banks at beginning and end of quarter.

^PPreliminary.

N.A. - Not available.

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