FEDERAL RESERVE BANK OF CHICAGO

AGRICULTURAL LETTER

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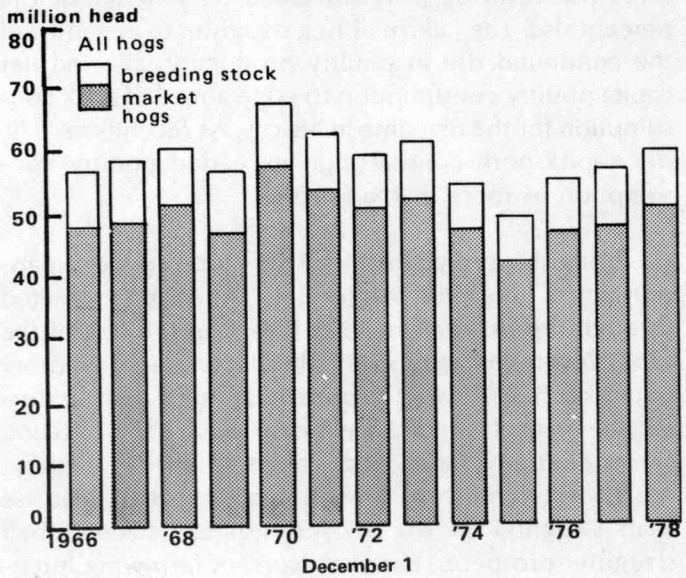
THE LONG-AWAITED EXPANSION IN HOG PRODUCTION is apparently further along than reports had indicated. According to the USDA, the December 1 inventory of hogs and pigs on farms is up 6 percent from a year earlier. Breeding inventories are up even more, with current farrowing intentions pointing to a possible 17 percent year-to-year increase in the December-May pig crop. If these estimates are right, 1979 pork production could be up more than a tenth. Although the effect will be cushioned by smaller supplies of beef, hog prices will probably trend lower throughout the year.

The indications of a sharp upturn in hog production, although delayed much longer than expected, are a reflection of the unusually high profits for the past year and a half. Except for one month, the hog-corn price ratio has exceeded 20 in every month since May 1977. That is a record length of time for such an unusually high ratio. According to Iowa State University budgets for a typical farrow-to-finish operation, the high ratio has been associated with an average net profit of nearly $30 a head on hogs marketed in 1978. Profits of this magnitude were bound to trigger an expansion eventually.

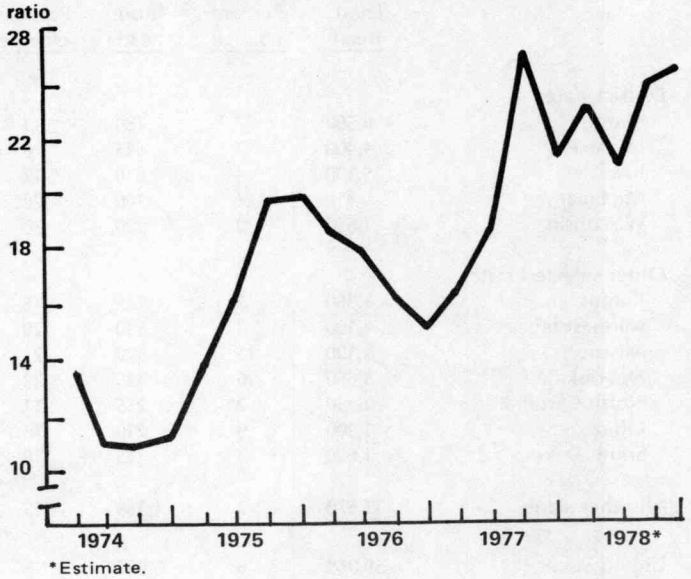
Hog inventories are up from a year ago



The December 1 inventory estimates show a 5 percent year-to-year rise in the number of hogs intended for market and an 11 percent rise in the number of hogs held for breeding. Among market hogs, those weighing 180 pounds or more numbered 1 percent less than a year ago. The inventory of market hogs weighing 120 to 179 pounds was up 2 percent, while that for hogs weighing 60 to 119 pounds was up 5 percent. Pigs under 60 pounds numbered 9 percent more than a year ago.

The inventory estimates were considerably larger than what had been indicated in past reports of producer's actual and planned farrowings. Last June, for instance, producers in the 14 major hog states indicated that they intended to boost June-November farrowings by 3 percent. A report in September, however, scaled the rise down to only 1 percent, based on an initial estimate of a slight decline in actual June-August farrowings and a reconfirmation that producers intended to boost September-November farrowings by only 3 percent. Now, according to the latest report, actual farrowings for the entire six-month period were up 6 percent, reflecting a revised estimate that shows June-August

The hog-corn price ratio has been unusually high for the past 6 quarters



farrowings up 2 percent and actual farrowings for the latter half of the period up an estimated 9 percent.

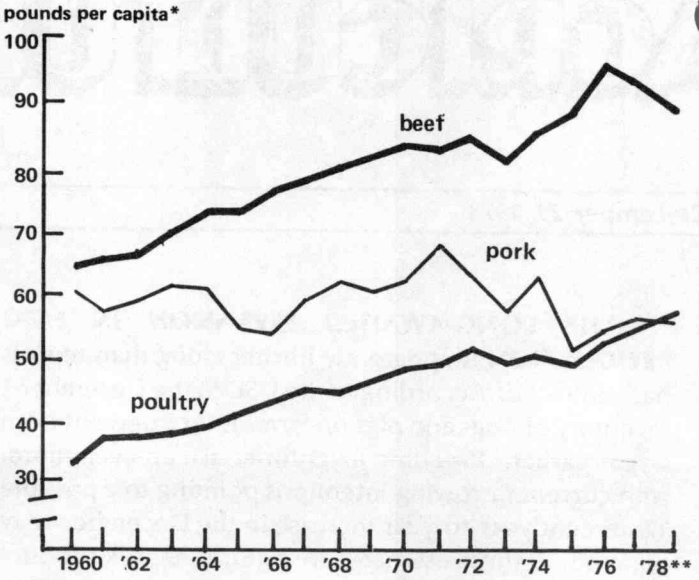
These changes are indicative of the difficulties the USDA encounters in measuring actual and planned changes in hog production. Moreover, the changes point out the tentative nature in which analysts should treat these numbers until confirmed by future slaughter levels. The USDA's *Hog and Pig* report is the most reliable source of information on future hog slaughter. But it can be misleading at times, as it has been in the recent past and could be with these latest estimates.

Farrowing intentions nationwide currently point to a 15 percent year-to-year rise in sow farrowings for the December-May period. Among producers in the 14 major states that report intentions quarterly, the indicated increase in farrowings for the December-February period is 12 percent—sharply above the 3 percent rise noted in the September report—while that for March-May is 16 percent. The intended number of sow farrowings appears consistent with the expanded inventory of breeding hogs and may portend an even larger rise in the pig crop. If the number of pigs saved per litter returns to more normal levels, the December-May pig crop could be up nearly 17 percent and the largest since 1971. At the same time, however, evidence that sow slaughter has been only moderately below year-ago levels in recent months suggests that the expansion in the breeding herd stems mostly from the retention of gilts. First time gilts typically farrow smaller-than-average litters.

Hog inventories and farrowing intentions are up from a year ago

	Inventory of all hogs		Dec.-May intended sow farrowings	
	Thou. head	Percent change	Thou. head	Percent change
District states				
Illinois	6,550	7	780	11
Indiana	4,400	7	445	9
Iowa	15,100	4	1,610	12
Michigan	810	27	100	28
Wisconsin	1,650	20	220	20
Other selected states				
Kansas	1,960	- 2	235	15
Minnesota	4,100	3	530	20
Missouri	4,100	11	520	21
Nebraska	3,650	16	435	23
North Carolina	2,350	2	255	11
Ohio	1,900	9	210	18
South Dakota	1,620	3	225	16
All other states	11,670	3	1,338	15
United States	59,860	6	6,903	15

Consumers ate more poultry than pork in 1978



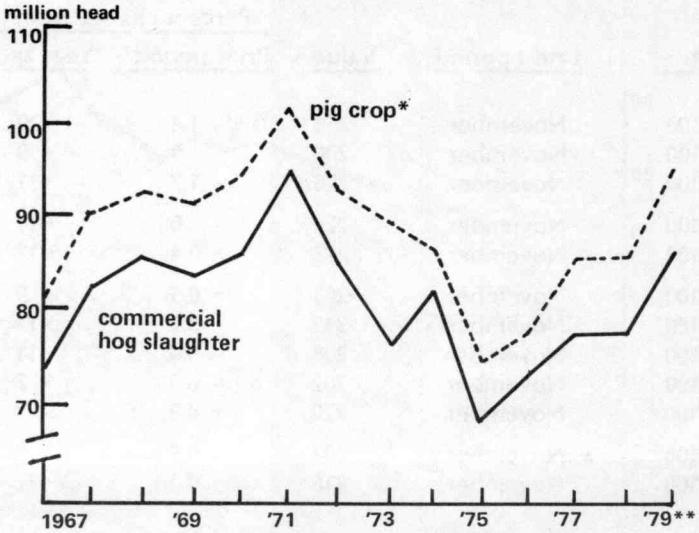
*Retail weight basis.
**USDA estimates.

District farmers have contributed to the upturn in hog production, paced by a surge of activity in Michigan and Wisconsin. In Michigan, both the existing inventory of hogs and the December-May farrowing intentions show year-to-year gains of more than a fourth. In Wisconsin, hog numbers are up a fifth, as are planned farrowings. But the combined hog inventories in Illinois, Indiana, and Iowa—the three major district states in the "hog belt"—are up only 5 percent and current farrowing intentions point to only an 11 percent rise.

Hog slaughter fell far short of expectations in 1978, but the current measures portend a substantial rise in 1979. Based on preliminary figures, it appears 1978 hog slaughter was virtually unchanged from the year-ago level. This contrasts with expectations a year ago of a 10 percent rise. The failure of hog slaughter to expand and the continued rise in poultry production allowed per capita poultry consumption to edge ahead of pork consumption for the first time in history. As recently as 1970, per capita pork consumption exceeded poultry consumption by more than a fourth.

Slaughter projections for 1979 hinge on the expansion since June plus the level of expansion expected through the first half of 1979. Based on the size of the June-November pig crop and the December 1 inventory of market hogs, it would appear that hog slaughter during the first half of 1979 may be up about 6 to 8 percent. On a quarterly basis, hog slaughter during January-March will likely show a much smaller year-to-year rise than slaughter in the second quarter. Second half slaughter prospects, based on current farrowing inten-

Larger pig crop portends substantial rise in hog slaughter in 1979

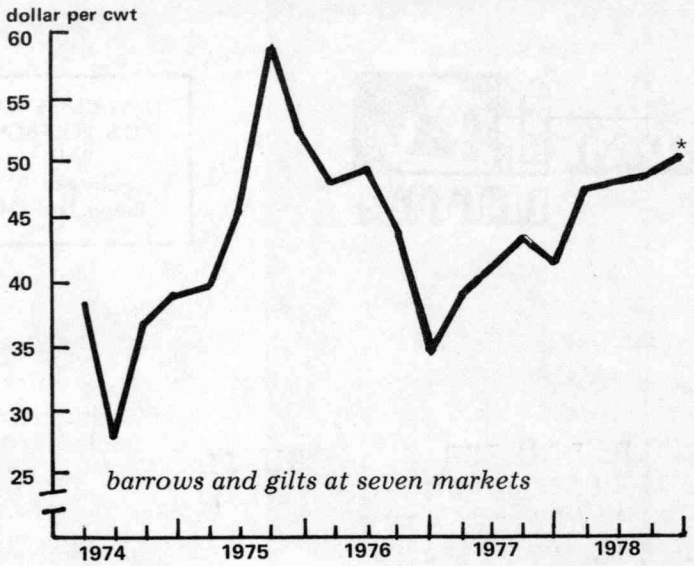


*Pigs born during 12 months ending in May.
**Estimates.

tions, point to a 15 to 17 percent year-to-year rise. Overall, the latest measures suggest 1979 hog slaughter may be up 10 to 12 percent and the largest since 1971.

Hog prices would clearly feel the weight of that much expansion in slaughter—should it materialize. But fortunately for hog producers, the impact on prices will be partially cushioned by a further downturn in beef production. Current USDA estimates show a 4 percent decline in beef production for the first half of 1979, followed by declines of 6 to 7 percent in the second half. The cutback in beef production could be even larger if the recent slowing in placements of cattle on feed prevails for the next few months. Although competitive supplies of turkeys and broilers will be up again in 1979, total per capita meat supplies may be only marginally larger than in 1978. If consumer demand for meat remains strong, hog prices next year may average close to the mid $40s per hundredweight. Nevertheless, prices are apt to trend noticeably lower during the year if the current measures of the rate of expansion in pork production prove reliable.

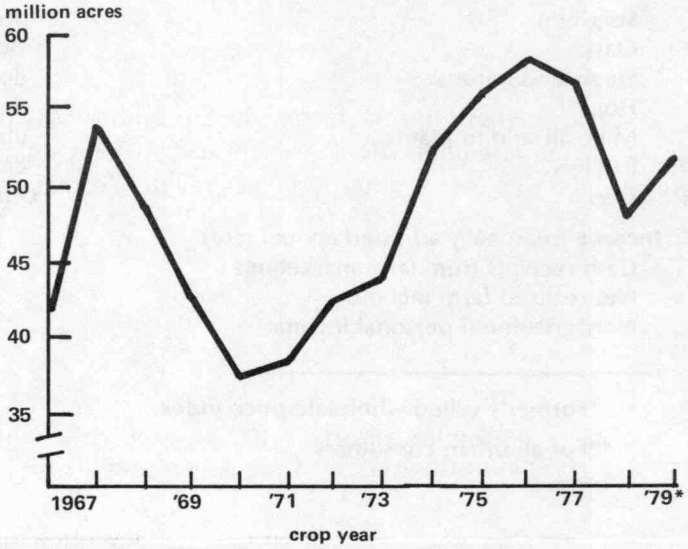
Hog prices were up sharply in 1978



*Estimate.

WINTER WHEAT SEEDINGS rose 8 percent, according to a recent USDA report. Winter wheat plantings in the five district states were up more than a fourth, paced by a 70 percent jump in Michigan. The upturn reflects both generally excellent fall seeding conditions and the much higher wheat prices this fall. In addition, it would appear that the 1979 wheat program, as it currently stands, will attract less participation than last year.

Winter wheat seedings are up



*USDA estimates.

The increased winter wheat seedings, coupled with prospects for improved per-acre yields and an increase in the proportion of planted acreage that will be harvested for grain portends a substantial boost in 1979 winter wheat production. The USDA currently projects winter wheat yields at an average of 28 bushels an acre, up about 2 bushels from the reduced yields in 1978. The proportion of planted acreage that will be harvested is expected to rise from the 81.5 precent utilized in the 1978 crop to the more normal 86 percent. These developments would be sufficient to push winter wheat production to 1.4 billion bushels, 15 percent more than in 1978. Winter wheat typically accounts for about three-fourths of the annual wheat harvest.

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Selected agricultural economic developments

Subject	Unit	Latest period	Value	Percent change from Prior period	Percent change from Year ago
Index of prices received by farmers	1967=100	November	214	- 1.4	+20
Crops	1967=100	November	200	0	+ 9
Livestock	1967=100	November	228	- 1.7	+31
Index of prices paid by farmers	1967=100	November	224	0	+11
Production items	1967=100	November	223	+ 0.4	+12
Producer price index* *(finished goods)*	1967=100	November	201	+ 0.5	+ 9
Foods	1967=100	November	212	- 0.2	+11
Processed foods and feeds	1967=100	November	208	- 0.4	+11
Agricultural chemicals	1967=100	November	202	- 0.3	+ 7
Agricultural machinery and equipment	1967=100	November	220	+ 0.9	+ 7
Consumer price index** *(all items)*	1967=100	November	202	+ 0.5	+ 9
Food at home	1967=100	November	216	+ 0.3	+12
Cash prices received by farmers					
Corn	dol. per bu.	November	2.03	+ 3.0	+ 8
Soybeans	dol. per bu.	November	6.31	+ 0.8	+12
Wheat	dol. per bu.	November	3.05	+ 2.0	+24
Sorghum	dol. per cwt.	November	3.45	+ 2.7	+14
Oats	dol. per bu.	November	1.16	+ 7.4	+ 5
Steers and heifers	dol. per cwt.	November	55.40	- 2.1	+46
Hogs	dol. per cwt.	November	46.70	- 8.6	+24
Milk, all sold to plants	dol. per cwt.	November	11.50	+ 1.8	+13
Broilers	cents per lb.	November	24.7	- 0.4	+16
Eggs	cents per doz.	November	56.8	+ 8.6	+11
Income *(seasonally adjusted annual rate)*					
Cash receipts from farm marketings	bil. dol.	3rd Quarter	110	+ 0.5	+20
Net realized farm income	bil. dol.	3rd Quarter	26	0	+59
Nonagricultural personal income	bil. dol.	November	1,739	+ 0.9	+12

*Formerly called wholesale price index.

**For all urban consumers.

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