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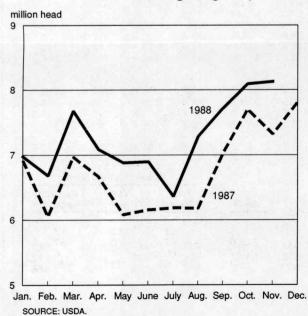
Hog production

FRB CHICAGO

Hog production continued to expand during the final months of 1988, but at a slower pace than had been expected. Recent USDA estimates of market hog inventories and pig crops show somewhat smaller numbers than suggested by earlier reports, and a year-to-year drop in the inventory of animals held for breeding purposes. The second half pig crop and inventories of lighter weight hogs remained above yearearlier levels, suggesting that hog slaughter and pork production will hold near or above last year's level during the first half of 1989. Farrowing intentions of U.S. hog producers indicate that hog production may expand during the third quarter, but will likely drop below year-ago levels during the final three months of 1989.

December market hog inventories on U.S. farms recorded a second consecutive year-to-year gain, but remain well below the levels of the early 1980s. At almost 48.3 million head, the December inventory was up almost 2 percent from a year earlier and 9 percent above the eleven year low recorded in 1986. Year-toyear gains were reported in all but the heaviest weight category, in which market hogs weighing more than 180 pounds were slightly below the year-earlier level.

Commercial hog slaughter



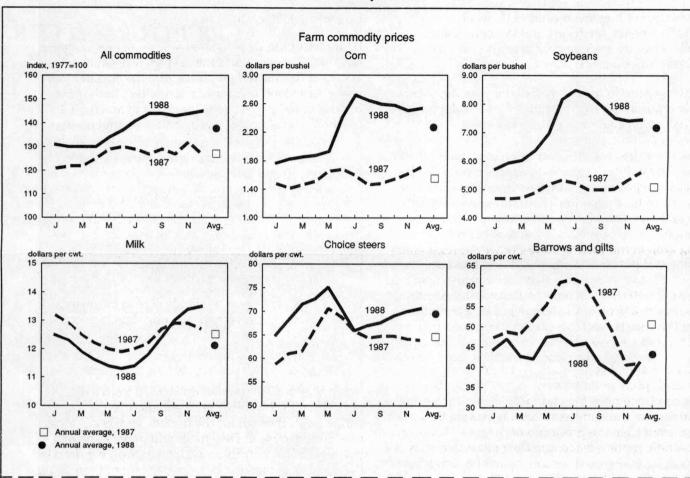
The lightest weight group, pigs under 60 pounds, registered an increase of less than 1 percent, while the number of market hogs on U.S. farms weighing between 60 and 180 pounds was reported to be up 3.4 percent. The December 1 inventory of hogs held for breeding purposes was down almost 2 percent from a year ago. The drop is an indication that the expansion in hog production may ebb in 1989.

The number of sows farrowing during the second half of last year continued to rise, with a 3.2 percent gain from a year earlier being registered. However, the increase in farrowings was considerably smaller than the year-to-year gain suggested by producers intentions earlier in the year. At mid year, U.S. hog farmers indicated that farrowings between June and November would be up 7.4 percent from a year earlier, while in September their intentions had been revised downward to a 5.4 percent gain. It appears that the effects of the drought on livestock and on feed costs were contributing factors to the downward revisions in producers' intentions and in actual farrowings.

The smaller than expected increase in second half farrowings, combined with the 8.4 percent year-toyear gain recorded between December and May, limited the increase in the 1988 pig crop. However, the year-to-year gain was also tempered by a reduction in the number of pigs per litter. Although the number of pigs per litter remained near the year-earlier level of 7.8 through May, during the second half of the year pigs per litter dropped to about 7.6, almost 2 percent lower than the comparable period in 1987. At almost 92.6 million head, the 1988 pig crop was up 5 percent from the year-earlier level and more than 12 percent above the cyclical low recorded in 1986.

Inventories and production varied considerably among the five District states, which account for almost half of the total U.S. inventory. Year-to-year declines in the breeding herd were reported by all of the District states except Wisconsin, where breeding animals in December were unchanged from the year-ago level. In Iowa, the nations leading hog producing state, breeding inventories were down almost 6 percent. Indiana and Michigan producers reported even larger declines of 12.9 and 8.1 percent, respectively. Illinois hog producers reported a 1.4 percent drop in inventories of breeding animals compared to December 1987. In Iowa, market hog inventories on December 1

1988 in Perspective



	Units	1970	1975	1980	1985	1986	1987	1988
Production								
Corn	bil. bu	4.15	5.84	6.64	8.88	8.25	7.06	4.67
Soybeans	bil. bu	1.13	1.55	1.80	2.10	1.94	1.92	1.51
Wheat	bil. bu.	1.35	2.13	2.38	2.42	2.09	2.11	1.81
Beef	bil. lbs.	21.7	24.0	21.6	23.7	24.4	23.6	23.5
Pork	bil. lbs.	14.7	11.8	16.6	14.8	14.1	14.4	15.7
Milk	bil. lbs.	117.0	115.4	128.4	143.1	143.4	142.5	145.3
Farm Sector Earnings								
Cash income	bil. dol.	54.8	90.7	143.3	156.8	152.0	160.4	169.0
Commodity sales	bil. dol.	50.5	88.9	139.7	144.0	135.1	138.1	149.0
Government payments	bil. dol.	3.7	.8	1.3	7.7	11.8	16.7	14.0
Cash expenses	bil. dol.	36.4	61.1	109.1	110.2	100.6	103.3	111.0
Net cash income						100.0	100.0	
Current dollars	bil. dol.	18.4	29.6	34.2	46.6	51.4	57.1	57.0
1982 dollars	bil. dol.	43.7	49.9	39.9	42.0	45.1	48.5	47.0
Farm Sector Balance Sheet								
Current dollars								
Assets	bil. dol.	272	511	996	749	692	709	741
Debt	bil. dol.	49	85	167	175	155	143	139
Equity	bil. dol.	223	426	829	574	536	566	602
1982 dollars	and the state of the second		120	020	77	000	500	002
Assets	bil. dol.	632	832	1,104	667	597	595	597
Debt	bil. dol.	113	138	185	156	134	120	112
Equity	bil. dol.	518	693	919	511	463	475	485

^{*}Preliminary USDA estimates.

were almost 1 percent lower than a year earlier. Declines in market hog inventories of between 4 and 7 percent in Indiana, Michigan, and Wisconsin were partially offset by a 4.5 percent year-to-year increase in market hogs on Illinois farms.

After sharp gains in the first half of the year, farrowings and pig crops in the District states receded during the latter half of 1988. Between December and May, farrowings and pig crops in the five District states registered a year-to-year increase of almost a tenth. During the months of June to November, however, only Illinois reported a year-to-year gain in farrowings, up 8 percent for the period. The District as a whole saw farrowings decline slightly from a year earlier during the six months ending in November. The second half pig crop in the District states, however, registered a decline of 3 percent, as the number of pigs per litter dropped from the year-earlier level. Declines in pig crops were noted for each of the District states except Illinois, where a drop in the number of pigs per litter limited the year-to-year increase in the second half pig crop to about 6.6 percent.

Producers' intentions regarding sow farrowings this winter and spring point to a cut in hog production. During the December-May period, U.S. producers intend to reduce the number of sows farrowing by 2 percent from from the previous year's level. However, the quarterly pattern evident in their intentions suggests that farrowings will remain 2 percent above last year during the winter months, but will drop by almost 6 percent during the March-May period. Intentions among hog farmers in the 10 major producing states point to a slightly larger drop during the six month period of 3 percent with the same quarterly pattern.

Hog slaughter during the final months of 1988 continued to run well ahead of the year-earlier pace. Commercial hog slaughter in October and November was up about 8 percent from the previous year and preliminary estimates of federally inspected hog slaughter in December point to a year-to-year increase of similar magnitude. Combined with the gains recorded in previous quarters, it suggests that hog slaughter in 1988 rose between 8 and 9 percent from a year earlier.

The December inventory and pig crop estimates suggest that smaller year-to-year gains in hog slaughter will continue into early 1989. The summer pig crop of all U.S. producers was up about 2.4 percent from a year ago, while the December inventory of market hogs on U.S. farms weighing between 60 and 179 pounds recorded an increase of about 3.4 percent. These two measures account for most of hogs to be slaughtered during the first three months of 1989 and

suggest that hog slaughter during this period will register a gain falling within this range.

Estimates of the December inventory of pigs weighing less than 60 pounds and the fall pig crop, which largely accounts for this weight group, provide an early indication of second quarter hog slaughter. Both measures recorded year-to-year increases of less than 1 percent. Together they suggest that second quarter hog slaughter will likely hold near the year-earlier level, well below the 5 percent gain implied by producers farrowing intentions in September.

Initial indications of hog slaughter for the second half of 1989 are provided by producers' intended farrowings during the December-May period. The intentions stated by U.S. producers in the December report suggest that farrowings between December and February will be up about 2 percent from a year ago, while between March and May intentions point toward a 5 percent year-to-year decline in farrowings. If these intentions are carried out, hog slaughter could continue to show year-to-year gains through the third quarter before dropping below year-earlier levels during the final three months of 1989.

Hog prices in 1988 trended downward from a midyear peak through November and remained below yearearlier levels throughout the period. However, prices rose considerably in December and moved above year-ago levels, consistent with a year-to-year drop in the number of market hogs weighing more than 180 pounds in inventories on December 1. Current USDA projections point to hog prices averaging in the lowto-mid \$40 per hundredweight range during the first three months of 1989, near the \$44.74 average for the same period a year ago. During the spring months the projections point to hog prices averaging in the midto-upper \$40 range compared to the year-earlier level of \$45.90 per hundredweight.

Peter J. Heffernan

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Selected Agricultural Economic Indicators

			Percent change from			
	Latest period	Value	Prior period	Year ago	Two years ago	
Receipts from farm marketings (\$ millions)	August	12,135	1.9	13	17	
Crops*	August	5,380	2.6	40	57	
Livestock	August	6,717	4.6	4	4	
Government payments	August	39	-83.8	-92	-93	
Real estate farm debt outstanding (\$ billions)						
Commercial banks	September 30	14.2	1.3†	9	24	
Farm Credit System	June 30	28.7	-1.5†	-8	-25	
Life insurance companies	September 30	9.40	-1.9†	-7	-17	
Nonreal estate farm debt outstanding (\$ billions)						
Commercial banks	September 30	29.2	1.5†	0	-9	
Farm Credit System	June 30	9.46	6.8†	-5	-24	
Interest rates on farm loans (percent)						
7th District agricultural banks						
Operating loans	October 1	11.67	3.8†	3	3	
Real estate loans	October 1	11.04	3.9†	3	3	
Commodity Credit Corporation	January	8.87	7.6	25	51	
Agricultural exports (\$ millions)	October	3,302	3.9	23	36	
Corn (mil. bu.)	October	175	12.8	26	40	
Soybeans (mil. bu.)	October	52	94.1	-47	-42	
Wheat (mil. bu.)	October	102	-21.7	-3	12	
Farm machinery sales ^p (units)						
Tractors, over 40 HP	December	4,480	22.1	-6	28	
40 to 139 HP	December	2,852	10.5	-20	1	
140 HP or more	December	1,628	49.8	34	142	
Combines	December	505	-17.1	-37	2	



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^{*}Includes net CCC loans.

Prior period is three months earlier.

Preliminary