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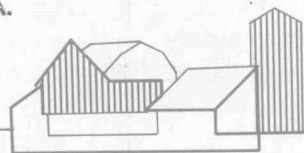
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FRB CHICAGO



AGRICULTURAL LETTER

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Pork production continues on the upswing

The USDA's latest quarterly survey found that hog farmers continue to expand production, albeit at a slower rate than previously indicated. The survey showed that the December 1 inventory of hogs and pigs on farms nationwide was up more than 4.5 percent from a year earlier. Moreover, it suggested that producers intend to farrow 4 percent more sows during the six months ending with May. The gains imply that pork production in 1992 will rise about 5 percent, reaching—on a per capita basis—the highest level since 1981. The expansion, combined with further growth in poultry and beef production, will weigh heavily on hog prices in the months ahead.

The pace of expansion indicated by the latest survey, while sizable, was noticeably less than most analysts had expected. For instance, the fall pig crop (the number of pigs born and raised during the three months ending with November) was reported to be up less than 5 percent from the same period the year before. Most analysts had expected a gain of 7 or 8 percent, based on the growth in the June-August pig crop and the fall-quarter farrowing intentions as reported last September.

The smaller-than-expected pig crop trimmed the gain in the inventory of hogs on farms. Market hogs numbered 47.8 million head as of December 1, up 4.5 percent from a year ago. Hogs held for breeding purposes numbered 7.3 million head, up a little over 5 percent but well short of the gain most observers expected. The updated reading on the intentions of hog farmers imply that sow farrowings during the winter (December-February) quarter will be up 7 percent, unchanged from the intentions reported last September. For the spring (March-May) quarter, however, producers intend to limit the year-over-year gain to 1 percent.

The latest tabulations on hog numbers and producer intentions for District states are mixed. Hog numbers in Iowa are up 7 percent from a year ago, paced by a rise of more than 12 percent in the inventory of hogs held for breeding purposes. Hog numbers in the other four District states range from up 2 or 3 percent in Illinois, Indiana, and Michigan to down 2 percent in Wisconsin. Producer farrowing intentions throughout the District states parallel the nationwide pattern of a large increase this winter, followed by a marked scaling-back during the spring quarter. The spring-quarter farrowing intentions among hog

farmers in three District states (Indiana, Michigan, and Wisconsin) point to declines from a year ago. Hog farmers in Illinois plan to hold spring farrowings unchanged from last year while Iowa farmers plan a 6 percent gain.

The structure of hog farms has changed dramatically over the years. The number of hogs on farms is virtually the same as eight years ago. But the number of operations with hogs has shrunk by nearly half. Over two-thirds of the nation's hogs are held on operations that house 500 head or more. These large farms account for only 12 percent of all hog farms. In 1983, such farms accounted for 6 percent of all hog farms and just over half of all hogs on farms. In the three major hog-producing states of the Seventh Federal Reserve District (Illinois, Indiana, and Iowa), the share of all hog farms that have 500 head or more has risen from 15 percent in 1983 to 25 percent. These large farms now account for nearly 70 percent of the hogs in these three states, up from 55 percent in 1983.

The current cyclical upturn in pork production became evident in the second quarter of last year and will likely extend through all of this year. Pork production for all of 1991 was up a little over 4 percent, paced by a fourth-quarter rise of 8 percent. Hog slaughter and pork production during the first half of this year is likely to be 6 to 7 percent above the same period in 1991, with the gain during the winter months slightly exceeding that for the spring quarter. Hog slaughter during the second half of

Recent and prospective trends in hog production

	Iowa		Other District states ¹		U.S.	
	Mil. head	% change ²	Mil. head	% change ²	Mil. head	% change ²
Pigs born & raised						
June-Aug. 1991	6.16	9.8	5.58	6.6	24.4	7.4
Sept.-Nov. 1991	5.58	3.6	5.08	1.4	23.2	4.6
Dec. 1 inventory						
All hogs & pigs	14.8	7.2	12.8	2.0	57.0	4.6
For market	13.0	6.6	11.2	1.9	49.8	4.5
For breeding	1.8	12.5	1.6	2.5	7.2	5.2
Intended sow farrowings						
Dec.-Feb. 1992	0.72	11.5	0.64	5.8	2.90	7.0
Mar.-May 1992	<u>0.90</u>	5.9	<u>0.73</u>	-2.1	<u>3.32</u>	1.0
Total	1.62	8.3	1.37	1.4	6.22	3.7

¹Illinois, Indiana, Michigan, and Wisconsin.

²From year earlier.

SOURCE: U.S. Department of Agriculture.

1992 is likely to be up 4 to 6 percent. The bulk of the second-half gain will occur in the summer quarter, with only a modest fourth-quarter rise if producers stick with their current farrowing intentions.

Another modest rise for beef production and sustained growth for poultry will augment pork's contribution to what is expected to be the tenth consecutive new high in annual per capita production of all meats. USDA analysts are expecting a 1 percent rise in beef production this year, with all of the gain coming in the first half. Poultry production is expected to grow nearly 4 percent. Following a rise of nearly 3.5 percent last year, total meat production is projected to increase another 3 percent this year. Two consecutive years of such large gains in meat production are rare when compared to the standards of the last two decades.

Hog prices fell sharply during the second half of last year as evidence of the upturn in production began to unfold. Monthly average barrow and gilt prices at major markets in 1991 ranged from a high of \$55.20 a hundredweight in July to a low of \$37.80 in November, the third lowest average for any month in over 10 years. For the year as a whole, hog prices averaged \$48.90, down from \$54.50 the previous year but still around \$5 above the annual averages recorded in 1988 and 1989. Prices are expected to remain comparatively low for several more months. Analysts believe hog prices during the winter and spring quarters will range mostly from the high \$30s to the mid \$40s per hundredweight. For the second half, prices could again retreat to the upper \$30s. While costs vary widely among farmers, Iowa State University studies suggest that the break-even cost of production for a typical farrow-to-finish producer is \$43 to \$44 per hundredweight. As such, many farmers suffered sizable losses on hogs marketed in November and December. Less-efficient producers will experience continued losses for several more months. In time, the losses will become apparent in a scaling-back in hog production and more normal returns to producers.

Gary L. Benjamin

Retail food prices

The rate of increase in retail food prices slowed in 1991, and the moderate pace is expected to continue into 1992. The Consumer Price Index (CPI) for food averaged 2.9 percent higher in 1991, well below the gains of 5.8 percent for both 1989 and 1990. Moreover, for the first time since 1985, last year's food price increase was less than the rise for all other components of the CPI. The 1991 food price increase was led by fresh fruits, fats and oils, and cereals and bakery products. A more moderating effect came from poultry, eggs, dairy products, and pro-

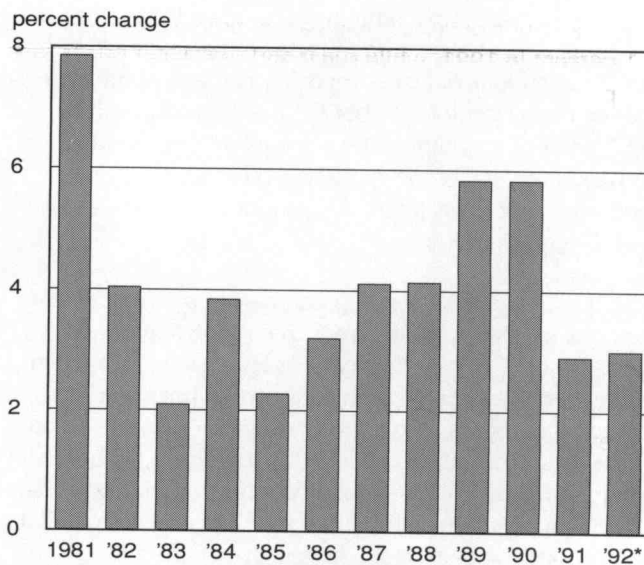
cessed fruits. The USDA predicts that food prices will average 2 to 4 percent higher in 1992, with softening red meat, poultry, and egg prices limiting the increase of food prices in general.

Comparisons of annual averages tend to mask intra-year trends in food prices. The bulk of last year's food price gain occurred in the early part of the year, in part due to a California freeze that disrupted fruit supplies. Food prices then declined during the summer of 1991, helping to trim the year-over-year rise in food prices to 1.9 percent for the final quarter. Late in the year, however, the upward trend resumed, in part because of the whitefly infestation in California vegetables.

The CPI for food is separated into two elements. The first is food consumed away from home, which averaged 3.4 percent higher in 1991. The USDA has forecast this component to increase about 4 percent in 1992. The second component is food consumed at home, which represents grocery store purchases. Grocery food prices averaged 2.6 percent higher in 1991, and the 1992 increase is expected to be limited to about 2 percent. However, a look at the year-over-year changes in retail food prices for December shows that prices for food consumed away from home were about 3 percent higher than a year ago. In contrast, the December, 1991 price index for food consumed at home showed a gain of slightly over 1 percent from a year ago.

Three major factors influencing retail food prices are farm-level prices, post-farm marketing costs, and consumer demand. The farm share accounts for about 30 percent of the retail dollar spent on domestically-produced food.

Annual food price increases



*Represents mid-point of USDA forecast.
SOURCE: USDA and Bureau of Labor Statistics.

Much of the remaining 70 percent is allocated to post-farm marketing costs such as labor, packaging, transportation, and energy. For the first three quarters of 1991, the USDA's index of marketing costs averaged about 3 percent over the year-earlier level. In contrast, the USDA's farm-level price measure averaged about 2 percent lower in 1991. Consumer demand is difficult to quantify, but a look at personal disposable income and employment figures provides insight regarding domestic food demand during 1991. Both aggregate and per capita personal disposable income, adjusted for inflation, lagged year-earlier levels during the first three quarters in 1991. In addition, unemployment trended higher during the year. These changes may have prompted consumers to tighten their food budgets by reallocating grocery expenditures towards cheaper items and by reducing the demand for food consumed in restaurants.

Fresh fruit and vegetable prices increased 13.5 percent and 2.2 percent, respectively, during 1991. Citrus production fell as California growers suffered a severe freeze in December, 1990. Fresh fruit prices responded by rising sharply the following month, and stayed at the higher level throughout the year. Fresh vegetable prices increased during the second quarter of 1991 as California production was hampered by late-winter rains and cold weather. However, prices fell during the third quarter as fresh vegetable supplies rebounded, resulting in a moderate average annual price increase. Processed fruit prices averaged 3.7 percent lower in 1991, largely on the strength of Florida's recovery from the previous year's freeze. Processed vegetable prices showed an increase of less than 1 percent. Assuming good weather in 1992, price increases for fresh fruits and vegetables are expected to moderate. Processed fruit and vegetable prices are expected to increase about 2 percent and 3 percent, respectively.

The retail price of cereals and bakery products increased 4.1 percent in 1991, while sugar and sweetener prices rose 3.7 percent. Each is expected to post slightly higher gains in 1992. Prices for fats and oils averaged 4.3 percent higher in 1991, and a more moderate increase is expected in 1992.

Both retail egg and dairy prices declined during 1991. Egg prices averaged about 2 percent lower as production edged higher again in 1991 while per capita egg consumption continued to decline. Similar trends are expected to push egg prices 4 to 7 percent lower in 1992. Retail dairy product prices declined slightly in 1991 after increasing by an average of 8 percent for 1989 and 1990. The 1991 price decline was due to sharply lower farm-level milk prices early in the year and larger inventories of

Percent change in retail food prices

	1990	1991	1992 forecast
Food	5.8	2.9	2 to 4
Food away from home	4.7	3.4	3 to 5
Food at home	6.5	2.6	1 to 3
Beef and veal	8.0	2.8	-1 to 1
Pork	14.7	3.3	-10 to -7
Poultry	-0.2	-0.8	-3 to 0
Fish and seafood	2.2	1.1	0 to 3
Eggs	4.7	-2.3	-7 to -4
Dairy products	9.4	-1.1	1 to 3
Fats and oils	4.2	4.3	1 to 3
Fresh fruits	12.1	13.5	-1 to 3
Fresh vegetables	5.6	2.2	0 to 3
Processed fruits	8.7	-3.7	1 to 3
Processed vegetables	2.7	0.8	2 to 4
Sugar and sweets	4.4	3.7	4 to 6
Cereal and bakery products	5.7	4.1	4 to 6
Nonalcoholic beverages	2.0	0.5	0 to 2
Other prepared foods	4.5	4.5	3 to 5

SOURCE: Bureau of Labor Statistics; forecast by USDA.

processed dairy products. Dairy product prices are expected to post a moderate increase in 1992 as total milk production remains level.

Retail poultry prices fell about 1 percent in 1991 as production rose nearly 6 percent. Continued expansion may push poultry prices lower again in 1992. Beef and pork prices recorded moderate increases of 2.8 percent and 3.3 percent, respectively, during 1991. Pork prices are expected to average between 7 to 10 percent lower during 1992 due to higher production. Retail beef prices are expected to show little change during 1992 as production remains flat.

Mike A. Singer

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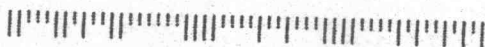
Selected agricultural economic indicators

	Latest period	Value	Percent change from		
			Prior period	Year ago	Two years ago
Prices received by farmers (index, 1977=100)					
Crops (index, 1977=100)	December	138	-0.7	-3	-7
Corn (\$ per bu.)	December	121	-2.4	0	-5
Hay (\$ per ton)	December	2.33	1.3	5	3
Soybeans (\$ per bu.)	December	68.40	-1.0	-14	-18
Wheat (\$ per bu.)	December	5.39	-1.6	-6	-4
Livestock and products (index, 1977=100)	December	3.46	6.5	44	-9
Barrows and gilts (\$ per cwt.)	December	154	0.0	-6	-9
Steers and heifers (\$ per cwt.)	December	39.60	2.9	-18	-19
Milk (\$ per cwt.)	December	71.20	-1.7	-12	-6
Eggs (¢ per doz.)	December	13.90	0.7	19	-13
Eggs (¢ per doz.)	December	71.8	12.2	-6	-13
Consumer prices (index, 1982-84=100)					
Food	December	138	0.1	3	9
	December	137	0.4	2	7
Production or stocks					
Corn stocks (mil. bu.)	December 1	6,538	N.A.	-6	-8
Soybean stocks (mil. bu.)	December 1	1,778	N.A.	6	10
Wheat stocks (mil. bu.)	December 1	1,442	N.A.	-24	1
Beef production (bil. lb.)	November	1.81	-14.3	-2	-5
Pork production (bil. lb.)	November	1.46	-5.1	6	1
Milk production* (bil. lb.)	November	9.91	-2.9	-1	3
Receipts from farm marketings (mil. dol.)					
Crops**	August	13,046	7.4	-4	4
Livestock	August	5,845	10.2	-2	7
Government payments	August	7,137	5.5	-8	3
	August	64	-14.7	N.A.	-51
Agricultural exports (mil. dol.)					
Corn (mil. bu.)	October	3,330	16.7	8	-2
Soybeans (mil. bu.)	October	137	1.8	27	-22
Wheat (mil. bu.)	October	50	87.9	69	-32
	October	125	37.6	43	34
Farm machinery sales (units)					
Tractors, over 40 HP	December	4,739	27.9	-31	-13
40 to 100 HP	December	2,225	13.6	-22	-15
100 HP or more	December	2,514	43.9	-37	-11
Combines	December	880	-13.0	-19	-13

N.A. Not applicable

*21 selected states.

**Includes CCC loans.



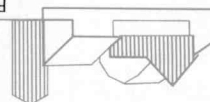
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