



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*

# AgLetter



## UPTURN IN HOG PRODUCTION

The expansion among hog farmers that started last spring continued at a rapid pace during the fall of 1997, both here in the Midwest and elsewhere. That expansion plus the growth expected during the first half of this year foreshadows an unusually large jump in pork production for 1998. Domestic meat supplies will be further buoyed by continued growth in poultry production and by a slowing in meat exports. On a trade adjusted per capita basis, production of all meats in 1998 is now forecast to surpass the previous high set in 1994. These prospects pulled hog prices sharply lower the last two or three months, triggering operating losses among many hog farmers.

The rapid expansion among hog farmers was especially apparent in the fall pig-crop, the number of pigs born and raised during the three months ending with November. That pig crop was recently estimated by the U.S. Department of Agriculture to be more than 9 percent larger than the year before and nearly equal to the highest on record for that period. The expansion stemmed from a modest buildup in the inventory of hogs held for breeding purposes, more intensive use of the breeding herd, and a continuing uptrend in the number of pigs saved per litter. The inventory of hogs held for breeding purposes as of September 1 was up only 2.6 percent from the year before. But indicative of the more intensive use of the breeding herd, the number of sows that farrowed (gave birth) during the September-November period was up 7.9 percent. The number of pigs saved per litter was up 1.3 percent from the year before, slightly below the trend rate of increase over the last five years.

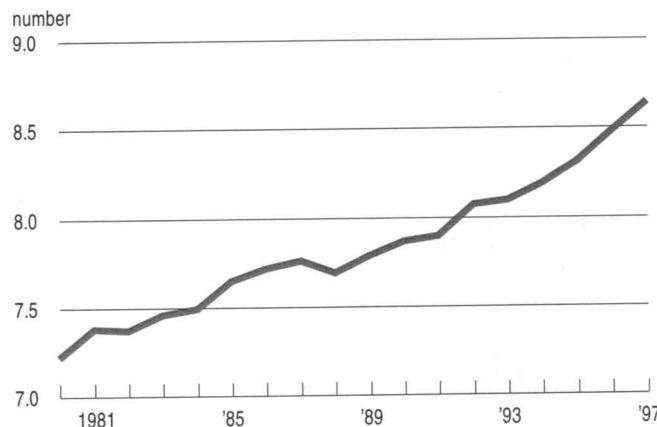
The big increase in the fall pig crop helped push the December 1 inventory of all hogs and pigs on farms up to 59.9 million head. That marked a rise of nearly 7 percent from the shrinking inventory of a year ago and it virtually matched the 1994 inventory as the highest for that date since 1980. The upturn in hog numbers was fairly widespread geographically. Among the five states comprising the Seventh Federal Reserve District, only

Wisconsin registered a decline in hog numbers (down 9 percent). The largest gains were in Iowa (up 15 percent) and Illinois (up 8 percent). Hog numbers in Indiana and Michigan recorded below-average gains (1 and 3 percent, respectively).

Other Midwest states that recorded comparatively large gains included Minnesota (11 percent) and Ohio (8 percent). Elsewhere, the expanding presence of hog production on the western fringe of the Hog/Corn Belt was apparent in year-over-year inventory gains of 81 percent in Utah, 25 percent in Colorado, 24 percent in Oklahoma, 17 percent in Montana, and 16 percent in Wyoming. Texas recorded a gain of 10 percent. The growth in hog numbers in North Carolina was limited to 4 percent, dampened by the moratorium on new and expanded hog production facilities imposed in that state early last year.

Although hog numbers turned up last year, and despite another year of generally favorable earnings for the industry, the number of hog farms continued its long-standing decline. Nationwide, there were fewer than 138,700 farms that had an inventory of at least one hog sometime during 1997. That estimate is down 11 percent from the year before and it is almost 50 percent below

**The number of pigs saved per litter was up again in 1997**



Source: U.S. Department of Agriculture.

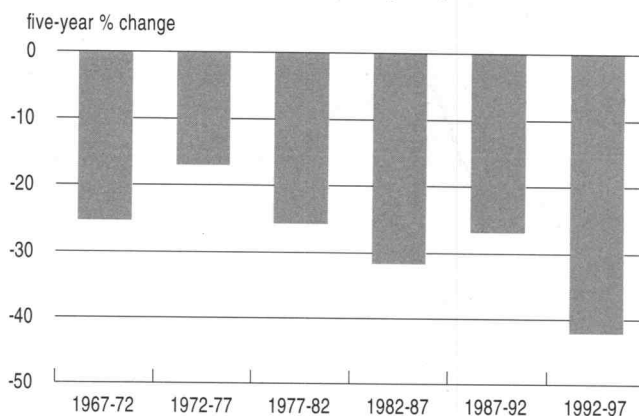
the number of hog farms that existed in 1990. For the five District states combined, the number of hog farms in 1997 was down 12.5 percent from the year before and also down about 50 percent from 1990. While the number of hog farms has been declining for decades, the rate of decline accelerated in recent years as the ongoing industry restructuring moved toward very large, highly integrated operations. Reflecting that shift, 55 percent of the nation's hogs are on farms with 2,000 or more hogs. (About 35 percent of all hogs are on farms with 5,000 or more hogs). Five years ago, farms with 2,000 or more hogs accounted for only 28 percent of all hogs on farms.

A string of eight consecutive quarters of year-over-year declines in pork production ended about mid 1997. The upturn started modestly with a 1 percent year-over-year gain in the third quarter and then ballooned to a larger-than-expected gain of about 7 percent in the fourth quarter. Labor problems at Canadian packing plants apparently attracted more hog imports to U.S. packing plants during the late fall and early winter months. Still larger gains in pork production are likely during much of this year. Based on the USDA's latest hog inventory estimates, and assuming a continuation of the trend rate of increase in dressed weights, it appears the year-over-year gain in pork production could surpass 8 percent in the first quarter of this year and be followed by an 11 percent gain in the second quarter.

Pork production in the second half of this year will hinge mostly on the winter (December-February) and spring (March-May) pig crop. The USDA's latest survey indicated that the December 1 inventory of hogs held for breeding purposes was up nearly 5 percent. However, the sow farrowing intentions of producers were somewhat mixed. The intentions for the winter quarter point to a 9 percent year-over-year gain in farrowings while those for the spring quarter signal a more modest gain of 3.5 percent. The indicated second-quarter slowing would be early by the standards of past hog cycles. Alternatively, the urge to slow the expansion could be reinforced by the recent and prospective operating losses that will grip many hog producers. At face value, these intentions suggest third quarter pork production could be up 12 percent while fourth quarter pork production—although rising seasonally—may only register a 3 or 4 percent gain.

The prospect for a large gain in pork production this year coincides with the likelihood of larger supplies of other meats and a growing disappointment over near-

### The rate of decline in the number of hog farms has accelerated in the most recent five-year period



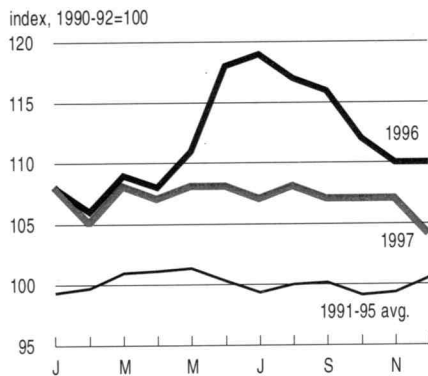
Source: U.S. Department of Agriculture.

term trade prospects for all meats. Following several years of large gains, the growth in pork exports slowed appreciably in 1997. USDA analysts now believe that pork exports may decline this year, largely because of developments in Asian countries. Preliminary tallies show beef production exceeded year-earlier levels by about 3 percent in both the third and fourth quarters of 1997. The gains stemmed from a stepped-up pace in fed cattle marketings which more than offset the cutback in the liquidation of the cow herd. The movement of feeder cattle into feedlots slowed in late 1997. However, the inventory of cattle in larger feedlots remains high (up 7.6 percent as of the USDA's December 1 survey). This inventory will likely keep beef production above year-earlier levels this winter and into the early spring. Thereafter, beef production may hold close to, or somewhat below year-earlier levels. Reflecting this view, USDA analysts believe beef production for all of 1998 will decline a little over 1.5 percent. However, the USDA analysts also foresee the possibility of growing beef imports and the possibility of a slight decline in beef exports for this year. The adverse trade developments could offset the envisioned decline in beef production, leaving domestically available beef supplies virtually unchanged for the second year in a row.

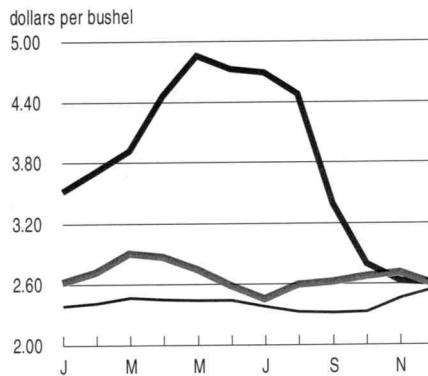
A slowing in export growth could also amplify a projected rise in poultry production for 1998. Turkey production was unchanged last year and, according to USDA forecasts may hold steady again this year. However, broiler production, after registering a below-trend rate of growth of 3.6 percent in 1997, is projected to register a more typical 5.5 percent rise this year. Moreover, poultry exports may edge only marginally

## 1997 farm commodity prices in perspective

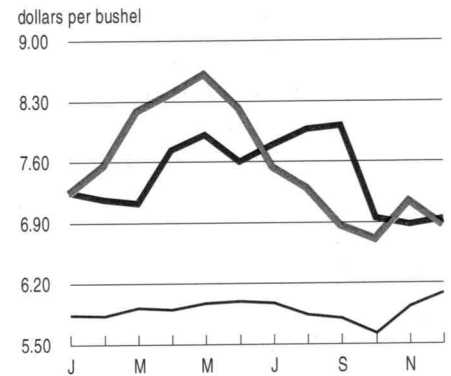
### All Commodities



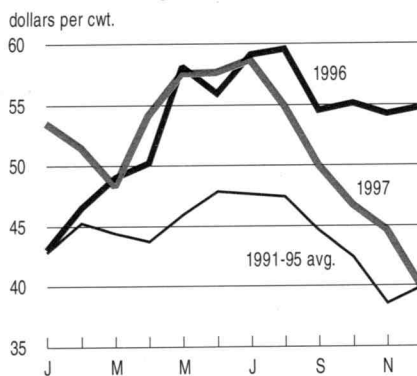
### Corn



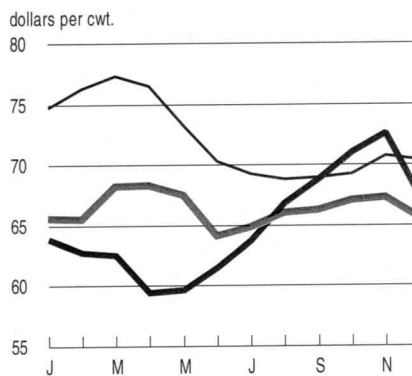
### Soybeans



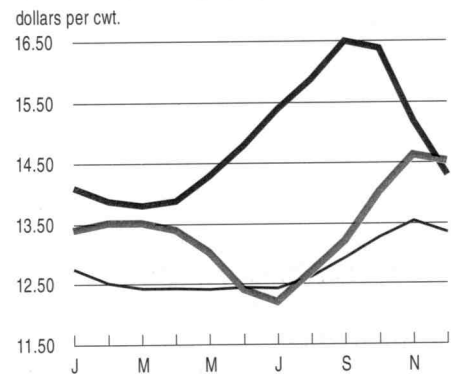
### Barrows and gilts



### Choice steers



### Milk



higher in 1998, falling well short of the 20 percent average gain of the last three years. On a trade-adjusted basis, the latest USDA projections suggest that the rise in per capita poultry production this year may be the largest since 1989.

Prospects for a large rise in pork production and another new high in per capita production of all meats have weighed heavily on hog prices since last fall. During the first half of January, hog prices averaged about \$34 per hundredweight, down more than a third from both the third quarter average and from a year ago. Although hog prices may recover seasonally from recent levels, they will likely range mostly in the upper \$30s to mid-\$40s during much of the year. Based on Iowa State University estimates of the cost of producing hogs, the recent and prospective prices suggest that the operating losses that began in late 1997 for many hog producers will extend through much of this year. Those estimates show that in December it cost the typical farrow-to-finish hog producer in Iowa about \$46 a hundredweight to get

a hog ready for market. Production costs may drift somewhat lower this year but not enough to restore favorable returns to most producers.

Gary L. Benjamin

**AgLetter** (ISSN 1080-8639) is published monthly by the Research Department of the Federal Reserve Bank of Chicago. It is prepared by Gary L. Benjamin, economic adviser and vice president, Mike A. Singer, economist, and members of the Bank's Research Department, and is distributed free of charge by the Bank's Public Information Center. The information used in the preparation of this publication is obtained from sources considered reliable, but its use does not constitute an endorsement of its accuracy or intent by the Federal Reserve Bank of Chicago.

To subscribe, please write or telephone:

Public Information Center  
Federal Reserve Bank of Chicago  
P.O. Box 834  
Chicago, IL 60690-0834  
Tel. no. 312-322-5111  
Fax no. 312-322-5515

Ag Letter is also available on the World Wide Web at <http://www.frbchi.org>.

# SELECTED AGRICULTURAL ECONOMIC INDICATORS

	Latest period	Value	Percent change from		
			Prior period	Year ago	Two years ago
<b>Prices received by farmers</b> (index, 1990-92=100)	December	104	-2.8	-5	-4
<b>Crops</b> (index, 1990-92=100)	December	110	-3.5	-5	-8
Corn (\$ per bu.)	December	2.48	18.1	-6	-19
Hay (\$ per ton)	December	97.70	-3.3	8	24
Soybeans (\$ per bu.)	December	6.68	-2.5	-3	-1
Wheat (\$ per bu.)	December	3.40	-2.9	-16	-30
<b>Livestock and products</b> (index, 1990-92=100)	December	97	-1.0	-6	1
Barrows and gilts (\$ per cwt.)	December	43.00	-5.7	-23	-3
Steers and heifers (\$ per cwt.)	December	67.50	-0.7	3	4
Milk (\$ per cwt.)	December	14.50	-0.7	1	4
Eggs (¢ per doz.)	December	78.7	-2.4	-10	-1
<b>Consumer prices</b> (index, 1982-84=100)	December	161	-0.1	2	5
Food	December	159	0.1	2	6
<b>Production or stocks</b>					
Corn stocks (mil. bu.)	December 1	7,230	N.A.	5	18
Soybean stocks (mil. bu.)	December 1	1,995	N.A.	9	9
Wheat stocks (mil. bu.)	December 1	1,615	N.A.	32	21
Beef production (bil. lb.)	November	1.94	-15.9	-1	-8
Pork production (bil. lb.)	November	1.47	-10.9	3	-8
Milk production* (bil. lb.)	December	11.1	4.8	1	2
<b>Receipts from farm marketings</b> (mil. dol.)					
Crops**	September	20,935	45.2	-1	25
Livestock	September	9,742	47.8	-7	2
Government payments	September	8,185	5.1	2	13
	September	3,008	N.A.	11	N.A.
<b>Agricultural exports</b> (mil. dol.)					
Corn (mil. bu.)	October	5,534	23.3	6	8
Soybeans (mil. bu.)	October	118	-17.2	-19	-44
Wheat (mil. bu.)	October	170	299.9	78	120
	October	92	-24.7	-9	-23
<b>Farm machinery sales</b> (units)					
Tractors, over 40 HP	December	6,226	-4.0	22	7
40 to 100 HP	December	3,313	-6.6	5	15
100 HP or more	December	2,913	-0.8	47	-1
Combines	December	1,316	6.1	5	27

N.A. Not applicable

\*20 selected states.

\*\*Includes net CCC loans.

AgLetter is printed on recycled paper using soy-based inks

\*\*\*\*\*AUTO\*\*MIXED PADC 606  
 LOUISE LETNES  
 DEPT OF AG & APPLIED ECONOMICS  
 UNIVERSITY OF MINNESOTA  
 1994 BUFORD AVE RM 231  
 SAINT PAUL MN 55108-6038

Return service requested  
 312-322-5111  
 Chicago, Illinois 60690-0834  
 P.O. Box 834  
 Public Information Center  
 Federal Reserve Bank of Chicago

**AgLetter**

PERMITTED  
 FIRST-CLASS MAIL  
 ZIP + 4 BARCODED  
 U.S. POSTAGE PAID  
 CHICAGO, ILLINOIS  
 PERMIT NO. 1942