

# AgLetter



## FARMLAND VALUES AND CREDIT CONDITIONS

### Summary

Farmland cash rental rates in the Seventh Federal Reserve District soared higher this year compared with those in 2007, rising 21 percent. But the year-over-year increase in District farmland values eased to 14 percent in the first quarter of 2008. A survey of 240 bankers in the Seventh District on April 1, 2008, indicated a slower quarterly increase of 2 percent in the value of “good” agricultural land. Almost half of the bankers expected increases in land values for the second quarter of 2008; nearly half expected stable land values; and only 2 percent expected decreases. In addition, two-thirds of the respondents reported that the demand to purchase farmland exceeded the demand of the winter and early spring a year ago.

Credit conditions continued to improve in the District during the first quarter of 2008. Demand for non-real-estate loans and the availability of funds increased. Loan repayment rates were at a high level; renewals and extensions of agricultural loans were lower. Respondents expected higher loan demand for the second quarter of 2008, especially for real estate, operating, farm machinery, and grain storage loans. As of April 1, District interest rates averaged 6.74 percent on new operating loans and 6.41 percent on farm real estate loans—the lowest rates since 2004. The

**CONFERENCE ANNOUNCEMENT**

**Agricultural Markets and Food Price Inflation**

On October 2, 2008, the Federal Reserve Bank of Chicago will hold a conference on the economic impacts of volatile agricultural costs and food price inflation, including the potential implications of persistent changes in food prices on price stability at the macroeconomic level. Please check the conference website at [www.chicagofed.org](http://www.chicagofed.org) under "Upcoming Events" for more information and the forthcoming agenda.

average loan-to-deposit ratio fell from three months ago to 75.9 percent (5 percent below the preferred ratio).

### Farmland values

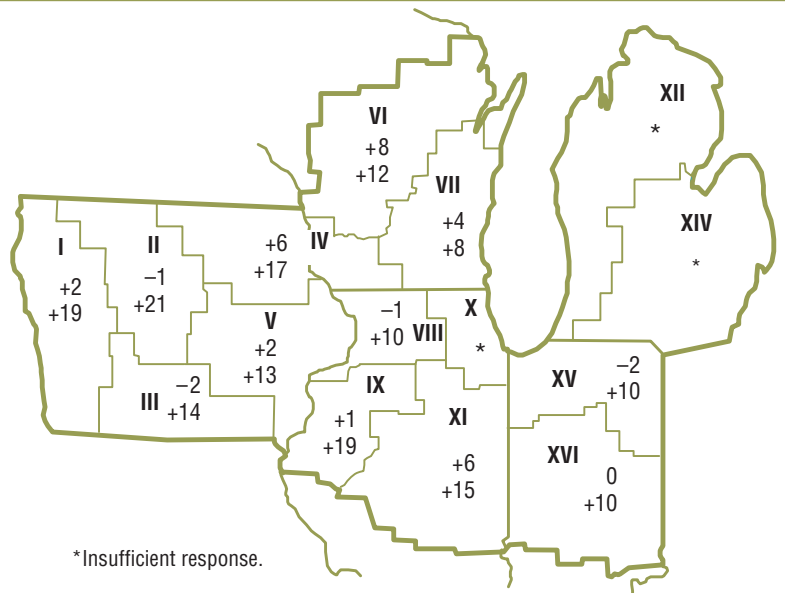
The District average year-over-year increase in the value of “good” agricultural land for the first quarter of 2008 dipped to 14 percent—still the third largest such increase since 1980. Compared with the first quarter of 2007, Iowa and Michigan land values climbed the most at 17 percent, followed by Illinois at 14 percent and Indiana and Wisconsin at 10 percent (see map and table below). Quarterly farmland values rose less than in the fourth quarter of 2007 for the District and all states except Wisconsin.

### Percent change in dollar value of “good” farmland

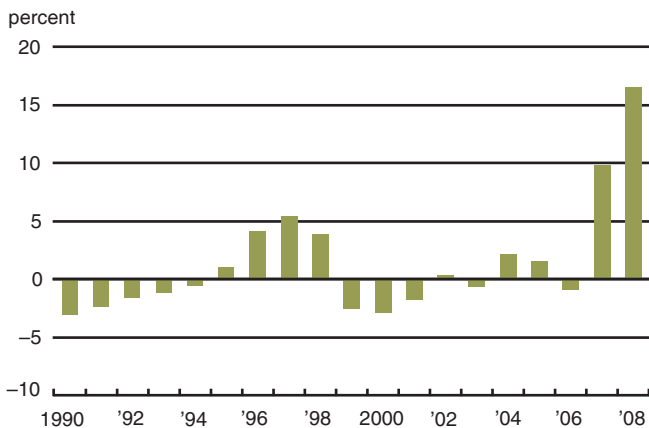
Top: January 1, 2008 to April 1, 2008

Bottom: April 1, 2007 to April 1, 2008

	January 1, 2008 to April 1, 2008	April 1, 2007 to April 1, 2008
Illinois	+4	+14
Indiana	0	+10
Iowa	+1	+17
Michigan	+1	+17
Wisconsin	+6	+10
Seventh District	+2	+14



## 1. Annual percentage change in Seventh District farmland cash rental rates adjusted by CPI-U



Sources: Author's calculations based on data from Federal Reserve Bank of Chicago farmland value surveys; and U.S. Bureau of Labor Statistics, Consumer Price Index for All Urban Consumers (CPI-U).

Surging cash rental rates for farmland reflected competition among farmers for additional acres to plant in 2008. Cash rents jumped 21 percent from 2007—the largest increase since these data were first collected in 1981 and much larger than the revised increase of 12 percent for 2007. State increases in cash rental rates were 18 percent for Illinois, 17 percent for Indiana, 23 percent for Iowa, 12 percent for Michigan, and 26 percent for Wisconsin. Adjusting for inflation using the Consumer Price Index, the “real” cash rental rate for the District climbed 16.5 percent from a year ago (see chart 1), surpassing the previously largest increase of last year. The arrangements for farmland operated by someone other than the owner shifted toward more cash rentals (80 percent) at the expense of crop shares (17 percent), with 1 percent on a bushel basis and 2 percent on other terms. This trend even occurred in Illinois as renting on a crop share basis slid to 31 percent, while cash rentals edged up to 66 percent of all arrangements, still the lowest percentage in the District.

The key factors driving both cash rental rates and farmland values higher were elevated crop prices and the prospect that corn and soybean prices will continue to rise. Prices in the first quarter of 2008 averaged \$4.40 per bushel for corn and \$11.05 per bushel for soybeans, according to the U.S. Department of Agriculture (USDA). Compared with a year ago, corn prices were 33 percent higher and soybean prices were 64 percent higher. USDA survey data on 2008 prospective plantings reflect these price movements. U.S. corn acres are projected to fall 8.1 percent from 2007 levels, and U.S. soybean acres are projected to rise 17.5 percent. District corn acres are expected to drop 7.6 percent, while District soybean acres are expected to climb 13 percent. These numbers represent a market response to last year's jump in corn acres, as soybean prices have risen relatively

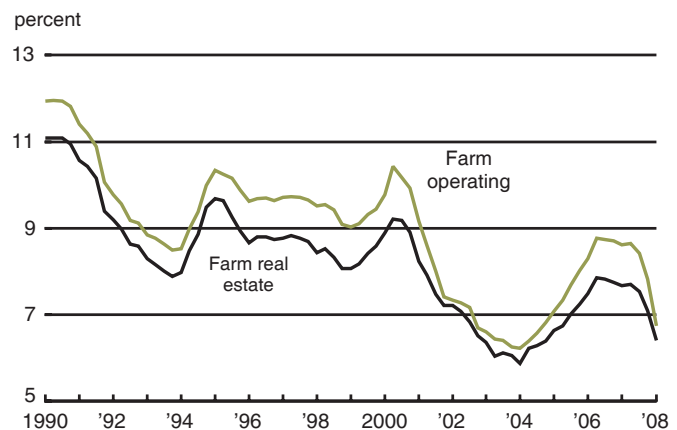
more and as higher input costs have reduced the returns from planting corn. In particular, fertilizer costs increased 52 percent from the first quarter of 2007, according to data from the Producer Price Index. Crop prices are forecasted by the USDA to move up even more because of strong global demand and tight ending stocks of both corn and soybeans. For the 2008–09 crop year, the USDA estimated price intervals of \$5.00 to \$6.00 per bushel for corn and \$10.50 to \$12.00 per bushel for soybeans. With spring planting delays in the U.S., there is a higher likelihood for further upward revisions in these estimated price intervals.

Future crop prices may propel cash rents and farmland values even higher in the quarters ahead. It's not surprising that 49 percent of reporting bankers expected farmland values to increase and 49 percent expected stable values during the period from April through June. Only 2 percent of the bankers thought that farmland values would decrease in their areas.

Farm real estate activity over the winter and early spring was higher than a year ago. More farmland was observed for sale by 37 percent of respondents, while less farmland was observed for sale by 16 percent. There were more farms sold than a year ago in all District states, especially in Iowa where over half of the bankers reported higher farm sales. Similarly, there was an increase in the acreage of all farms sold.

Two-thirds of the respondents saw higher demand for the purchase of agricultural land compared with the first quarter of 2007 (only 6 percent reported lower demand). This year Indiana and Iowa again displayed the most demand for farmland purchases, with 73 percent of the bankers reporting higher demand and 3 percent or less reporting lower demand for farmland purchases. Farmers bought a larger portion of the total acreage sold in the District compared with a year ago, as 44 percent observed a higher share for farmers versus 12 percent a smaller share.

## 2. Quarterly District farm loan interest rates



## Credit conditions at Seventh District agricultural banks

	Loan demand (index) <sup>b</sup>	Funds availability (index) <sup>b</sup>	Loan repayment rates (index) <sup>b</sup>	Average loan-to-deposit ratio (percent)	Interest rates on farm loans		
					Operating loans <sup>a</sup> (percent)	Feeder cattle <sup>a</sup> (percent)	Real estate <sup>a</sup> (percent)
<b>2006</b>							
Jan-Mar	131	102	87	76.7	8.30	8.27	7.48
Apr-June	115	101	85	78.0	8.76	8.66	7.85
July-Sept	124	95	87	79.1	8.73	8.70	7.82
Oct-Dec	109	116	130	76.6	8.71	8.70	7.74
<b>2007</b>							
Jan-Mar	128	113	131	78.4	8.61	8.60	7.67
Apr-June	121	115	117	77.8	8.65	8.63	7.70
July-Sept	118	118	122	78.1	8.42	8.40	7.53
Oct-Dec	110	126	149	77.2	7.82	7.89	7.09
<b>2008</b>							
Jan-Mar	110	129	147	75.9	6.74	6.86	6.41

Note: Historical data on Seventh District agricultural credit conditions is available for download from the *AgLetter* homepage, [www.chicagofed.org/economic\\_research\\_and\\_data/ag\\_letter.cfm](http://www.chicagofed.org/economic_research_and_data/ag_letter.cfm).

<sup>a</sup>At end of period.

<sup>b</sup>Bankers responded to each item by indicating whether conditions during the current quarter were higher, lower, or the same as in the year-earlier period. The index numbers are computed by subtracting the percent of bankers that responded "lower" from the percent that responded "higher" and adding 100.

### Credit conditions

Continued improvement in agricultural credit conditions during the first quarter of 2008 demonstrated the strength of crop farming, while masking concerns related to livestock production. As corn and soybean prices soared, increased feed costs stressed livestock operations, though the measures of credit conditions may not adequately reflect this departure from the overall financial strength of agriculture. The index of loan demand was 110, down from the level of a year ago, as 36 percent of the bankers noted higher demand for non-real-estate loans and 26 percent lower demand. These numbers were similar in the last quarter of 2007. They departed from the typical seasonal trend of bigger increases in loan demand for first quarters. With 33 percent of the bankers reporting that more funds were available from January through March than a year ago and 4 percent reporting that fewer funds were available for lending, the index of funds availability rose to 129, its highest level in four years.

Non-real-estate farm loan repayment rates were about the same as those in the fourth quarter of 2007 and higher than those of the first quarter a year ago. With 51 percent of the bankers stating there were higher rates of loan repayment and 4 percent lower rates, the index of loan repayment rates was 147, close to the previous quarter's 20-year high. There was an acceleration in the decline of loan renewals and extensions, with just 6 percent of the respondents seeing increases and 38 percent decreases. The banks tightened collateral requirements from last year, as 10 percent required more collateral in the first three months of 2008 and 2 percent required less.

Loan-to-deposit ratios averaged 75.9 percent, the lowest level in two years. These ratios were below the level desired by 65 percent of the responding bankers, though 11 percent reported ratios above the desired level.

Interest rates on agricultural loans were down to their lowest levels since 2004 (see chart 2). As of April 1, 2008, the District average for interest rates on new operating loans was 6.74 percent. Interest rates for farm real estate loans averaged 6.41 percent.

### Looking forward

The volume of farm loans made by the banks of respondents during the second quarter of 2008 was expected to be higher than in 2007. The responding bankers anticipated the volumes for operating, farm machinery, and grain storage construction loans to grow, while feeder cattle and dairy loan volumes would retreat. Real estate loan volume from April through June was expected to increase by 33 percent of the bankers and to decrease by 13 percent.

David B. Oppedahl, *business economist*

*AgLetter* (ISSN 1080-8639) is published quarterly by the Research Department of the Federal Reserve Bank of Chicago. It is prepared by David B. Oppedahl, business economist, and members of the Bank's Research Department. 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.

© 2008 Federal Reserve Bank of Chicago  
*AgLetter* articles may be reproduced in whole or in part, provided the articles are not reproduced or distributed for commercial gain and provided the source is appropriately credited. Prior written permission must be obtained for any other reproduction, distribution, republication, or creation of derivative works of *AgLetter* articles. To request permission, please contact Helen Koshy, senior editor, at 312-322-5830 or email [Helen.Koshy@chi.frb.org](mailto:Helen.Koshy@chi.frb.org). *AgLetter* and other Bank publications are available on the Bank's website at [www.chicagofed.org](http://www.chicagofed.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)	April	144	-1.4	8	30
<b>Crops</b> (index, 1990-92=100)	April	167	0.0	18	40
Corn (\$ per bu.)	April	5.13	9.1	51	143
Hay (\$ per ton)	April	152.00	9.4	23	45
Soybeans (\$ per bu.)	April	11.80	2.6	72	114
Wheat (\$ per bu.)	April	10.10	-4.7	107	165
<b>Livestock and products</b> (index, 1990-92=100)	April	125	-3.1	-2	19
Barrow and gilts (\$ per cwt.)	April	41.70	1.7	-13	0
Steers and heifers (\$ per cwt.)	April	90.1	-2.8	-10	1
Milk (\$ per cwt.)	April	18.0	-0.6	8	49
Eggs (¢ per doz.)	April	1.160	-7.2	44	127
<b>Consumer prices</b> (index, 1982-84=100)	April	215	0.6	4	7
Food	April	211	0.8	5	9
<b>Production or stocks</b>					
Corn stocks (mil. bu.)	March 1	6,859	N.A.	13	-2
Soybean stocks (mil. bu.)	March 1	1,428	N.A.	-20	-14
Wheat stocks (mil. bu.)	March 1	857	N.A.	-12	-13
Beef production (bil. lb.)	April	2.26	7.4	12	15
Pork production (bil. lb.)	April	2.02	2.6	18	25
Milk production (bil. lb.)*	April	14.8	-2.0	3	4
<b>Agricultural exports</b> (mil. dol.)	March	10,568	4.2	56	66
Corn (mil. bu.)	March	216	-0.4	27	19
Soybeans (mil. bu.)	March	119	-14.7	40	17
Wheat (mil. bu.)	February	86	-3.2	12	24
<b>Farm machinery</b> (units)					
Tractors, over 40 HP	April	10,969	25.9	-4	5
40 to 100 HP	April	7,665	34.9	-8	-2
100 HP or more	April	3,304	9.1	6	28
Combines	April	420	-5.2	35	1

N.A. Not applicable.

\*23 selected states.

Sources: Author's calculations based on data from the U.S. Department of Agriculture, U.S. Bureau of Labor Statistics, and the Association of Equipment Manufacturers.