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AgLetter

FARMLAND VALUES AND CREDIT CONDITIONS

Summary

The year-over-year change in Seventh Federal Reserve District farmland values edged up to 10 percent in the first quarter of 2007, and cash rental rates for farmland surged upward. A survey of 275 bankers in the Seventh District on April 1, 2007, showed a quarterly increase of 5 percent in the value of "good" agricultural land for the District. Over half of the bankers expect land values to increase in the April-June period. Furthermore, over half of the respondents reported that the demand to purchase farmland was higher over the winter than a year ago. The share purchased by farmers increased slightly, even as the amount of farmland sold (and on the market) rose.

Credit conditions improved for the second quarter in a row, as loan repayment rates increased strongly again. Also, renewals and extensions of agricultural loans fell. Loan demand and the availability of funds increased again in the first quarter of 2007. Respondents expect higher loan demand for the second quarter. Interest rates on agricultural loans eased a bit for the third quarter in a row.

Farmland values

The average year-over-year increase in the value of "good" agricultural land for the District picked up to 10 percent in the first quarter of 2007 (see map and table below). Illinois, Indiana, and Iowa land values grew faster than

CONFERENCE ANNOUNCEMENT

The Role of R&D in Agriculture and Related Industries: Today and Tomorrow

On September 24, 2007, the Federal Reserve Bank of Chicago will hold a conference on the role of research and development in agriculture, biotechnology, and the food industry, with a focus on policies that promote industry growth and rural development. Please check the conference website at www.chicagofed.org under "Upcoming Events" for more information.

in the previous quarter at 7 percent, 10 percent, and 16 percent, respectively, while Wisconsin land value gains slowed. (There were insufficient responses from Michigan.) Farmland values for the first quarter of 2007 increased in Illinois (4 percent) and Indiana (8 percent), but were the same in Iowa (7 percent) and Wisconsin (2 percent), resulting in the District average remaining at 5 percent. These results reverse the situation from a year ago when Illinois, Indiana, and Iowa lagged in farmland value increases.

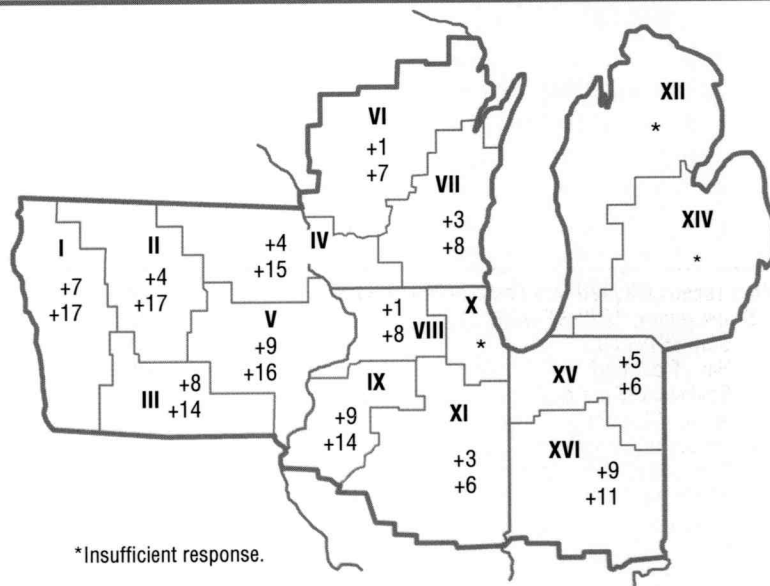
The most salient factor in this reversal has been the expectation that the higher corn and soybean prices relative to a year ago will be sustained by continued growth in demand for these crops, particularly to make biofuels. Prices in the first quarter averaged \$3.31 per bushel for corn and \$6.73 per bushel for soybeans, according to the

Percent change in dollar value of "good" farmland

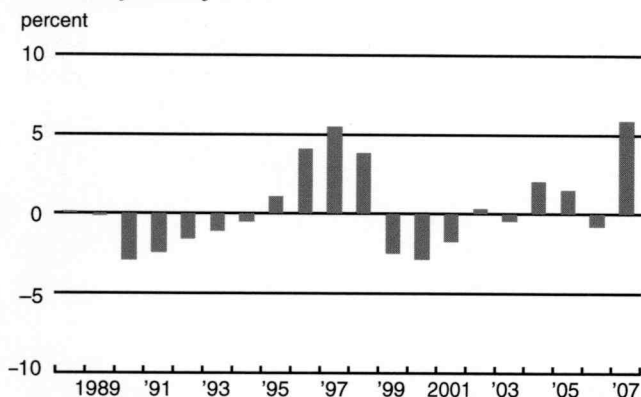
Top: January 1, 2007 to April 1, 2007

Bottom: April 1, 2006 to April 1, 2007

| | January 1, 2007 to April 1, 2007 | April 1, 2006 to April 1, 2007 |
|------------------|--|--------------------------------------|
| Illinois | +4 | +7 |
| Indiana | +8 | +10 |
| Iowa | +7 | +16 |
| Michigan | * | * |
| Wisconsin | +2 | +8 |
| Seventh District | +5 | +10 |



1. Annual percentage change in Seventh District farmland values 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).

U.S. Department of Agriculture (USDA). Compared with a year ago, corn prices were 63 percent higher and soybean prices were 18 percent higher. The USDA data on 2007 prospective plantings reflect these prices, as U.S. corn acres would rise 16 percent from 2006 and U.S. soybean acres would fall 11 percent. District corn acres would increase 12 percent, while District soybean acres would decrease 12 percent. This surge in corn acres would result in the greatest acreage planted to corn since 1944. These elevated crop prices are likely to be sustained by higher demand prospects, in large part because of the upswing in production of ethanol from corn. The USDA projects that ethanol production will require 27 percent of the 2007-08 corn crop, an increase from 20 percent for 2006-07. This demand for corn to produce ethanol boosted the projected total usage of corn to 12.5 billion bushels for the 2007-08 crop year, slightly outpacing projected corn production. U.S. ending corn stocks would be 947 million bushels, just 10 million bushels above the previous year's level, resulting in a lower stocks-to-use ratio of 7.6 percent.

The survey also looks at farm real estate activity. Over the last two quarters, there was more real estate activity in the southern parts of the District than in the northern parts. One-third of the respondents said that more farmland was for sale, beyond the rise seen a year ago, while a fifth saw less farmland up for sale. All District states experienced more farm sales than a year ago, as well as an increase in the acreage of farms sold, although Wisconsin trailed the other states.

The percentage of respondents that reported higher demand for the purchase of agricultural land compared with the first quarter of 2006 rose to 65 percent, with just 6 percent reporting lower demand. In Indiana and Iowa, higher demand for purchases was especially pronounced. Over 70 percent of the bankers reported higher demand for farmland. This helps explain the largest land value

increases in the District. Also, the surveys show that farmers (rather than investors or developers) obtained a slightly higher share of the acreage sold compared with a year ago (30 percent reported a higher share versus 27 percent lower).

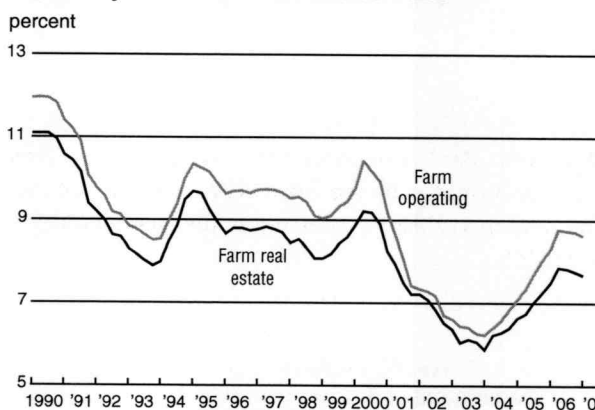
A higher percentage of bankers than last quarter expect farmland values to increase (53 percent), while just 1 percent expect farmland values to go down from April through June. About 60 percent of the respondents anticipate increases in Indiana, Iowa, and Wisconsin; in Illinois and Michigan, less than 50 percent predict higher farmland values.

Cash rental rates for farmland rose 8 percent from 2006, tying the largest previous increases in 1981 and 1997. The annual increase in cash rental rates for Indiana and Wisconsin led the District at 11 percent and 12 percent, respectively. Illinois and Iowa had the lowest hikes (8 percent and 9 percent, respectively). Iowa has an earlier mandated cutoff date for notification of rent increases, which may have capped the jump this year. However, there were reports of renters negotiating to avoid a larger jump next crop year by paying more for this year. The "real" cash rental rate for the District rose 5.8 percent from a year ago, adjusting for inflation using the Consumer Price Index. This was the largest "real" increase in the history of the survey (see chart 1). The breakdown for farmland operated by someone other than the owner was essentially unchanged from a year ago: 78 percent in cash rentals, 19 percent on a crop-shared basis, 1 percent on a bushel basis, and 2 percent on other terms.

Credit conditions

There was another improvement in credit conditions during the first quarter of 2007, as higher prices for a variety of agricultural products boosted farm incomes. In addition to crop price increases, prices were higher than a year ago for other key District products: Eggs were up 42 percent, milk up 11 percent, and hogs up 7 percent. The responses show that non-real-estate farm loan repayment rates were higher than those of the first quarter

2. Quarterly District farm loan interest rates



338.13
A46
1936

Credit conditions at Seventh District agricultural banks

| | Loan demand | Funds availability | Loan repayment rates | Average loan-to-deposit ratio | Interest rates on farm loans | | |
|-------------|----------------------|----------------------|----------------------|-------------------------------|------------------------------|----------------------------|--------------------------|
| | (index) ^b | (index) ^b | (index) ^b | (percent) | Operating loans ^a | Feeder cattle ^a | Real estate ^a |
| 2004 | | | | | | | |
| Jan-Mar | 116 | 131 | 128 | 73.2 | 6.22 | 6.28 | 5.87 |
| Apr-June | 101 | 117 | 118 | 73.7 | 6.39 | 6.46 | 6.23 |
| July-Sept | 109 | 111 | 112 | 74.5 | 6.57 | 6.61 | 6.28 |
| Oct-Dec | 109 | 121 | 127 | 74.1 | 6.81 | 6.80 | 6.39 |
| 2005 | | | | | | | |
| Jan-Mar | 117 | 112 | 116 | 74.4 | 7.07 | 7.08 | 6.63 |
| Apr-June | 119 | 101 | 103 | 76.3 | 7.33 | 7.30 | 6.74 |
| July-Sept | 115 | 97 | 87 | 76.9 | 7.68 | 7.65 | 7.02 |
| Oct-Dec | 120 | 110 | 90 | 75.8 | 8.02 | 7.95 | 7.25 |
| 2006 | | | | | | | |
| 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 |
| 2007 | | | | | | | |
| Jan-Mar | 127 | 113 | 131 | 78.4 | 8.61 | 8.60 | 7.67 |

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.

^aAt end of period.

^bBankers 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.

in 2006. With 37 percent of the bankers indicating higher rates of loan repayment and just 6 percent lower rates, the index of loan repayments climbed to 131, the highest level in nearly 20 years. In addition, there were fewer loan renewals and extensions, with only 10 percent of the respondents reporting increases and 28 percent decreases. The banks increased collateral requirements a bit from last year, as 10 percent required more collateral in the first three months of 2007 and only 1 percent required less.

The substantial increase in corn acres contributed to higher loan demand because of the expenses related to maximizing yields. The index of loan demand was 127, almost up to the level of a year ago, as 41 percent of the bankers reported higher demand for non-real-estate loans and 14 percent lower demand. Agricultural banks had some additional funds available to lend in response to this demand, with 21 percent of the bankers stating that more funds were available from January through March than a year before and 8 percent stating that fewer funds were available for lending. This eased the index of funds availability to 113. Loan-to-deposit ratios averaged 78.4 percent—not quite as high as six months ago—and were still below the level desired by the responding bankers (81.2 percent). Bankers indicated that the use of farm loan guarantees provided by the Farm Service Agency of the USDA remained close to 5 percent of the District farm loan portfolio.

Agricultural interest rates continue to drift downward, after peaking in the second quarter of 2006 (see chart 2). As of April 1, 2007, the District average for interest rates on new operating loans was 8.61 percent, 15 basis points

down since the most recent peak. Averaging 7.67 percent, interest rates for farm real estate loans were 18 basis points below the level of July 1, 2006.

Looking forward

Respondents expect to make more agricultural loans in the second quarter of 2007 than they did in 2006, though not by as large a margin. They primarily anticipate these to be operating, farm machinery, and grain storage construction loans. Loan volumes for dairy and feeder cattle are expected to decline. More bankers anticipate higher versus lower real estate loan volume from April through June of 2007 (28 percent versus 11 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.

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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, 1990-92=100) | April | 135 | 0.7 | 22 | 12 |
| Crops (index, 1990-92=100) | April | 144 | -0.7 | 21 | 20 |
| Corn (\$ per bu.) | April | 3.20 | -6.7 | 52 | 60 |
| Hay (\$ per ton) | April | 124.00 | 6.0 | 18 | 25 |
| Soybeans (\$ per bu.) | April | 6.81 | -2.0 | 23 | 13 |
| Wheat (\$ per bu.) | April | 4.94 | 4.0 | 30 | 47 |
| Livestock and products (index, 1990-92=100) | April | 129 | 2.4 | 23 | 6 |
| Barrow and gilts (\$ per cwt.) | April | 46.80 | 2.9 | 12 | -9 |
| Steers and heifers (\$ per cwt.) | April | 100.00 | 2.4 | 12 | 2 |
| Milk (\$ per cwt.) | April | 16.4 | 5.1 | 36 | 8 |
| Eggs (¢ per doz.) | April | 72.3 | -12.7 | 41 | 53 |
| Consumer prices (index, 1982-84=100) | April | 207 | 0.6 | 3 | 6 |
| Food | April | 201 | 0.2 | 4 | 6 |
| Production or stocks | | | | | |
| Corn stocks (mil. bu.) | March 1 | 6,070 | N.A. | -13 | -10 |
| Soybean stocks (mil. bu.) | March 1 | 1,784 | N.A. | 7 | 29 |
| Wheat stocks (mil. bu.) | March 1 | 856 | N.A. | -12 | -13 |
| Beef production (bil. lb.) | March | 2.12 | 8.4 | -4 | 4 |
| Pork production (bil. lb.) | March | 1.86 | 13.8 | -1 | 3 |
| Milk production (bil. lb.)* | April | 14.4 | -2.2 | 2 | 5 |
| Agricultural exports (mil. dol.) | March | 6,763 | 2.1 | 7 | 22 |
| Corn (mil. bu.) | March | 169 | 0.2 | -7 | 19 |
| Soybeans (mil. bu.) | March | 85 | -34.2 | -11 | -14 |
| Wheat (mil. bu.) | February | 77 | -10.0 | 6 | 0 |
| Farm machinery (units) | | | | | |
| Tractors, over 40 HP | April | 11,512 | 11.1 | 10 | 2 |
| 40 to 100 HP | April | 8,374 | 8.6 | 7 | 7 |
| 100 HP or more | April | 3,138 | 18.5 | 22 | -8 |
| Combines | April | 312 | -24.3 | -25 | -32 |

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.

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