The Agricultural Newsletter from the Federal Reserve Bank of Chicago

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AgLetter

FARMLAND VALUES AND CREDIT CONDITIONS

Summary

Agricultural land values in the Seventh Federal Reserve District continued their rapid rise at the start of 2012, but short of the torrid pace of 2011. With a 19 percent year-over-year increase in the first quarter of 2012, District farmland values still appreciated substantially. The value of "good" agricultural land increased 5 percent in the first quarter of 2012 compared with the fourth quarter of 2011, according to 231 surveys submitted by District agricultural bankers. District cash rental rates for farmland climbed 17 percent in 2012 compared with 2011. The demand to purchase farmland in the six months ending with March 2012 was higher relative to that in the six months ending with March 2011. Additionally, the number of farms sold, acreage sold, and the amount of farmland for sale over the winter and early spring rose more sharply than a year ago. Almost two-thirds of the reporting bankers anticipated agricultural land values to be stable during the second quarter of 2012, while a third expected further increases.

Agricultural credit conditions became more favorable overall compared with a year ago, although relatively minor additional collateral requirements were reported. Both the index for the availability of funds for lending and the index for loan repayment rates reached their highest levels in the survey's history. Meanwhile, renewals and extensions of non-real-estate farm loans dropped. Agricultural interest rates continued to decrease, establishing record lows. Even so, there was weaker demand for non-real-estate loans in the first quarter of 2012 compared with the first quarter of 2011. The average loan-to-deposit ratio fell to 66.5 percent—its lowest level in almost 16 years and 10 percentage points below the average level desired by the responding bankers.

SAVE THE DATE

On November 27, 2012, the Federal Reserve Bank of Chicago will hold a conference to examine the role of farmland leases in the agricultural economy, with a particular focus on trends in cash rental rates. Details are forthcoming on www.chicagofed.org and in the next issue of *AgLetter*.

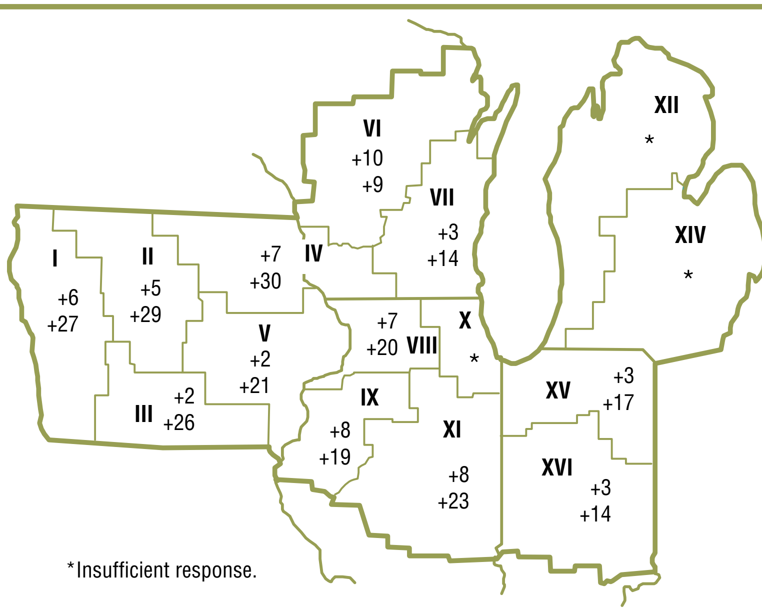
Farmland values

District agricultural land values were 19 percent higher in the first quarter of 2012 compared with the first quarter of 2011—a shade down from the year-over-year increases of the past three quarters. Farmland values in Iowa continued to lead the pack, with a year-over-year increase of 27 percent (see table and map below). On a year-over-year basis, "good" agricultural land values in Illinois, Indiana, Michigan, and Wisconsin were up 20 percent, 15 percent,

Percent change in dollar value of "good" farmland

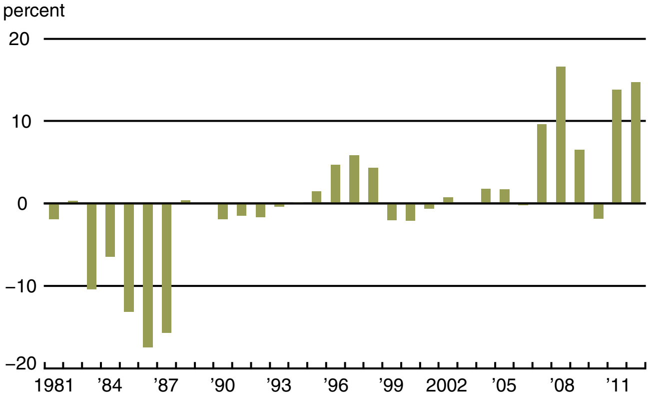
Top: January 1, 2012 to April 1, 2012
Bottom: April 1, 2011 to April 1, 2012

	January 1, 2012 to April 1, 2012	April 1, 2011 to April 1, 2012
Illinois	+8	+20
Indiana	+3	+15
Iowa	+4	+27
Michigan	+5	+7
Wisconsin	+8	+13
Seventh District	+5	+19



*Insufficient response.

1. Annual percentage change in Seventh District farmland cash rental rates adjusted by PCE



Sources: Author's calculations based on data from Federal Reserve Bank of Chicago farmland value surveys; and U.S. Bureau of Economic Analysis, Personal Consumption Expenditures (PCE) Price Index, from Haver Analytics.

7 percent, and 13 percent, respectively. The quarterly increase in agricultural land values for the District was 5 percent—in line with the gains of the past year and a half.

Bidding among farmers was common at farmland auctions, driving up winning bids. There were scattered reports of auctions where a reserve price was not met. Relative to investors, farmers again purchased a higher share of the acres sold in the past three to six months, although investors were actively searching for properties across the District. Forty percent of the survey respondents observed a higher share of land purchased by farmers versus investors, while 7 percent observed a lower share, in the period from October 2011 through March 2012. The demand to purchase farmland over this period was markedly higher compared with the October 2010 through March 2011 period: Indeed, 74 percent of the bankers reported higher demand to purchase farmland, and just 1 percent observed lower demand. The increase in the amount of farmland up for sale over the winter and early spring relative to a year ago was more pronounced, as 46 percent of the respondents noted more farmland was up for sale in their areas and 13 percent noted less. Similar percentages supported the view that the number of farms sold and their acreage were higher than a year ago as well. The current farm real estate climate seemed to encourage additional properties to be offered for sale, as owners hoped to cash in on recent gains.

Farmland cash rental rates in 2012 climbed 17 percent from 2011 for the District—the second-largest increase in the history of the survey. Cash rental rates for agricultural land went up 15 percent in Illinois, 15 percent in Indiana, 20 percent in Iowa, 12 percent in Michigan, and 19 percent in Wisconsin. After adjusting for inflation using the Personal Consumption Expenditures Price Index, District cash rental rates increased 15 percent from 2011 (see chart 1). The five top increases in cash rental rates have all come in the past six years, after adjusting for inflation.

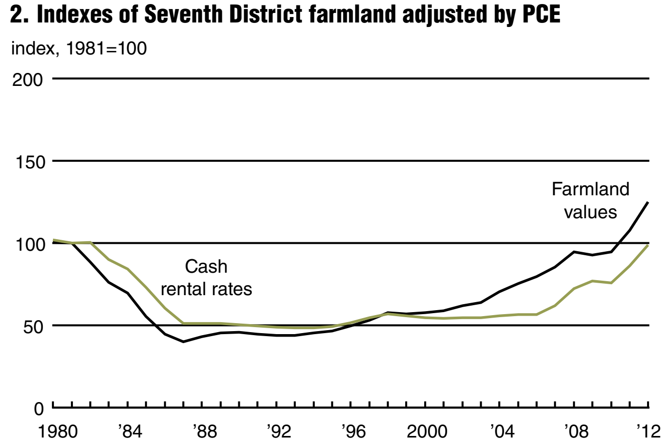
As evidenced by chart 2, the more-rapid increases in cash rental rates of the past decade resulted in their index approaching its 1981 level. In contrast, farmland values had already passed their 1981 indexed level in 2011 and reached a point 25 percent above this level by 2012. Changes in cash rental rates tend to lag changes in farmland values. Both on the way down (as in the 1980s) and on the way up (as in the most recent decade), the index of cash rental rates generally trailed the index of farmland values. This pattern partly reflected influences on farmland values besides those due to agricultural returns, such as development rights and long-lasting relationships between owners and operators.

The momentum for rising farmland values was generated by higher commodity prices and net farm incomes last year. With a lag, these same fundamental factors pushed up cash rental rates. However, upward pressures eased early in 2012. Corn prices in the first quarter of 2012 averaged \$6.23 per bushel, according to the U.S. Department of Agriculture (USDA).The USDA forecasted an easing of tight corn stocks because of an anticipated record fall harvest, leading to a lower estimated price interval of \$4.20 to \$5.00 per bushel for corn in the 2012–13 crop year. Moreover, the prices for milk and hogs—the District's biggest income generators from livestock—were down in 2012 relative to their values in the final quarter of 2011. Based on the USDA index of prices paid by farmers, input costs for agriculture rose 6.6 percent through the first quarter of 2012 compared with the first quarter of 2011. Thus, with possibly lower revenues for several outputs and higher costs for inputs, agriculture faces a more challenging road to profits in 2012 than in 2011.

Credit conditions

In a very competitive environment, agricultural credit conditions improved in the first quarter of 2012 compared with

2. Indexes of Seventh District farmland adjusted by PCE



Note: Both series are adjusted by PCE for the first quarter of each year.
Sources: Author's calculations based on data from Federal Reserve Bank of Chicago farmland value surveys; and U.S. Bureau of Economic Analysis, Personal Consumption Expenditures (PCE) Price Index, from Haver Analytics.

Credit conditions at Seventh District agricultural banks

	Loan demand	Funds availability	Loan repayment rates	Average loan-to-deposit ratio	Interest rates on farm loans: Operating loans[a]	Feeder cattle[a]	Real estate[a]
	(index)[b]	*(index)*[b]	*(index)*[b]	*(percent)*	*(percent)*	*(percent)*	*(percent)*
2010							
Jan–Mar	109	127	79	73.7	6.13	6.25	6.04
Apr–June	98	122	85	74.5	6.12	6.25	5.99
July–Sept	90	138	114	73.2	6.05	6.14	5.81
Oct–Dec	101	142	142	71.8	5.85	6.02	5.70
2011							
Jan–Mar	81	149	146	69.8	6.01	5.93	5.80
Apr–June	79	145	133	70.3	5.75	5.91	5.62
July–Sept	81	149	133	69.0	5.66	5.79	5.36
Oct–Dec	87	153	150	68.7	5.47	5.65	5.20
2012							
Jan–Mar	72	163	154	66.5	5.34	5.54	5.08

[a]At end of period.
[b]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 percentage of bankers that responded "lower" from the percentage that responded "higher" and adding 100.
Note: Historical data on Seventh District agricultural credit conditions are available for download from the *AgLetter* webpage, www.chicagofed.org/webpages/publications/agletter/index.cfm.

the first quarter of 2011. Generally stronger balance sheets enabled farmers to deal with credit problems. The index of non-real-estate agricultural loan repayment rates climbed to its highest level in the survey's history (154) for the first quarter of 2012, as 56 percent of the respondents noted higher rates of repayment and only 2 percent noted lower rates. There was also an improvement for loan renewals and extensions, with 37 percent of the bankers reporting fewer and 4 percent reporting more in the first quarter this year than in the same period last year.

The index of funds availability also set a record at 163, as 64 percent of the banks had additional funds available to lend and just 1 percent had fewer. Farmers reportedly placed larger deposits than usual in banks, and farmers seemed to fund more of their operations with cash earnings rather than with bank credit. Only in Wisconsin was there evidence of greater loan demand. The index of demand for non-real-estate farm loans fell to 72, which was its lowest level since the first quarter of 1987; 19 percent of reporting bankers saw higher loan demand, and 47 percent saw lower demand. At 66.5 percent, the average loan-to-deposit ratio fell to its lowest point since 1996. The share of banks below their desired loan-to-deposit ratio level was 82 percent. Nine percent of banks required larger amounts of collateral during January through March of 2012 relative to a year ago, and 1 percent required smaller amounts. The percentage of farm loans guaranteed by the Farm Service Agency (FSA) of the USDA edged up slightly, but FSA guaranteed loans remained below 6 percent of the District farm loan portfolio.

Competition in an environment with reduced loan demand led banks to lower interest rates further—to an average of 5.34 percent on farm operating loans and 5.08 percent on real estate loans, as of April 1, 2012. Both of these figures established new lows for the survey of interest rates.

Looking forward

The trend toward higher farmland values could ease in the second quarter of 2012, according to survey respondents. A third of the responding bankers expected farmland values to increase during the April through June period, while 1 percent expected declines. Nearly two-thirds of the respondents looked for farmland values to stabilize.

The volume of non-real-estate farm loans was expected to decline during the period from April through June of 2012 compared with the same period of 2011, entirely because of responses from Illinois and Iowa. The respondents anticipated lower volumes for operating, feeder cattle, dairy, and FSA guaranteed loans. Growth was forecasted in farm machinery, grain storage construction, and real estate loan volumes in the second quarter of 2012 compared with the second quarter of 2011.

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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	177	−3.8	1	31
Crops *(index, 1990–92=100)*	April	205	−2.4	2	40
Corn *($ per bu.)*	April	6.14	−3.3	−3	80
Hay *($ per ton)*	April	190	5.0	33	76
Soybeans *($ per bu.)*	April	13.80	6.2	5	46
Wheat *($ per bu.)*	April	6.87	−4.5	−14	56
Livestock and products *(index, 1990–92=100)*	April	153	−4.4	−2	20
Barrows & gilts *($ per cwt.)*	April	62.80	−4.1	−8	11
Steers & heifers *($ per cwt.)*	April	129.00	−2.3	6	28
Milk *($ per cwt.)*	April	16.90	−1.7	−14	16
Eggs *($ per doz.)*	April	0.86	−13.3	−18	13
Consumer prices *(index, 1982–84=100)*	March	229	0.3	3	5
Food	March	233	0.2	3	6
Production or stocks					
Corn stocks *(mil. bu.)*	March 1	6,009	N.A.	−8	−22
Soybean stocks *(mil. bu.)*	March 1	1,372	N.A.	10	8
Wheat stocks *(mil. bu.)*	March 1	1,201	N.A.	−16	−11
Beef production *(bil. lb.)*	March	2.16	7.4	−5	−2
Pork production *(bil. lb.)*	March	1.99	5.6	−3	−3
Milk production *(bil. lb.)**	March	16.4	8.6	4	6
Agricultural exports *($ mil.)*	March	11,956	3.4	−10	21
Corn *(mil. bu.)*	March	133	1.1	−22	−31
Soybeans *(mil. bu.)*	March	117	−23.9	−6	−11
Wheat *(mil. bu.)*	March	87	25.8	−28	18
Farm machinery *(units)*					
Tractors, over 40 HP	April	8,781	N.A.	5	8
40 to 100 HP	April	5,389	N.A.	12	9
100 HP or more	April	3,392	N.A.	−4	7
Combines	April	581	N.A.	−24	−8

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.