

# AgLetter



## FARMLAND VALUES AND CREDIT CONDITIONS

### Summary

On the whole, “good” farmland values kept rising in the Seventh Federal Reserve District during the first quarter of 2013, but signs of moderation in farmland value gains emerged. Agricultural land values appreciated 4 percent in the first quarter of 2013 relative to the fourth quarter of 2012, based on the survey responses of 219 District agricultural bankers. This quarterly increase was smaller than that of the previous survey. That said, the year-over-year increase in agricultural land values was 15 percent in the first quarter of 2013, nearly matching the annual gain of 2012. Both the District’s quarterly and year-over-year increases in farmland values masked the weaker results of some areas, such as Wisconsin.

Demand to purchase agricultural land increased in the three- to six-month period ending with March 2013 compared with the same period a year ago. Similarly, the number of farms sold, the amount of acreage sold, and the amount of farmland for sale rose during the winter and early spring of 2013 compared with a year ago. Additionally, farmland cash rental rates in the District were 11 percent higher in 2013 compared with 2012. With regard to agricultural land values during the second quarter of 2013, over three-quarters of the responding bankers expected them to be stable.

### SAVE THE DATE

On November 19, 2013, the Federal Reserve Bank of Chicago will hold a conference to explore the risks faced by agricultural producers and lenders, as well as the risk-management tools available to them. Details are forthcoming on [www.chicagofed.org](http://www.chicagofed.org) and in the next issue of *AgLetter*.

Credit conditions continued to improve for agricultural producers. Both the index of availability of funds to lend and the index of repayment rates for non-real-estate farm loans moved up, although they did not reach their peaks. In addition, fewer renewals and extensions of these loans indicated improvement in credit conditions. Yet, the index of demand for non-real-estate loans in the first quarter of 2013 fell to its lowest level since 1986. At 63.7 percent, the average loan-to-deposit ratio had not been lower since 1994. Interest rates on farm loans moved down further to new lows for the survey.

### Farmland values

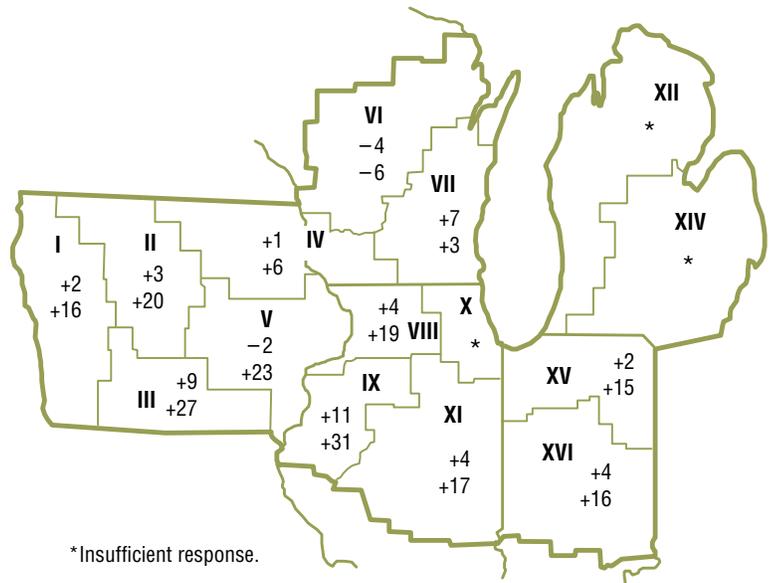
District agricultural land values rose 4 percent in the first quarter of 2013 relative to the fourth quarter of 2012, easing down from the quarterly increase of last year’s final quarter. However, the year-over-year increase in District farmland values was 15 percent in the first quarter of 2013, almost matching the annual gain of 2012. Furthermore, the District’s

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

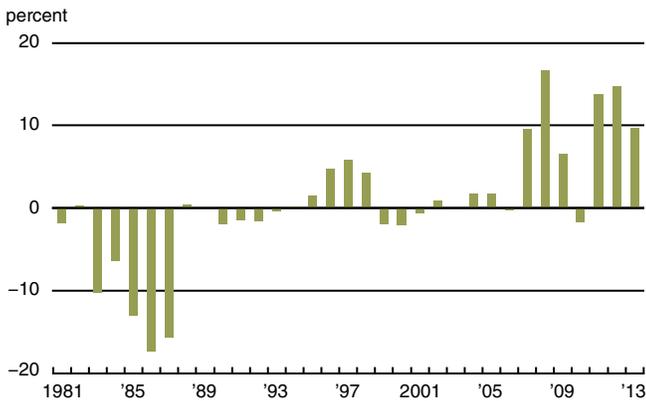
Top: January 1, 2013 to April 1, 2013

Bottom: April 1, 2012 to April 1, 2013

	January 1, 2013 to April 1, 2013	April 1, 2012 to April 1, 2013
Illinois	+5	+19
Indiana	+4	+15
Iowa	+3	+20
Michigan	+12	+24
Wisconsin	0	-3
Seventh District	+4	+15



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



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 Price Index (PCEPI), from Haver Analytics.

quarterly and year-over-year gains in agricultural land values masked the weaker results of some areas (see table and map on front page). Most notable was a 3 percent drop in Wisconsin's farmland values in the first quarter of 2013 from a year ago. That said, the year-over-year and quarterly gains in agricultural land values for Michigan were higher than the strong gains of the previous quarter. For Illinois and Iowa, the increases in farmland values on a year-over-year basis were close to those of the previous quarter, although these District states' quarterly increases were softer than those of the last quarter.

There was higher demand to purchase farmland in the three- to six-month period ending with March 2013 compared with the same period a year ago; 59 percent of the survey respondents observed higher demand to purchase farmland, while only 1 percent observed lower demand. The supply of farmland was higher too: There was an increase in the amount of farmland for sale over the winter and early spring relative to a year ago, as 37 percent of the responding bankers reported more farmland was up for sale in their areas and 28 percent reported less. Similarly, the number of farms and amounts of acreage sold increased over the winter and early spring relative to a year ago. A little over one-third of survey participants reported that farmers increased their share of farmland acres purchased (relative to investors) in the three- to six-month period ending in March 2013 versus the same period a year earlier; 3 percent said farmers decreased their share; and 62 percent saw no change.

District cash rental rates for agricultural land in 2013 were up 11 percent from 2012 (this annual increase was smaller than those of the past two years). Over the same period, farmland cash rental rates were up 9 percent in Illinois, 11 percent in Indiana, 13 percent in Iowa, 2 percent in Michigan, and 12 percent in Wisconsin. District cash rental rates increased almost 10 percent from 2012 when

adjusted for inflation using the Personal Consumption Expenditures Price Index (see chart 1); this result was the fourth-largest increase in farmland cash rental rates in the history of the survey.

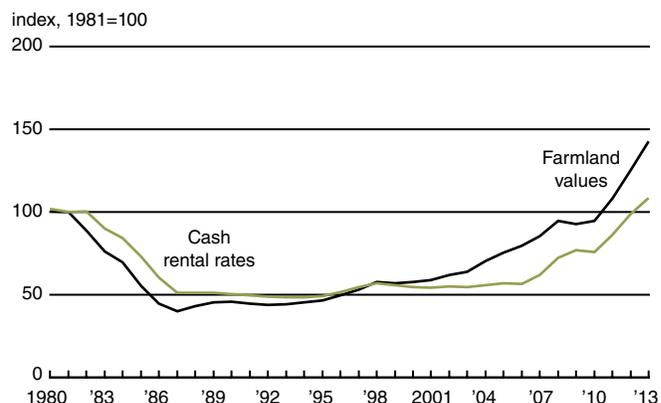
The string of strong advances in farmland cash rental rates propelled their inflation-adjusted index past its previous peak (see chart 2). Similarly, the index of agricultural land values has established new records every year since 2011. Historically, changes in cash rental rates have tended to trail those in farmland values, so not surprisingly, the equity derived from the land outpaced the income from cash rents in 2013.

Rising cash rental rates and farmland values reflected higher crop prices. Prices in the first quarter of 2013 averaged \$7.06 per bushel for corn and \$14.47 per bushel for soybeans, according to the U.S. Department of Agriculture (USDA). In the first quarter of 2013, corn prices and soybean prices increased 2.5 percent and 1.4 percent, respectively, from the fourth quarter of 2012; corn prices grew 13 percent and soybean prices grew 17 percent compared with a year ago, as tight stocks and uncertainty about the weather boosted prices. Moreover, at the end of the first quarter of 2013, \$16.1 billion had been paid out for insured 2012 agricultural losses across the U.S., of which \$6.66 billion went to producers in the five District states (41 percent of the U.S. total). These factors bolstered farmland values and cash rents while enhancing agricultural credit conditions in the first quarter of 2013.

### Credit conditions

Agricultural credit conditions improved in the first quarter of 2013 compared with the first quarter of 2012. At 161, the index of funds availability nearly matched last year's record, with 61 percent of the survey respondents reporting their banks had more funds available to lend and under 1 percent reporting their banks had less. The index of repayment rates for non-real-estate farm loans moved up

### 2. Indexes of Seventh District farmland adjusted by PCEPI



Note: Both series are adjusted by PCEPI 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 Price Index (PCEPI), from Haver Analytics.

## 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>2011</b>							
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
<b>2012</b>							
Jan–Mar	72	163	154	66.5	5.34	5.54	5.08
Apr–June	69	164	139	68.1	5.27	5.41	4.94
July–Sept	81	147	128	67.5	5.21	5.37	4.86
Oct–Dec	96	151	135	67.2	5.03	5.24	4.70
<b>2013</b>							
Jan–Mar	67	161	143	63.7	4.91	5.12	4.60

<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 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](http://www.chicagofed.org/webpages/publications/agletter/index.cfm).

to 143 for the first quarter of 2013—its highest value since setting a new high a year ago; 47 percent of the responding bankers reported higher rates of repayment and 4 percent reported lower rates. Thirty-five percent of the survey respondents observed fewer loan renewals and extensions over the January through March period of 2013 compared with the same period last year, while 5 percent observed more of them.

The index of demand for non-real-estate farm loans dropped to 67—its lowest value since 1986. Only 13 percent of the reporting bankers noted higher loan demand compared with a year ago, and 46 percent noted lower demand. Low loan demand led to a decline in the average loan-to-deposit ratio for the District. At 63.7 percent, the District’s average loan-to-deposit ratio had fallen to its lowest level since 1994, and this level was 13 percentage points below the average level desired by District bankers. Furthermore, the share of banks below their desired level of lending rose to 89 percent. Six percent of the survey respondents reported that their banks required larger amounts of collateral for loans during the January through March period of 2013 relative to the same period last year, while only 1 percent reported that their banks required smaller amounts. As of April 1, 2013, average interest rates had fallen to 4.91 percent for operating loans and 4.60 percent for agricultural real estate loans; both were record lows.

### Looking forward

Heavy precipitation has delayed planting this spring, in sharp contrast with last year, when planting occurred ahead of schedule. That said, the rains have revitalized much of the subsoil. During last year’s drought, subsoil moisture played a key role in preventing even deeper losses in agricultural output. Similar to a year ago (before the drought hit), the USDA recently forecasted an easing of tight crop stocks because of the anticipated record harvests of corn

and soybeans this fall; according to the USDA, this record production should lead to lower estimated price intervals for the 2013–14 crop year: \$4.30 to \$5.10 per bushel for corn and \$9.50 to \$11.50 per bushel for soybeans. Lower crop prices could slow the upward trend in farmland values. Many District bankers responding to the survey appeared to share this view: For the second quarter of 2013, 19 percent predicted farmland values to increase, while 4 percent expected them to decrease; the vast majority anticipated farmland values to be stable.

Non-real-estate farm loan volumes were projected by survey respondents to decrease during the April through June period of 2013 compared with the same period of 2012, except in Indiana and Wisconsin. However, agricultural real estate loan volumes were expected to rise in the second quarter of 2013 compared with the second quarter of 2012 for all District states.

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

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## SELECTED AGRICULTURAL ECONOMIC INDICATORS

	Latest period	Value	Percent change from		
			Prior period	Year ago	Two years ago
<b>Prices received by farmers</b> ( <i>index, 1990–92=100</i> )	April	189	-6.4	6	7
<b>Crops</b> ( <i>index, 1990–92=100</i> )	April	218	-9.2	4	8
Corn (\$ per bu.)	April	6.67	-7.1	5	5
Hay (\$ per ton)	April	200	2.0	4	40
Soybeans (\$ per bu.)	April	14.20	-2.1	3	8
Wheat (\$ per bu.)	April	7.52	-1.8	6	-6
<b>Livestock and products</b> ( <i>index, 1990–92=100</i> )	April	163	-1.2	7	4
Barrows & gilts (\$ per cwt.)	April	61.00	2.0	-3	-11
Steers & heifers (\$ per cwt.)	April	128.00	0.0	0	5
Milk (\$ per cwt.)	April	19.30	1.0	15	-2
Eggs (\$ per doz.)	April	0.88	-23.3	2	-16
<b>Consumer prices</b> ( <i>index, 1982–84=100</i> )	March	232	-0.2	1	4
Food	March	236	0.0	2	5
<b>Production or stocks</b>					
Corn stocks ( <i>mil. bu.</i> )	March 1	5,399	N.A.	-10	-17
Soybean stocks ( <i>mil. bu.</i> )	March 1	999	N.A.	-27	-20
Wheat stocks ( <i>mil. bu.</i> )	March 1	1,234	N.A.	3	-13
Beef production ( <i>bil. lb.</i> )	March	2.04	8.8	-6	-10
Pork production ( <i>bil. lb.</i> )	March	1.93	8.7	-3	-6
Milk production ( <i>bil. lb.</i> )*	March	16.4	12.3	-1	4
<b>Agricultural exports</b> (\$ mil.)	March	11,682	-6.5	-2	-12
Corn ( <i>mil. bu.</i> )	March	68	23.6	-49	-60
Soybeans ( <i>mil. bu.</i> )	March	68	-53.6	-42	-45
Wheat ( <i>mil. bu.</i> )	March	102	11.9	17	-16
<b>Farm machinery</b> ( <i>units</i> )					
Tractors, over 40 HP	April	9,551	N.A.	9	14
40 to 100 HP	April	5,158	N.A.	-4	7
100 HP or more	April	4,393	N.A.	30	25
Combines	April	920	N.A.	59	21

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.