The Agricultural Newsletter
from the Federal Reserve Bank of Chicago
Number 1962 *November 2013*

AgLetter

FARMLAND VALUES AND CREDIT CONDITIONS

Summary
On a year-over-year basis, farmland values in the Seventh Federal Reserve District gained 14 percent in the third quarter of 2013. However, the return of drought seemed to temper the year-over-year gain in Iowa farmland values. There was a 1 percent increase in "good" agricultural land values in the third quarter relative to the second quarter of 2013, according to the 195 agricultural bankers that provided responses for the October 1 survey. While District farmland values increased on the whole in the third quarter of 2013, this upward trend was not expected to continue: The respondents' expectations leaned toward a decrease in farmland values in the fourth quarter of 2013, as only 4 percent anticipated an increase and 21 percent forecasted a decrease (75 percent foresaw stable farmland values).

In the third quarter of 2013, agricultural credit conditions, by and large, saw improvement from a year ago. But this improvement narrowed from those seen in recent quarters for the District. There was less financial stress, as repayment rates for non-real-estate farm loans were higher and as loan renewals and extensions were lower in the third quarter of 2013 relative to the same quarter last year. Moreover, funds availability was higher than in the third quarter of 2012. And demand for non-real-estate loans was lower compared with a year ago. These last two factors contributed to the average loan-to-deposit ratio for the District (66.9 percent) being lower than what had been recorded a year earlier. The average interest rate on farm operating loans was unchanged in the third quarter of 2013, while the average interest rate on farm real estate loans edged up.

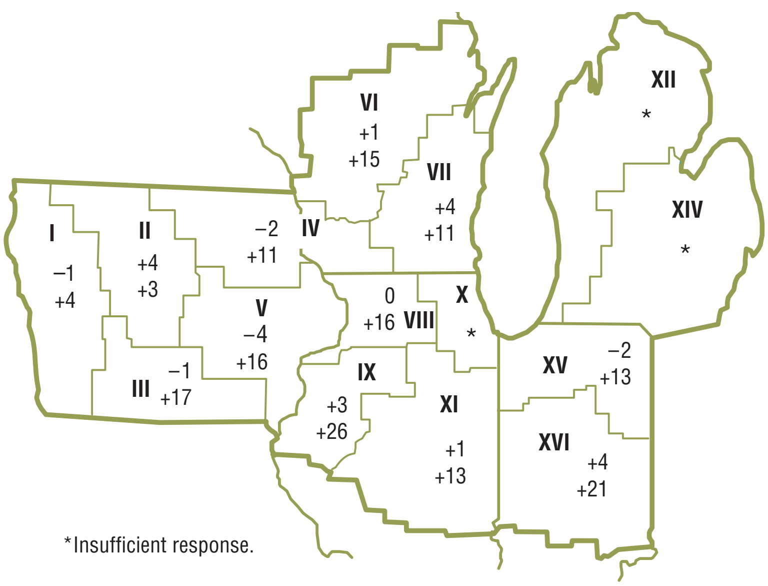
Farmland values
The momentum of rising farmland values in the District was carried into the third quarter of 2013, as evidenced by a year-over-year increase of 14 percent. On a quarterly basis, the District's agricultural land values saw a gain of 1 percent in the third quarter of 2013 after recording no increase in the previous quarter. After leading the District in terms of year-over-year gains in farmland values from the first quarter of 2010 until earlier this year, Iowa felt the impact of renewed drought conditions and had the lowest year-over-year increase in agricultural land values among District states, as well as the only quarterly decrease (see map and table below).

The District's quarterly uptick in farmland values occurred in spite of a significant downturn in corn and soybean prices. According to the U.S. Department of Agriculture (USDA), corn prices averaged $6.13 per bushel in the third quarter of 2013—down 12 percent from the

Percent change in dollar value of "good" farmland

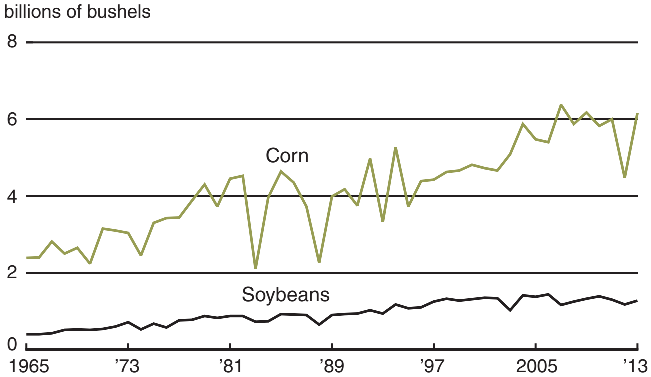
Top: July 1, 2013 to October 1, 2013
Bottom: October 1, 2012 to October 1, 2013

	July 1, 2013 to October 1, 2013	October 1, 2012 to October 1, 2013
Illinois	+1	+16
Indiana	+2	+18
Iowa	−1	+9
Michigan	+5	+17
Wisconsin	+2	+14
Seventh District	+1	+14



*Insufficient response.

1. Corn and soybean production for Seventh District states



Source: Author's calculations based on data from the U.S. Department of Agriculture, National Agricultural Statistics Service.

previous quarter and down 15 percent from a year ago. At $14.23 per bushel in the third quarter of 2013, the average price for soybeans dropped 3.8 percent from the previous quarter and was off 7.0 percent from a year ago. The USDA predicted that the five District states' harvest of corn for grain would be 38 percent greater than the drought-reduced harvest of 2012. For the five District states, soybean production was projected by the USDA to rise 8.5 percent in 2013 from its 2012 level. Even with the reoccurrence of drought in parts of the District, the third-largest corn harvest and a soybean harvest just outside the top ten filled storage bins across the Midwest (see chart 1). Better-than-expected crop yields for the District may have contributed to the momentum of its rising farmland values; however, in areas affected by back-to-back droughts, the loss of revenue from declines in crop prices and yields may have constrained farmland value gains.

Credit conditions

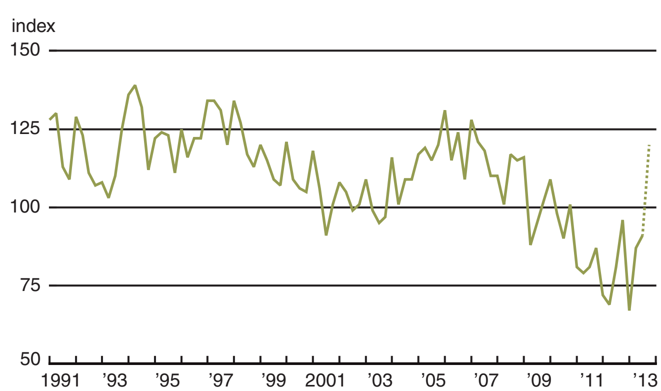
In the third quarter of 2013, the District's agricultural credit conditions saw improvement relative to a year ago, although it was generally narrower than in the previous quarters of this year and the past few years. Compared with a year ago, repayment rates on non-real-estate farm loans were higher in the July through September period of 2013. Yet, the index of loan repayment rates dropped to 115 in the third quarter of 2013, as 23 percent of the responding bankers reported higher rates of loan repayment relative to a year ago and 8 percent reported lower rates. In addition, loan renewals and extensions on non-real-estate agricultural loans were lower this past quarter relative to the third quarter of 2012, with 8 percent of the responding bankers observing more of them and 13 percent observing fewer. The index of funds availability fell to 128, with 34 percent of the respondents indicating there were more funds available at their banks during the third quarter of 2013 than a year earlier and 6 percent indicating there were fewer. The indexes of loan repayment rates and funds availability had not been as low during the past three years as they were in the third quarter of 2013. Collateral requirements for loans tightened in the third quarter of 2013 relative to the third quarter of the previous year, as 7 percent of the survey respondents reported that their banks required more collateral and 1 percent reported that their banks required less.

Demand for non-real-estate loans compared with a year ago was lower in the third quarter of 2013. Given that 20 percent of survey respondents observed higher demand for non-real-estate loans than a year earlier and 29 percent observed lower demand, the index of loan demand stood at 91—up slightly from 87 in the second quarter (see chart 2). Somewhat lower than a year ago, the District's average loan-to-deposit ratio was 66.9 percent—about 11 percentage points below the level desired by the responding bankers. As of October 1, 2013, the average interest rate on agricultural operating loans was 4.94 percent (the same as it had been on July 1, 2013), but the average interest rate on farm real estate loans edged up to 4.68 percent.

Looking forward

The third quarter's results were fairly similar to those of previous quarters, but the survey respondents predicted some stark differences for the coming months. The respondents' expectations tended to indicate a reversal of fortunes for farmland values; indeed, only 4 percent of the respondents anticipated higher farmland values in the October through December period of 2013, while 21 percent forecasted lower farmland values. Still, the vast majority (75 percent) expected no change in farmland values for the fourth quarter of 2013. Moreover, survey respondents predicted farmers' demand to acquire farmland this fall and winter to be stronger than a year ago, whereas they expected the opposite for nonfarm investors' demand. Thirty-six percent of the responding bankers predicted a decrease in the volume of farmland transfers relative to the fall and winter of a year ago, while 18 percent expected an increase.

2. Non-real-estate farm loan demand for Seventh District



Notes: The dashed line including the final data point on this chart is a projection based on survey results. All other data are historical survey data.
Source: Author's calculations based on data from Federal Reserve Bank of Chicago farmland value surveys.

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)*
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
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
2013							
Jan–Mar	67	161	143	63.7	4.91	5.12	4.60
Apr–June	87	142	129	64.6	4.94	5.16	4.65
July–Sept	91	128	115	66.9	4.94	5.14	4.68

[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 who responded "lower" from the percentage who 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.

Net cash farm earnings for crop and livestock operations were expected to move in opposite directions. Crop farmers faced the prospects of lower levels of net cash earnings this fall and winter relative to the previous fall and winter, as only 12 percent of survey respondents anticipated net cash earnings from crops to rise and 73 percent expected them to drop. Given the recent steep declines in crop prices, the USDA estimated price intervals of $4.10 to $4.90 per bushel for corn and $11.15 to $13.15 per bushel for soybeans in the 2013–14 crop year. Reduced feed costs have been a boon for hog, cattle, and dairy farmers. Thirty-seven percent of the respondents expected higher net earnings for cattle and hog operations over the next three to six months relative to a year ago, while 26 percent predicted lower net earnings. In October 2013, cattle and hog prices were 0.8 percent and 11 percent higher than a year ago, respectively. The prospects for dairy producers were not as rosy, since milk prices were off 6 percent from October 2012. Fifteen percent of respondents expected higher net earnings for dairy operations over the fall and winter compared with a year ago, and 26 percent forecasted lower net earnings.

Furthermore, heading into the fall and winter, survey respondents sensed a shift in agricultural credit conditions. Loan repayment was anticipated to worsen, with 17 percent of the responding bankers predicting the volume of farm loan repayments to rise in the next three to six months relative to a year ago and 26 percent expecting this volume to fall. According to bankers participating in the survey, forced sales or liquidations of farm assets among financially stressed farmers should decline in the next three to six months relative to a year earlier, except in Wisconsin.

Finally, there were more survey respondents predicting an increase versus a decrease in non-real-estate loan volume for the October through December period of 2013 relative to the same period of 2012. If these predictions were to come about, the index of non-real-estate loan demand would hit its highest level since 2007 (see chart 2). All the predicted strength stemmed from a higher volume of operating loans in the fourth quarter of 2013 compared with a year earlier—which was forecasted by 44 percent of the respondents (10 percent expected a lower volume). The volume of farm real estate loans was anticipated to decline in the fourth quarter of 2013 relative to the fourth quarter of 2012, as 14 percent of the respondents forecasted an increase and 23 percent predicted a decrease.

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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, senior 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.

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)*	October	187	0.5	−11	1
Crops *(index, 1990–92=100)*	October	203	−1.5	−15	0
Corn *($ per bu.)*	October	4.49	−16.9	−34	−22
Hay *($ per ton)*	October	177	0.6	−7	−4
Soybeans *($ per bu.)*	October	12.60	−5.3	−11	7
Wheat *($ per bu.)*	October	7.09	4.3	−15	−2
Livestock and products *(index, 1990–92=100)*	October	163	0.0	1	7
Barrows & gilts *($ per cwt.)*	October	69.40	−1.7	11	1
Steers & heifers *($ per cwt.)*	October	128.00	0.8	1	5
Milk *($ per cwt.)*	October	20.30	1.0	−6	2
Eggs *($ per doz.)*	October	1.04	0.0	2	2
Consumer prices *(index, 1982–84=100)*	September	234	0.2	1	3
Food	September	238	0.0	1	3
Production or stocks					
Corn stocks *(mil. bu.)*	September 1	824	N.A.	−17	−27
Soybean stocks *(mil. bu.)*	September 1	141	N.A.	−17	−34
Wheat stocks *(mil. bu.)*	September 1	1,855	N.A.	−12	−14
Beef production *(bil. lb.)*	September	2.07	−7.5	3	−6
Pork production *(bil. lb.)*	September	1.84	−4.9	−4	−6
Milk production *(bil. lb.)**	September	14.8	−5.7	1	1
Agricultural exports *($ mil.)*	August	10,255	1.4	−5	−6
Corn *(mil. bu.)*	August	46	−19.3	−44	−70
Soybeans *(mil. bu.)*	August	17	26.9	−77	−61
Wheat *(mil. bu.)*	August	141	24.0	45	41
Farm machinery *(units)*					
Tractors, 40 HP or more	September	7,937	N.A.	7	11
40 to 100 HP	September	4,434	N.A.	9	10
100 HP or more	September	3,503	N.A.	4	13
Combines	September	1,028	N.A.	−24	−18

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.