# AgLetter

## **FARMLAND VALUES AND CREDIT CONDITIONS**

# **Summary**

Although the drought's effects on the Seventh Federal Reserve District lingered, the year-over-year increase in agricultural land values only eased to 13 percent in the third quarter of 2012. In addition, there was a quarterly gain of 5 percent in the value of "good" farmland—actually much larger than the increase of the previous quarter. According to the 223 responses provided for the October 1 survey, the District's agricultural land values were expected to continue rising in the fourth quarter of 2012.

The drought's impact was evident in credit conditions for the agricultural sector in the July through September period of this year compared with the same period of 2011, even though the changes were subtle. Relative to a year ago, demand for non-real-estate loans was lower during the third quarter of 2012, but not as much as it was during the second quarter. Also, at 67.5 percent for the District, the average loan-to-deposit ratio was lower than a year ago. Compared with a year earlier, repayment rates, as well as the rates of loan renewals and extensions, for non-real-estate farm loans improved in the third quarter of 2012, but not by as much as in the second quarter of this year. Funds availability relative to the prior year eased in the third quarter of 2012 from its historic high of the previous quarter. Interest rates

on farm operating and real estate loans edged down again in the third quarter, setting records once more.

#### Farmland values

For the third quarter of 2012, the year-over-year gain in District agricultural land values was 13 percent—the smallest increase since 2010. Iowa's farmland values continued to lead the District, with a year-over-year increase of 18 percent for the third quarter of 2012 (see table and map below). The quarterly increase in the District's agricultural land values was 5 percent for the third quarter of 2012—much higher than the 1 percent gain for the previous quarter.

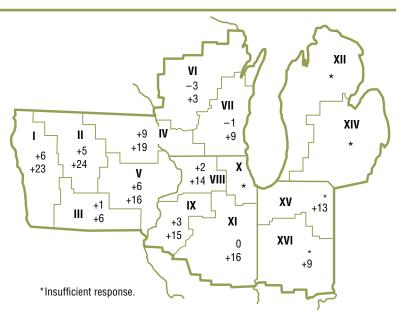
Survey results indicated that the impetus for higher farmland values actually strengthened during the third quarter of 2012. Given that 36 percent of the survey respondents expected higher agricultural land values in the October through December period of 2012 and just 1 percent expected lower values, the drought does not seem to have derailed bankers' anticipation of further upward movement in farmland values.

Moreover, the demand to acquire farmland this fall and winter was not anticipated to ebb, particularly among farmers. Given that 57 percent of surveyed bankers predicted increased demand for farmland among farmers over the next three to six months and only 5 percent predicted decreased demand, there should continue to be a lot of

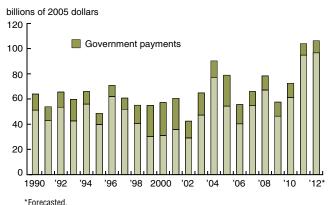
# Percent change in dollar value of "good" farmland

*Top:* July 1, 2012 to October 1, 2012 *Bottom:* October 1, 2011 to October 1, 2012

	July 1, 2012 to October 1, 2012	October 1, 2011 to October 1, 2012		
Illinois	+1	+15		
Indiana	*	+11		
lowa	+6	+18		
Michigan	*	+7		
Wisconsin	-2	+8		
Seventh District	+5	+13		



#### 1. Real net farm income



Source: Author's calculations based on data from the U.S. Department of Agriculture, Economic Research Service.

interest in available agricultural ground. The high level of interest in farmland should also persist on account of the sustained strong demand among nonfarm investors; 31 percent of the survey respondents forecasted greater demand to buy farmland among nonfarm investors over the next three to six months, while 17 percent forecasted lesser demand. In addition, 45 percent of the responding bankers expected farmland transfers to grow in volume this fall and winter relative to the previous fall and winter, while 8 percent expected them to decline.

According to the survey responses, the drought was predicted to more adversely affect the net farm earnings of livestock farm operators than those of crop farmers. Crop farmers were actually forecasted to experience higher levels of net cash earnings this fall and winter relative to the previous fall and winter; however, dairy, cattle, and hog producers were forecasted to have lower levels. Because of higher corn and soybean prices this fall and payouts from crop insurance to cover lost output, 48 percent of survey respondents anticipated net cash earnings from crops to rise over the next three to six months and 24 percent anticipated these earnings to fall. For District states, the corn harvest was forecasted to be 4.47 billion bushels in 2012—25 percent below 2011's level—and the production of soybeans was estimated to be 1.16 billion bushels this year—an 11 percent decline from last year. October corn and soybean prices climbed 21 percent and 20 percent from last year, respectively. As a result, feed costs have jumped up, squeezing dairy, cattle, and hog farmers. For cattle and hog operations, 72 percent of the responding bankers expected lower earnings for the fall and winter relative to the previous fall and winter, while 6 percent anticipated higher earnings; for dairy operations, 59 percent expected lower earnings, while 7 percent anticipated higher earnings. Even with milk and cattle prices up 6 percent and 3 percent from last October, respectively, prospects for dairy and cattle producers were diminished, but not as

much as those for hog producers hurt by an 11 percent drop in hog prices from last October.

The relative fortunes of the crop and livestock sectors were delineated in the latest forecasts of 2012 net farm income by the U.S. Department of Agriculture (USDA): Overall, 2012 net farm income was predicted to rise 3.7 percent, reflecting a 6.0 percent increase in the value of crop production but masking a 0.1 percent dip in the value of livestock production. Purchased inputs were expected to grow by 7.2 percent in 2012, with feed expenditures for livestock anticipated to be higher by 13 percent. Thus, according to the USDA, the livestock sector faced a bleaker outlook for 2012, while the crop sector faced a brighter outlook than expected given that yields were impaired by the drought. Furthermore, after adjusting for inflation, net farm income for the United States increased for the third year in a row (see chart 1), reaching its highest level since 1973. Strong earnings for crop producers this year, especially following the high earnings of 2011, should help set the stage for continuing growth in farmland values.

#### **Credit conditions**

The divergent paths of net farm income for crop producers and livestock producers were also reflected by the changes in District agricultural credit conditions over the July through September period of 2012. Demand for non-realestate loans relative to a year ago fell during the third quarter of 2012, but not as deeply as it did during the second quarter. With 14 percent of survey respondents reporting higher demand for non-real-estate loans compared with a year ago and 33 percent reporting lower demand, the index of loan demand was 81 for the third quarter of 2012. However, there was a surge of non-real-estate loan demand relative to last year in Wisconsin, presumably to meet the needs of the dairy industry. For the third quarter of 2012, the District's average loan-to-deposit ratio was 67.5 percent, which was over 10 percentage points below the level desired by survey respondents.

#### 2. Repayment rates for Seventh District non-real-estate farm loans



Source: Author's calculations based on data from Federal Reserve Bank of Chicago farmland value surveys.

## **Credit conditions at Seventh District agricultural banks**

Ordan domaino	Loan demand	Funds availability	Loan repayment rates	Average loan-to- deposit ratio	Interest rates on farm loans		
					Operating loans <sup>a</sup>	Feeder cattle <sup>a</sup>	Real estateª
	(index) <sup>b</sup>	(index) <sup>b</sup>	(index) <sup>b</sup>	(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
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

aAt end of period.

Repayment rates on non-real-estate farm loans were better in the July through September period of 2012 than in the same period of last year. Still, the index of loan repayment rates slid to 128 (see chart 2), as 32 percent of the responding bankers noted higher rates of loan repayment and 4 percent noted lower rates. Moreover, the rates of loan renewals and extensions on non-real-estate agricultural loans edged down in the third quarter of 2012 relative to the same period last year, with 5 percent of the reporting bankers observing increases in them and 25 percent observing decreases. With 49 percent of the respondents indicating there were more funds available at their banks during the third quarter of 2012 than a year earlier and 2 percent indicating there were fewer, the index of funds availability decreased to 147 after setting a record last quarter.

As of October 1, 2012, the average interest rates on agricultural operating loans and real estate loans were 5.21 percent and 4.86 percent, respectively. Both values were new record lows for the District. Illinois had the lowest average interest rates for both kinds of loans, while Wisconsin had the highest. According to the survey respondents, borrowers needed more collateral to qualify for loans at 7 percent of the banks compared with a year ago, while less collateral was required at 2 percent.

# Looking forward

Responding bankers expected additional improvements in agricultural credit conditions outside of Wisconsin for the fall and winter. While 37 percent of survey respondents anticipated the volume of farm loan repayments compared with a year ago to increase over the next three to six months, 13 percent anticipated this volume to decrease. Similarly, responding bankers predicted forced sales or liquidations of farm assets among financially stressed farmers to edge down in the next three to six months across the District

except in Michigan and Wisconsin: 21 percent of the respondents projected lower rates of forced sales or liquidations, while just 8 percent projected higher rates.

The District's non-real-estate loan volume for the fourth quarter of 2012 was expected to decline compared with the fourth quarter of 2011, according to responding bankers' forecasts. Yet, the volumes of operating and farm machinery loans were predicted to increase for the District in the final quarter of 2012 relative to the final quarter of the previous year. Also, Wisconsin bankers foresaw higher volumes of dairy loans in the October through December period of 2012 compared with the same period a year ago. Finally, 27 percent of respondents expected the volume of farm real estate loans during the fourth quarter of 2012 to rise relative to the fourth quarter of 2011, while 6 percent expected this volume to fall.

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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.

# **SELECTED AGRICULTURAL ECONOMIC INDICATORS**

SELECTED AGRICULTURAL ECONOMIC INDICA	iuna		Percent change from			
	Latest period	Value	Prior period	Year ago	Two years ago	
Prices received by farmers (index, 1990–92=100)	October	210	8.8	14	39	
Crops (index, 1990–92=100)	October	239	6.7	17	46	
Corn (\$ per bu.)	October	6.95	0.9	21	61	
Hay (\$ per ton)	October	193	3.2	4	74	
Soybeans (\$ per bu.)	October	14.20	-0.7	20	39	
Wheat (\$ per bu.)	October	8.37	1.2	15	42	
Livestock and products (index, 1990–92=100)	October	160	2.6	4	19	
Barrows & gilts (\$ per cwt.)	October	61.50	9.2	-11	15	
Steers & heifers (\$ per cwt.)	October	126.00	0.8	3	27	
Milk (\$ per cwt.)	October	21.10	7.7	6	14	
Eggs`(\$ per doź.)	October	1.03	-16.3	1	26	
Consumer prices (index, 1982–84=100)	September	231	0.6	2	6	
Food	September	234	0.1	1	6	
Production or stocks						
Corn stocks (mil. bu.)	September 1	988	N.A.	-12	-42	
Soybean stocks (mil. bu.)	September 1	169	N.A.	-21	12	
Wheat stocks (mil. bu.)	September 1	2,104	N.A.	-2	-14	
Beef production (bil. lb.)	September	2.02	-14.9	-9	-11	
Pork production (bil. lb.)	September	1.91	-4.4	-2	1	
Milk production (bil. lb.)*	September	14.7	-3.9	0	1	
Agricultural exports (\$ mil.)	August	10,789	5.3	-1	31	
Corn (mil. bu.)	August	82	-13.8	-46	-57	
Soybeans (mil. bu.)	August	76	3.7	74	31	
Wheat <i>(mil. bu.)</i>	August	97	38.2	-3	-7	
Farm machinery (units)						
Tractors, over 40 HP	September	7,452	N.A.	5	11	
40 to 100 HP	September	4,060	N.A.	1	6	
100 HP or more	September	3,392	N.A.	10	17	
Combines	September	1,353	N.A.	8	-10	

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.