AgLetter

FARMLAND VALUES AND CREDIT CONDITIONS

Summary

At 25 percent, the year-over-year gain in agricultural land values in the third quarter of 2011 for the Seventh Federal Reserve District was the largest in just over three decades. Moreover, at 7 percent, the quarterly increase in the value of "good" farmland matched the highest since the late 1970s. According to the 216 bankers who responded to the October 1 survey, agricultural land values were poised to rise in the fourth quarter of 2011 as well.

Credit conditions for agricultural producers in the third quarter of 2011 remained favorable, as interest rates on farm operating and real estate loans declined further. However, there was also a slight tilt toward requiring higher levels of collateral to qualify for loans. Repayment rates for farm loans rose in the third quarter of 2011 relative to those of a year ago, while loan renewals and extensions declined. Funds availability relative to the prior year had not been higher at District banks since 1987. Dampened demand persisted for non-real-estate loans in the period from July through September of this year compared with the same period of 2010. Declining to a new post-1997 low, the average loan-to-deposit ratio was 69 percent for the District.

Farmland values

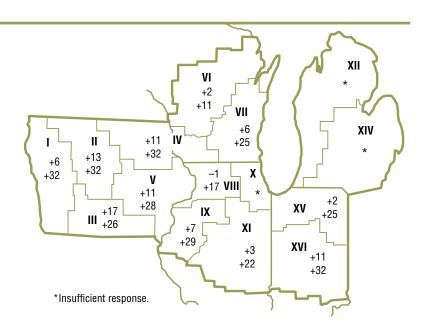
With a 25 percent increase from a year ago for the third quarter of 2011, District farmland values exhibited their largest rise since 1977. Iowa's agricultural land values led the District with a year-over-year increase of 31 percent for the third quarter of 2011 (see map and table below). The District's farmland values surged 7 percent from the second quarter to the third quarter of 2011, matching the highest previous quarterly gain since 1977.

Revisions were performed recently that affect the changes in District and state agricultural land values back to the fourth quarter of 1993 (for details, contact the author). Once these revisions have been taken into account, the gains in farmland values were larger than previously reported in the *AgLetter*. In 2007, the index of inflation-adjusted farmland values for the District passed the previous peak of 1979 (see chart 1). Since District farmland values hit bottom in 1986, the compound annual growth rate for farmland values has been 5 percent (adjusted for inflation). The revised path for District farmland values more closely matches one based on farm real estate values (each year as of January 1) from the U.S. Department of Agriculture (USDA), which uses an acre-weighted average for the five District states.

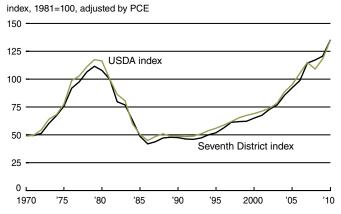
Percent change in dollar value of "good" farmland

Top: July 1, 2011 to October 1, 2011 *Bottom:* October 1, 2010 to October 1, 2011

	July 1, 2011 to October 1, 2011	October 1, 2010 to October 1, 2011		
Illinois	+3	+23		
Indiana	+8	+29		
lowa	+11	+31		
Michigan	+11	+16		
Wisconsin	+4	+17		
Seventh District	+7	+25		



Indexes of Seventh District farmland values and USDA farm real estate



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

Given that 39 percent of the survey respondents anticipated higher farmland values in the period from October through December of 2011 and only 2 percent anticipated lower farmland values, expectations overall favored continued increases in farmland values. This distribution of bankers' expectations was very similar to that for the previous quarter.

Demand to acquire farmland this fall and winter looked to remain strong. This demand appeared to be especially strong among farmers: About 60 percent of respondents forecasted higher demand for farmland among farmers over the next three to six months, whereas just 3 percent forecasted lower demand. In addition, 41 percent of the responding bankers expected greater demand to purchase farmland among nonfarm investors over the next three to six months, whereas 16 percent expected lesser demand. Higher volumes of farmland transfers compared with the previous fall and winter were predicted: 48 percent of respondents anticipated this outcome (versus 10 percent who anticipated lower volumes). Unsurprisingly, the highest farmland values in over three decades stoked expectations of more acres up for sale in the next three to six months.

Survey respondents anticipated increased net cash earnings for farm operations during the fall and winter relative to the previous fall and winter. A slide in corn and soybean prices this fall had not extinguished optimism regarding farm incomes, as evidenced by 74 percent of the responding bankers expecting higher net cash earnings for crops and 9 percent expecting lower earnings over the next three to six months. October corn and soybean prices remained 37 percent and 17 percent above the levels of a year ago, respectively. Hog, cattle, and dairy farmers were expected to see enhanced earnings this fall and winter as well. Over 30 percent of the respondents forecasted higher

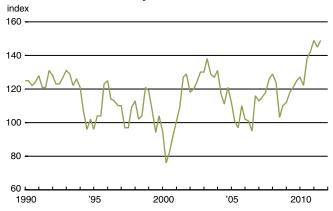
livestock earnings; less than 20 percent forecasted lower earnings. Prices for hogs, cattle, and milk were 29 percent, 22 percent, and 7.6 percent higher this October than last October, respectively. Moreover, feed costs had declined, boosting net incomes from livestock. According to the latest USDA forecasts, 2011 net farm income is anticipated to increase \$24.5 billion from 2010, totaling \$103.6 billion. The rise in 2011 net farm income would stem from gains of \$34.7 billion in the value of crop production and \$22.7 billion in the value of livestock production, while purchased inputs would be \$28.0 billion higher. Elevated levels of farm income and heightened demand for farmland continued to support further gains in agricultural land values.

Credit conditions

Agricultural credit conditions continued to improve across the District in the third quarter of 2011. Notably, interest rates on farm loans trended below the previous quarter's record lows (see table on the next page). As of October 1, the District average for interest rates on agricultural real estate loans was 5.36 percent. Interest rates for operating loans fell to 5.66 percent, on average, for the District. Iowa had the lowest rate for farm mortgages (5.24 percent). Indiana had the lowest rate for operating loans (5.44 percent).

In the third quarter of 2011, the index of funds availability had equaled its highest value since 1987. Given that 52 percent of the responding bankers indicated there were more funds available during the third quarter of 2011 than their banks had a year earlier and 3 percent indicated there were fewer, the index of funds availability hit 149 (see chart 2). Repayment rates on non-real-estate farm loans rose above the level of the July through September period of last year. The index of loan repayment rates remained 133, as 38 percent of the respondents observed higher rates of loan repayment and 5 percent observed lower rates. In addition, loan renewals and extensions on non-real-estate agricultural loans were lower in third quarter of

2. Index of funds availability for the Seventh District



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	Operating loans ^a	Feeder cattle ^a	Real estate ^a	
	(index) ^b	(index) ^b	(index) ^b	(percent)	(percent)	(percent)	(percent)	
2009								
Jan-Mar	116	112	105	76.2	6.20	6.31	6.14	
Apr-June	88	118	93	77.3	6.18	6.36	6.16	
July-Sept	95	121	89	75.3	6.17	6.35	6.13	
Oct-Dec	102	125	92	75.4	6.23	6.40	6.13	
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	

^aAt end of period.

2011 relative to the same period last year, with 4 percent of the bankers indicating an increase in such activities and 31 percent indicating a decrease.

Declining demand for non-real-estate loans persisted in the District during July, August, and September of 2011. Given that 18 percent of the respondents reported higher demand for non-real-estate than a year ago and 37 percent reported lower demand, the index of loan demand was 81. However, non-real-estate loan demand was up from the prior year for Indiana. District banks increased the amount of collateral required for loans in the third quarter of 2011 compared with a year ago. Eleven percent of the respondents reported that their banks required more collateral, and 88 percent reported their banks did not change their collateral requirements. The District's average loan-to-deposit ratio was 69 percent—the lowest level since 1997. This was, on average, 8.5 percentage points below the desired levels reported by the respondents.

Looking forward

Further strengthening of agricultural credit conditions during the fall and winter was anticipated by respondents. With 53 percent of the responding bankers expecting the volume of farm loan repayments would rise over the next three to six months compared with a year ago and just 3 percent expecting repayment rates would go down, current loan repayment trends should continue. 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 in all District states. Only 8 percent of the respondents forecasted more forced sales or liquidations, and 42 percent forecasted fewer.

Non-real-estate loan volumes for the October through December period of 2011 compared with the

same period of 2010 were predicted to be about the same, with expected increases in Indiana and Iowa offset by expected decreases in Illinois and Wisconsin. The volume of livestock loans was forecasted to shrink for all District states in the final quarter of 2011 relative to the final quarter of 2010. However, for operating loans, farm machinery loans, and grain storage construction loans, there were more responding bankers who expected augmented volumes than those who expected smaller volumes. About 40 percent of respondents forecasted increases in the volume of farm real estate loans during the fourth quarter of 2011 relative to the fourth quarter of 2010, and only 11 percent forecasted decreases.

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Interest rates on farm loans

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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	Latest period	Value	Percent change from			
			Prior period	Year ago	Two years ago	
Prices received by farmers (index, 1990–92=100)	October	185	3.4	23	38	
Crops (index, 1990–92=100)	October	206	1.5	26	36	
Corn (\$ per bu.)	October	5.92	-7.1	37	64	
Hay (\$ per ton)	October	181	2.8	63	72	
Soybeans (\$ per bu.)	October	11.90	-2.5	17	26	
Wheat (\$ per bu.)	October	6.94	-8.1	18	55	
Livestock and products (index, 1990–92=100)	October	153	0.7	14	39	
Barrows & gilts (\$ per cwt.)	October	69.00	2.7	29	80	
Steers & heifers (\$ per cwt.)	October	121.00	3.4	22	43	
Milk (\$ per cwt.)	October	19.90	-5.7	8	39	
Eggs (\$ per doz.)	October	1.02	7.6	25	28	
Consumer prices (index, 1982–84=100)	September	227	0.3	4	5	
Food	September	231	0.5	5	6	
Production or stocks						
Corn stocks <i>(mil. bu.)</i>	September 1	1,128	N.A.	-34	-33	
Soybean stocks (mil. bu.)	September 1	215	N.A.	42	56	
Wheat stocks (mil. bu.)	September 1	2,150	N.A.	-12	-3	
Beef production (bil. lb.)	September	2.22	-7.2	-2	-1	
Pork production (bil. lb.)	September	1.95	3.3	4	-2	
Milk production (bil. lb.)*	September	14.8	-3.3	2	6	
Agricultural exports (\$ mil.)	August	10,869	-7.8	31	45	
Corn (mil. bu.)	August	151	-9.4	-21	-21	
Soybeans <i>(míl. bu.)</i>	August	44	44.7	-25	-21	
Wheat (mil. bu.)	August	100	20.6	-4	47	
Farm machinery (units)						
Tractors, over 40 HP	September	7,140	N.A.	6	13	
40 to 100 HP	September	4,041	N.A.	6	-5	
100 HP or more	September	3,099	N.A.	7	50	
Combines	September	1,256	N.A.	-16	-7	

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.