The Agricultural Newsletter
from the Federal Reserve Bank of Chicago
Number 1947 *February 2010*

AgLetter

FARMLAND VALUES AND CREDIT CONDITIONS

Summary
The annual change in farmland values was positive at 2 percent in 2009 for the Seventh Federal Reserve District, though 2009's first three quarters had negative year-over-year comparisons. The quarterly increase in the value of "good" agricultural land was 2 percent as well, based on 214 surveys from agricultural bankers. Over 80 percent of respondents expected farmland values to stay unchanged from January through March of 2010 in their respective areas.

The Seventh District's agricultural credit conditions were mixed in the fourth quarter of 2009 because of greater financial stress relative to a year ago. Non-real-estate loan demand was almost the same in October through December of 2009 compared with the same period of the previous year. Funds availability also improved again in the fourth quarter of 2009. However, farm loan repayment rates in the final quarter of 2009 were below the level of a year ago, and rates of loan renewals and extensions were higher than a year earlier. Agricultural interest rates remained low. Averaging 75.4 percent, loan-to-deposit ratios were essentially the same as in the third quarter of 2009.

Farmland values

With a 2 percent annual increase for 2009 in the value of "good" agricultural land, the District experienced its smallest change in a decade (see chart 1 on next page). Still, this small annual increase, registered for the final quarter of 2009, was better than the year-over-year comparisons for each of the three previous quarters. Not all District states contributed to the increase in farmland values for 2009: Michigan and Wisconsin farmland values fell 6 percent and 1 percent for the year, respectively (see table and map below). At the other end of the spectrum, Indiana and Iowa had higher annual increases in farmland values than the District average. The annual gain for Illinois matched the District average.

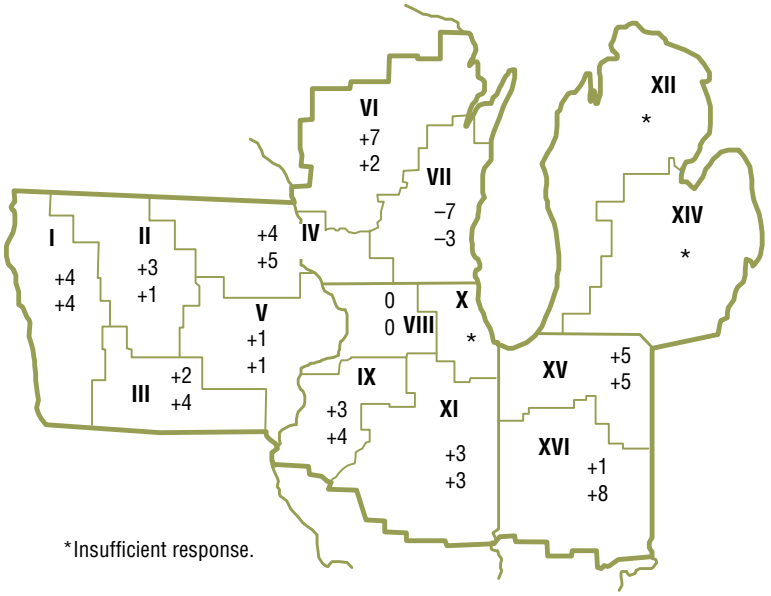
District land values rose 2 percent from the third quarter to the fourth quarter of 2009, reflecting higher agricultural prices in the final three months of the year. Michigan had a quarterly decrease in land values, diverging from the other states in the District.

Adjusted for inflation, annual farmland values increased only 1 percent in 2009 for the District—the same as in 2008. Even though the annual index of nominal farmland values had more than doubled by the end of 2009 from its 1981 peak (see chart 2 on next page), the index of inflation-adjusted farmland values only approached the level of 1981. The compound annual growth rate in farmland values (adjusted for inflation) was 1.8 percent from 1970 through 2009. So, 2009's gain in land values was below the pace seen over the past four decades.

Percent change in dollar value of "good" farmland

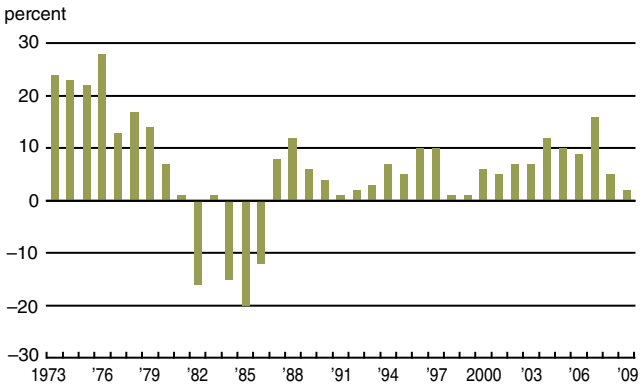
Top: October 1, 2009 to January 1, 2010
Bottom: January 1, 2009 to January 1, 2010

	October 1, 2009 to January 1, 2010	January 1, 2009 to January 1, 2010
Illinois	+2	+2
Indiana	+3	+7
Iowa	+3	+4
Michigan	–2	–6
Wisconsin	+1	–1
Seventh District	+2	+2



*Insufficient response.

1. Annual percentage change in Seventh District farmland values



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

Midwest agriculture experienced a challenging 2009, especially with a long, difficult harvest and losses on livestock throughout most of the year. Still, the majority of the farm sector rallied toward the end of 2009. A record-setting U.S. harvest produced 13.2 billion bushels of corn and 3.36 billion bushels of soybeans, based on U.S. Department of Agriculture (USDA) estimates. District production of corn increased 5 percent from 2008 and set a new record for yield. Soybean output was up 6 percent from 2008 in the District. Cash corn prices rose to $3.59 per bushel in December 2009, 7.2 percent higher than in December 2008. Cash soybean prices increased to $10.13 per bushel in December 2009, 20 percent above prices a year prior. Both milk and hog prices had risen above year-ago levels by the end of 2009.

Net farm income in 2009 fell 35 percent from 2008, to $56.4 billion, according to the latest estimates by the USDA. Yet the agricultural sector had some financial cushion after a run of six years that averaged $73.9 billion in net farm income per year. Out of the previous 50 years only three resulted in a higher level of net farm income (adjusted for inflation). Respondents reported that some larger-than-average farm operations looked to expand, even in 2009, because of their strong balance sheets and available cash. One motive mentioned was to add family partners to the operation. Also, a higher premium for better quality farmland helped keep values above the level of 2008.

The value of crop production in the U.S. declined 9.1 percent in 2009, to $166 billion, from its 2008 level, according to USDA data. The USDA predicted that the value of crop production would slip again to $162 billion in 2010. The value of livestock production was forecasted to increase to $130 billion in 2010 from $118 billion in 2009—a 10 percent jump. If this forecast proves to be correct, it would be quite a reversal because in 2009 the value of livestock production fell 16 percent from its 2008 level. Direct government payments to agriculture; input costs; and payments to laborers, creditors, and landlords are all anticipated to be about the same in 2010 as in 2009. Given these forecasts, the USDA predicted net farm income to rise from $56.4 billion in 2009 to $63.0 billion in 2010. Even so, over 80 percent of the responding District bankers anticipated farmland values to be unchanged from January through March of 2010, while 6 percent anticipated values to increase and 10 percent anticipated values to decrease.

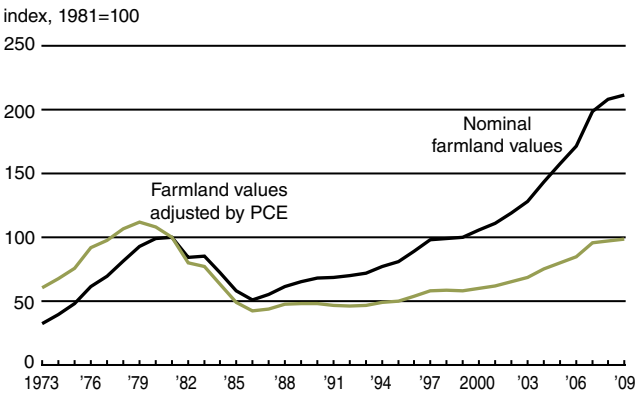
Credit conditions

There was improvement in the District's credit conditions for the fourth quarter of 2009 compared with the third quarter of 2009, though not when compared with the fourth quarter of 2008. Demand for non-real-estate loans during the last three months of 2009 was essentially the same as a year ago, recovering more from a lull in the middle of the year. The index of loan demand was 102, with 28 percent of responding bankers noting an increase in the demand for non-real-estate loans and 26 percent noting a decrease.

A higher rate of renewals and extensions of loans in the fourth quarter of 2009 compared with the fourth quarter of the previous year reflected the stresses on livestock operations, as did lower loan repayment rates. Respondents reported higher rates of renewals and extensions (22 percent) rather than lower rates (9 percent) for the fourth quarter of 2009 than for the same quarter of 2008. In Wisconsin, half of the bankers indicated loan renewals and extensions in the fourth quarter of 2009 were higher than in the prior year, as dairy losses continued to mount.

Repayment rates deteriorated in the fourth quarter of 2009 compared with a year ago, although the index edged up from the third quarter of 2009. The index of non-real-estate farm loan repayment rates was 92 in the final quarter of 2009, with 13 percent of the bankers reporting higher

2. Indexes of Seventh District farmland values



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]	Interest rates on farm loans: Feeder cattle[a]	Interest rates on farm loans: Real estate[a]
	(index)[b]	*(index)*[b]	*(index)*[b]	*(percent)*	*(percent)*	*(percent)*	*(percent)*
2008							
Jan–Mar	110	129	147	75.9	6.74	6.86	6.41
Apr–June	101	124	137	75.2	7.06	6.77	6.51
July–Sept	117	103	115	78.8	6.74	6.85	6.56
Oct–Dec	115	110	113	76.4	6.21	6.33	6.23
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

[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.

rates of loan repayment and 21 percent reporting lower rates. Repayment rates weakened in all District states except Iowa. Wisconsin was particularly challenged, with over half of the respondents noting lower repayment rates. Over 8 percent of the volume of Wisconsin banks' agricultural loan portfolios was classified as having major or severe repayment problems, versus 4 percent for the District. Both of these numbers were under 3 percent at the end of 2008.

The availability of funds grew during the October through December period of 2009 relative to the same period of 2008. The index of funds availability climbed to 125, since 30 percent of the responding bankers had more funds available to lend and 5 percent had fewer. However, the amount of collateral required for loans increased in the fourth quarter of 2009 at 25 percent of the banks. Tighter credit standards for agricultural loans relative to the fourth quarter of 2008 were instituted at 44 percent of the reporting banks in 2009. Almost 4 percent of District customers with operating credit would probably not receive new credit lines in 2010; Wisconsin, at 11 percent, faced the highest level of troubled operating credit.

Interest rates on agricultural loans remained at low levels in the fourth quarter of 2009. Though operating loan rates edged up, mortgage rates were unchanged from three months earlier. As of January 1, 2010, the District averages for interest rates were 6.23 percent on new operating loans and 6.13 percent on farm real estate loans.

Looking forward

Respondents expected to make about the same volumes of non-real-estate loans in the first quarter of 2010 as they made in the first quarter of 2009. Lower volumes were predicted for feeder cattle, dairy, farm machinery, and grain storage construction loans; higher volumes were predicted for operating loans and loans guaranteed by the Farm Service Agency. Responding bankers anticipated farm real estate loan volumes to lessen during January, February, and March of 2010 relative to the same months of 2009.

Capital expenditures by farmers in 2010 were expected to be lower than in 2009. Thirteen percent of the respondents anticipated increased spending in 2010 on land purchases or improvements, while 37 percent anticipated reduced spending. For buildings and facilities, 17 percent predicted higher spending and 42 percent predicted lower spending. With 19 percent of respondents anticipating higher purchases and 36 percent anticipating lower purchases, the prospects for sales of machinery and equipment were not much better. Expenditures on trucks and autos were forecasted to decline as well, with 19 percent more of the respondents expecting lower rather than higher spending by farmers. Reduced investments in capital goods for farming would support the view that agriculture will continue to face challenges throughout 2010.

David B. Oppedahl, *business economist*

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.

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)*	January	137	1.5	–1	–6
Crops *(index, 1990–92=100)*	January	148	0.0	–1	–7
Corn *($ per bu.)*	January	3.45	–3.9	–21	–13
Hay *($ per ton)*	January	109	1.9	–19	–13
Soybeans *($ per bu.)*	January	9.49	–3.2	–5	–5
Wheat *($ per bu.)*	January	4.79	–1.2	–23	–40
Livestock and products *(index, 1990–92=100)*	January	123	3.4	8	–5
Barrows & gilts *($ per cwt.)*	January	47.80	5.1	12	25
Steers & heifers *($ per cwt.)*	January	87.00	3.8	1	–7
Milk *($ per cwt.)*	January	16.50	0.0	24	–20
Eggs *($ per doz.)*	January	1.03	–1.9	0	–20
Consumer prices *(index, 1982–84=100)*	December	218	0.1	3	3
Food	December	218	0.2	–1	5
Production or stocks					
Corn stocks *(mil. bu.)*	December 1	10,934	N.A.	9	6
Soybean stocks *(mil. bu.)*	December 1	2,337	N.A.	3	–1
Wheat stocks *(mil. bu.)*	December 1	1,765	N.A.	24	56
Beef production *(bil. lb.)*	December	2.13	5.9	2	4
Pork production *(bil. lb.)*	December	1.99	3.3	–3	1
Milk production *(bil. lb.)**	December	14.6	4.3	–1	1
Agricultural exports *($ mil.)*	November	10,685	13.5	15	12
Corn *(mil. bu.)*	November	131	–4.6	–9	–49
Soybeans *(mil. bu.)*	November	294	50.1	70	131
Wheat *(mil. bu.)*	November	68	–12.2	–12	–44
Farm machinery *(units)*					
Tractors, over 40 HP	January	5,446	N.A.	7	–3
40 to 100 HP	January	2,811	N.A.	–8	–23
100 HP or more	January	2,635	N.A.	30	36
Combines	January	581	N.A.	14	29

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.