*The Agricultural Newsletter*
*from the Federal Reserve Bank of Chicago*
*Number 1943* *February 2009*

# AgLetter

## FARMLAND VALUES AND CREDIT CONDITIONS

**Summary**
Farmland values declined in the fourth quarter of 2008 for the Seventh Federal Reserve District—the first quarterly decrease in a decade. There was still an annual increase of 5 percent in the value of "good" agricultural land for 2008, based on 209 surveys completed by District agricultural bankers. Few respondents expected farmland values to rise in the first quarter of 2009, but 35 percent expected them to fall in their respective areas.

Agricultural credit conditions in the District continued to strengthen in the fourth quarter of 2008, though not as strongly as a year ago. Non-real-estate loan demand grew in the final quarter of 2008 relative to that of 2007. Also, the index of funds availability was higher in the fourth quarter of 2008 than in the third quarter of 2008. Farm loan repayment rates improved, while loan renewals and extensions edged down from a year ago. Agricultural interest rates were at the lowest levels in almost five years. Loan-to-deposit ratios averaged 76.4 percent for the fourth quarter of 2008, with nearly half of the banks below their desired ratio.

**Farmland values**
The District's 5 percent annual increase for 2008 in the value of "good" agricultural land was the lowest since 2001 (see chart 1 on next page). Indiana had a 1 percent annual decrease in farmland values (see table and map below). In contrast, Wisconsin had a 13 percent annual increase in farmland values, catching up with the District after lagging at the end of 2007. Having values between these two extremes in the District, the annual gains for Illinois, Iowa, and Michigan were substantially smaller than a year ago.

For the first time in a decade and only the second time since 1986, overall District land values experienced a quarterly decline. Only Wisconsin did not experience a quarterly drop in land values for the fourth quarter of 2008.

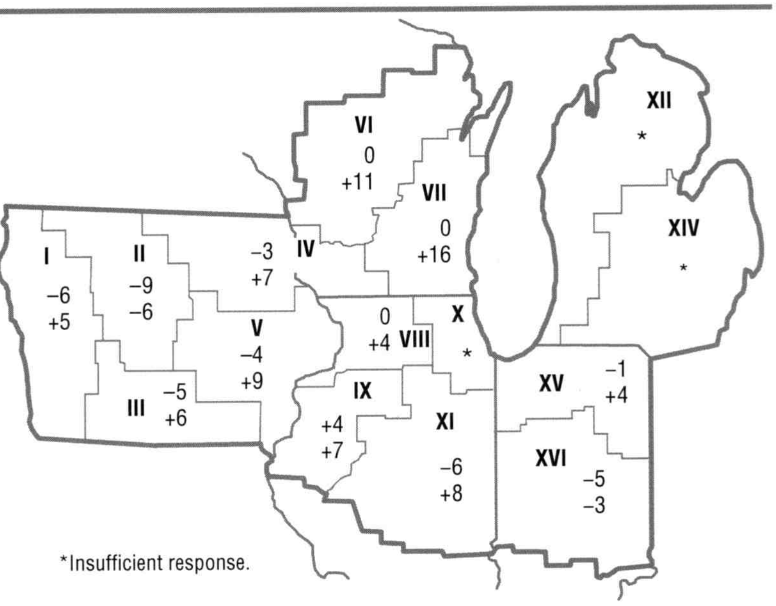
An annual index of nominal farmland values doubled by the end of 2008 from its 1981 peak (see chart 2 on next page). Adjusted for inflation, annual farmland values increased only 1 percent in 2008, much less than the nominal increase. Moreover, an index of inflation-adjusted farmland values remained well under its peak in 1979. The slower growth in real farmland values during 2008 kept the District from nearing this peak.

Even though net farm income in 2008 set a record, net farm income at the end of the year had not risen as much as many had anticipated, and it looked ready to decline in 2009. These factors played a key role in slowing the growth of farmland values. Elevated net farm income spurred farmland values upward faster in the first three quarters of

**Percent change in dollar value of "good" farmland**

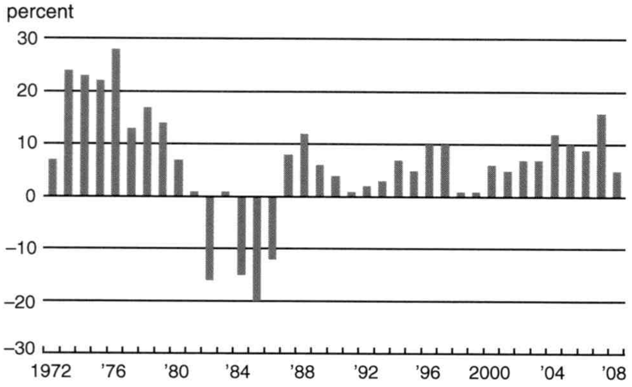
*Top:* October 1, 2008 to January 1, 2009
*Bottom:* January 1, 2008 to January 1, 2009

| | October 1, 2008 to January 1, 2009 | January 1, 2008 to January 1, 2009 |
|---|---|---|
| Illinois | −3 | +6 |
| Indiana | −4 | −1 |
| Iowa | −6 | +4 |
| Michigan | −4 | +2 |
| Wisconsin | 0 | +13 |
| Seventh District | −4 | +5 |




*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.

2008 as corn and soybean prices peaked in the summer. Cash corn prices fell to $3.35 per bushel in December, almost 50 percent below prices in June. Cash soybean prices dropped to $8.45 per bushel in December, 43 percent under prices in July. National production estimates for 2008 from the U.S. Department of Agriculture (USDA) were 12.1 billion bushels for corn and 2.96 billion bushels for soybeans. Across the nation, the harvest of 2008 was 7 percent below that of 2007 for corn and 11 percent above that of 2007 for soybeans. From a year earlier, District production decreased 8 percent for corn and increased 7 percent for soybeans.

According to the USDA, the value of crop production in the U.S. climbed to $182 billion in 2008—an increase of 21 percent from 2007. However, lower crop prices were estimated to reduce the value of crop production to $161 billion in 2009. The global recession and accompanying decline in oil prices hurt crop prices, since demand for food, feed, and biofuels ebbed. For the 2008–09 marketing year, the slower pace of demand was projected to leave U.S. ending corn stocks at 1.79 billion bushels and soybean stocks at 210 million bushels. The corresponding stocks-to-use ratios were expected to be 15 percent for corn and 7.1 percent for soybeans. These more ample supplies of corn and soybeans contributed to lower USDA forecasts of crop prices.

Additionally, the value of livestock production was predicted to decline to $132 billion in 2009 from $143 billion in 2008. Direct government payments to agriculture were anticipated to be $11.4 billion in 2009, 8 percent down from 2008. After accounting for a smaller decrease in input costs and payments to laborers, creditors, and landlords, the USDA forecasted net farm income for 2009 at $71.2 billion, down from $89.3 billion in 2008. Given these conditions, just 4 percent of respondents expected farmland values to increase from January through March of 2009, while 35 percent expected values to decrease and 61 percent expected values to remain the same.

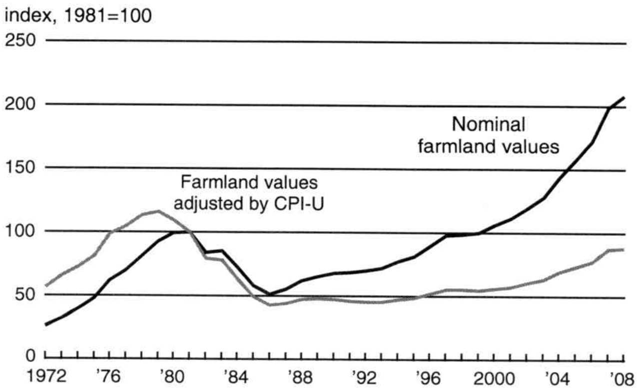
## Credit conditions

District credit conditions improved once again, although credit standards were stiffer. Demand for non-real-estate loans during October, November, and December of 2008 grew from a year ago, continuing five years of growth. The index of loan demand was 115, with 33 percent of respondents reporting an increase in the demand for non-real-estate loans and 18 percent reporting a decrease. The rate of renewals and extensions of loans in the fourth quarter of 2008 fell compared with the fourth quarter of the previous year. Eleven percent of District bankers noted higher renewals and extensions in the final quarter of 2008 than a year ago, and 15 percent noted lower levels. In contrast with the rest of the District, Wisconsin experienced a higher rate of loan renewals and extensions in the fourth quarter of 2008 than in the final quarter of the previous year.

Funds became more available in the fourth quarter of 2008 compared with a year ago. The index of funds availability increased to 110, with 24 percent of the respondents seeing higher funds availability and 14 percent seeing lower funds availability. Collateral requirements were more restrictive at District banks, as 22 percent raised the amount of collateral required during the October–December period in 2008. Almost half of the respondents reported tighter credit standards for agricultural loans in the fourth quarter of 2008 compared with a year ago; none reported easier standards. Close to 2 percent of District customers with operating credit were not likely to qualify for new credit in 2009, with Wisconsin's 5 percent having the largest role in raising the average from 2008.

Loan repayment rates in the fourth quarter of 2008 improved from a year ago. The index of non-real-estate farm loan repayment rates was 113 in the final quarter of 2008, with 25 percent of the bankers indicating higher rates of loan repayment and 12 percent reporting lower

**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 Labor Statistics, Consumer Price Index for All Urban Consumers (CPI-U).

**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)* |
| **2006** | | | | | | | |
| Jan–Mar | 131 | 102 | 87 | 76.7 | 8.30 | 8.27 | 7.48 |
| Apr–June | 115 | 101 | 85 | 78.0 | 8.76 | 8.66 | 7.85 |
| July–Sept | 124 | 95 | 87 | 79.1 | 8.73 | 8.70 | 7.82 |
| Oct–Dec | 109 | 116 | 130 | 76.6 | 8.71 | 8.70 | 7.74 |
| **2007** | | | | | | | |
| Jan–Mar | 128 | 113 | 131 | 78.4 | 8.61 | 8.60 | 7.67 |
| Apr–June | 121 | 115 | 117 | 77.8 | 8.65 | 8.63 | 7.70 |
| July–Sept | 118 | 118 | 122 | 78.1 | 8.42 | 8.40 | 7.53 |
| Oct–Dec | 110 | 126 | 149 | 77.2 | 7.82 | 7.89 | 7.09 |
| **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 |

[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 percent of bankers that responded "lower" from the percent 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/economic_research_and_data/ag_letter.cfm.

rates. In Wisconsin, lower rates of repayment prevailed. Less than 3 percent of the volume of the banks' agricultural loan portfolios were classified as having major or severe repayment problems, about the same as in 2007.

Agricultural interest rates moved down to the lowest levels in five years. The rate on operating loans dipped under the 2004 low of the previous cycle. As of January 1, 2009, the District averages for interest rates were 6.21 percent on new operating loans and 6.23 percent on farm real estate loans. It has been 30 years since the operating loan rate was lower than the mortgage rate. Interest rates on operating loans were lowest in Indiana (5.68 percent) and highest in Wisconsin (6.63 percent). Interest rates on agricultural real estate loans were lowest in Illinois (6.13 percent) and highest in Indiana (6.54 percent).

**Looking forward**

For the first quarter of 2009, additional growth in non-real-estate loan volumes was anticipated by the respondents, with 43 percent expecting higher volumes and 16 percent expecting lower volumes. Increases in loan volumes were forecasted for operating loans, farm machinery loans, and loans guaranteed by the Farm Service Agency. Decreases in volumes were anticipated for feeder cattle, dairy, and grain storage construction loans. The volume of mortgages on agricultural real estate was predicted to shrink, with 15 percent of the bankers expecting higher real estate loan volumes during January, February, and March of 2009 and 19 percent expecting lower volumes.

In a reversal from a year ago, 2009 capital expenditures by farmers were predicted to fall from the levels of 2008, according to respondents. Fifteen percent expected higher spending in 2009 on land purchases or improvements, while 44 percent expected lower spending. For buildings and facilities, 13 percent forecasted higher spending and 51 percent forecasted lower spending.

The prospects for purchases of machinery and equipment were somewhat better, especially in Illinois, with 25 percent of respondents anticipating higher purchases and 39 percent anticipating lower purchases. Expenditures on trucks and autos were predicted to drop relatively more, as 13 percent of the bankers expected higher spending by farmers and 41 percent expected lower spending. Thus, these investments in the agricultural sector of the District were projected to be less in 2009 than in 2008.

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

## 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 | –5 | 11 |
| **Crops** *(index, 1990–92=100)* | January | 157 | 5.4 | –1 | 20 |
| Corn *($ per bu.)* | January | 3.61 | 7.7 | –21 | –1 |
| Hay *($ per ton)* | January | 136 | –3.5 | 8 | 25 |
| Soybeans *($ per bu.)* | January | 9.70 | 14.7 | –19 | 46 |
| Wheat *($ per bu.)* | January | 5.90 | –1.2 | –26 | 30 |
| **Livestock and products** *(index, 1990–92=100)* | January | 115 | –3.4 | –11 | 2 |
| Barrow and gilts *($ per cwt.)* | January | 41.80 | –0.2 | 10 | –4 |
| Steers and heifers *($ per cwt.)* | January | 86.30 | 0.8 | –8 | –4 |
| Milk *($ per cwt.)* | January | 13.80 | –11.5 | –33 | –5 |
| Eggs *($ per doz.)* | January | 1.03 | 3.1 | –20 | 13 |
| **Consumer prices** *(index, 1982–84=100)* | December | 212 | –0.8 | 0 | 4 |
| Food | December | 219 | 0.0 | 5 | 10 |
| **Production or stocks** | | | | | |
| Corn stocks *(mil. bu.)* | December 1 | 10,084 | N.A. | –2 | 13 |
| Soybean stocks *(mil. bu.)* | December 1 | 2,276 | N.A. | –4 | –16 |
| Wheat stocks *(mil. bu.)* | December 1 | 1,422 | N.A. | 26 | 8 |
| Beef production *(bil. lb.)* | December | 2.08 | 6.2 | 1 | 2 |
| Pork production *(bil. lb.)* | December | 2.05 | 8.7 | 4 | 14 |
| Milk production *(bil. lb.)** | December | 14.6 | 4.3 | 1 | 4 |
| **Agricultural exports** *($ mil.)* | December | 8,183 | –12.2 | –11 | 23 |
| Corn *(mil. bu.)* | December | 129 | –10.5 | –36 | –30 |
| Soybeans *(mil. bu.)* | December | 171 | –1.6 | 17 | 39 |
| Wheat *(mil. bu.)* | November | 77 | –19.7 | –36 | 24 |
| **Farm machinery** *(units)* | | | | | |
| Tractors, over 40 HP | January | 5,137 | –35.9 | –8 | –17 |
| 40 to 100 HP | January | 3,101 | –37.7 | –15 | –33 |
| 100 HP or more | January | 2,036 | –32.9 | 5 | 31 |
| Combines | January | 509 | –46.0 | 13 | 26 |

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.



AgLetter
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