

# AgLetter



## FARMLAND VALUES AND CREDIT CONDITIONS

### Summary

Increases slowed in the second quarter of 2006 for the value of “good” agricultural land in the Seventh Federal Reserve District, while credit conditions generally declined. From April 1, 2006, to June 30, 2006, farmland values rose 1 percent, on average, for the District, based on a survey of 235 agricultural bankers. The year-over-year increase as of July 1 was 9 percent, below the annual increase for the second quarter of 2005. Almost three-quarters of the responding bankers expected farmland values to be unchanged in the third quarter, although 21 percent thought more increases are forthcoming.

Once again, credit conditions drifted down compared with a year ago. Though a smaller percentage of agricultural loans were classified by respondents as having “major” or “severe” repayment problems compared with those six months ago, the rate of loan repayment fell from the second quarter of 2005. Non-real-estate loan demand from April through June grew from a year ago, while the availability of funds remained about the same. Renewals and extensions of loans were up relative to the second quarter of 2005. A larger percentage of banks required higher amounts of collateral than in the same period the previous year. Interest rates on farm loans rose in the quarter

### CONFERENCE ANNOUNCEMENT

#### Globally Competitive Agriculture and the Midwest

On September 29, 2006, the Federal Reserve Bank of Chicago and the Chicago Council on Foreign Relations will hold a joint conference on the linkages between global competition in agriculture and the Midwest. Please check the conference website at [www.chicagofed.org](http://www.chicagofed.org) under “Upcoming Events” for more details and the agenda.

for the ninth time in a row. Loan-to-deposit ratios reached a new high for the survey of 78 percent, as of July 1, 2006.

### Farmland values

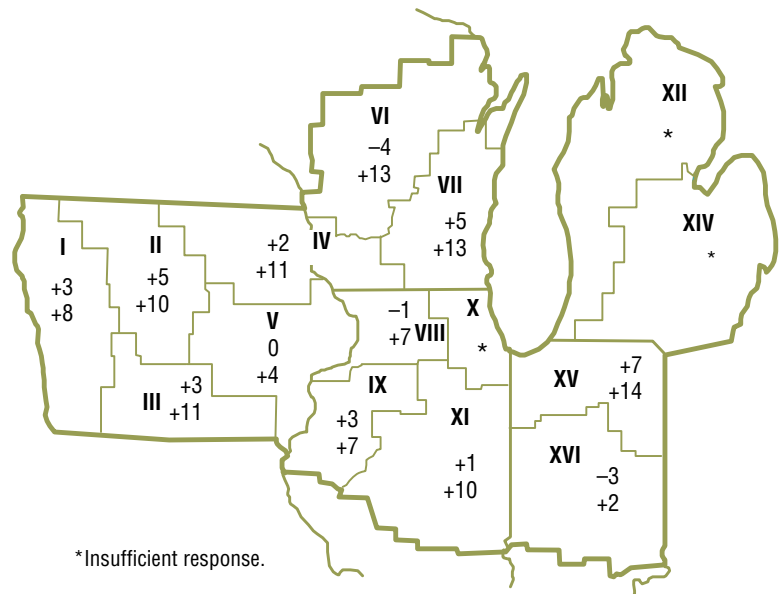
Gains in farmland values were smaller in the second quarter of 2006. The average quarterly increase for good agricultural land in the District was 1 percent from the first quarter of 2006 (see table and map). Iowa exhibited the strongest quarterly growth in land values at 3 percent, while Illinois and Indiana were at the District average, and Michigan and Wisconsin pulled down the District average. The year-over-year gain of 9 percent for the District indicated a slowing from 12 percent a year ago, although it matched last quarter’s gain. In addition, the state gains were closer together than they were in the previous quarter. Michigan and Wisconsin had the biggest

### Percent change in dollar value of “good” farmland

Top: April 1, 2006 to July 1, 2006

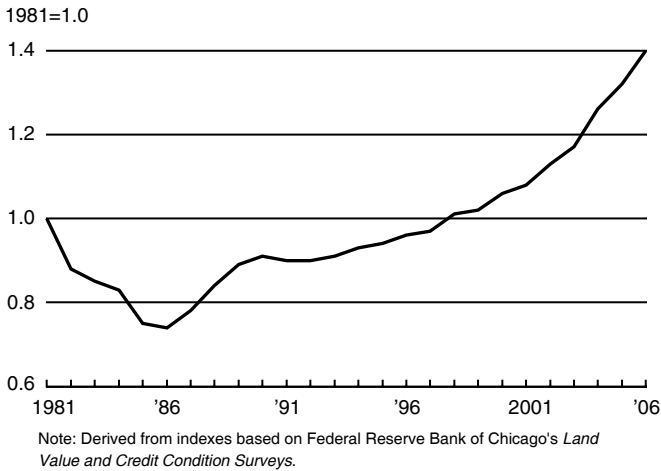
Bottom: July 1, 2005 to July 1, 2006

	April 1, 2006 to July 1, 2006	July 1, 2005 to July 1, 2006
Illinois	+1	+9
Indiana	+1	+6
Iowa	+3	+8
Michigan	*	*
Wisconsin	0	+13
Seventh District	+1	+9



\* Insufficient response.

## 1. District price-to-earnings ratio



increases from a year ago; the increases in Indiana and Iowa trailed those of the other states.

Growth in farmland values benefited from the momentum of double-digit increases for the District the last two years. The District continued to see demand for residential and recreational acreages, as well as by nonfarm investors. Yet, given this year's slowdown in the housing industry, the demand for additional farmland by developers seemed to slow, as indicated by reports of abandoned deals. So, location and other characteristics have become even more important factors in farmland values as increases have become more mixed.

Based on survey responses, gains in the third quarter of 2006 should continue to slow, with 21 percent of respondents expecting increases in farmland values between July and September and 6 percent forecasting decreases. Most of those surveyed anticipated farmland values to remain stable in the third quarter. Responses by state reflected the District trend, although 30 percent of Wisconsin respondents expected higher land values.

The District price-to-earnings (P/E) ratio for farmland is another indicator that the stage has been set for a slowdown in farmland value growth. From an asset valuation model, the present price of an asset should reflect current profitability and expectations for future earnings. Cash rental rates represent the earnings potential of farmland. The P/E ratio for farmland can then be constructed as the ratio of an average farmland value per acre and the cash rental rate per acre. Over the past few years, the District P/E ratio has increased the most since the 1980s (see chart 1), consistent with the evidence of a surge in nonfarm investment. With farmland values seeming to have increased faster than earnings potential, one could conclude that declines in the rate of increase in land

values will continue, since cash rental rates are unlikely to rise fast enough to bring the P/E ratio back toward the norm. Certainly, a continued slowing in land value growth would fit the survey results on expected land values and the history of P/E ratios for the District.

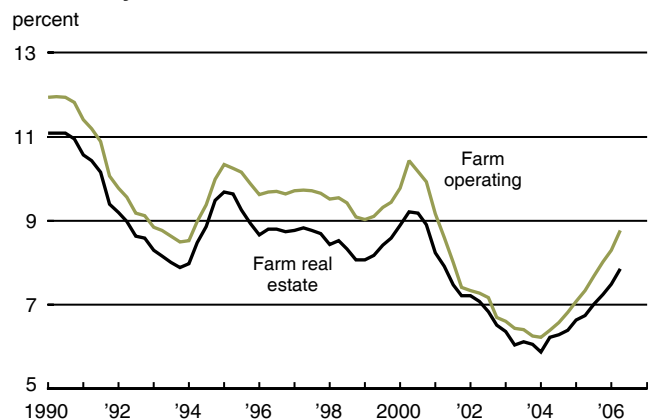
## Credit conditions

Given higher operating costs (especially for fuel and fertilizer) and losses from drought in parts of the District, tighter cash flows for agricultural operations have led to poorer credit conditions in general. In response to cash flow needs, demand for non-real-estate agricultural loans was higher than a year ago for the tenth quarter in a row. With 35 percent of banks reporting increased demand compared with the second quarter last year and 20 percent decreased demand, the index of non-real-estate agricultural loan demand eased to 115, after an even bigger jump in the first quarter of 2006 when more planting costs were likely incurred.

There was another dip in repayment rates for non-real-estate farm loans from April to June relative to the previous year. The index of loan repayment rates was 85, with 7 percent of the responding bankers noting higher rates of loan repayment and 22 percent lower rates. On the other hand, only 3 percent of the respondents' farm loan volume was classified as having major or severe repayment problems, matching the percentage of a year ago and slightly less than six months ago.

Higher levels of renewals and extensions of non-real-estate agricultural loans relative to those from the second quarter of 2005 also indicated credit concerns, with 20 percent of respondents reporting an increase and 6 percent a decrease. Relative to the previous year, the amount of collateral required for loans was higher at 17 percent of the reporting banks and lower at only 2 percent. Fund availability was essentially flat for the quarter versus a year ago, given an index value of 101. The average loan-to-deposit

## 2. Quarterly District farm loan interest rates



## Credit conditions at Seventh District agricultural banks

	Loan demand (index) <sup>2</sup>	Funds availability (index) <sup>2</sup>	Loan repayment rates (index) <sup>2</sup>	Average loan-to-deposit ratio (percent)	Interest rates on farm loans		
					Operating loans <sup>1</sup> (percent)	Feeder cattle <sup>1</sup> (percent)	Real estate <sup>1</sup> (percent)
<b>2003</b>							
Jan-Mar	109	130	79	72.4	6.61	6.75	6.36
Apr-June	99	138	84	72.7	6.43	6.52	6.04
July-Sept	95	129	86	72.9	6.41	6.47	6.12
Oct-Dec	97	127	104	71.8	6.26	6.35	6.05
<b>2004</b>							
Jan-Mar	116	131	128	73.2	6.22	6.28	5.87
Apr-June	101	117	118	73.7	6.39	6.46	6.23
July-Sept	109	111	112	74.5	6.57	6.61	6.28
Oct-Dec	109	121	127	74.1	6.81	6.80	6.39
<b>2005</b>							
Jan-Mar	117	112	116	74.4	7.07	7.08	6.63
Apr-June	119	101	103	76.3	7.33	7.30	6.74
July-Sept	115	97	87	76.9	7.68	7.65	7.02
Oct-Dec	120	110	90	75.8	8.02	7.95	7.25
<b>2006</b>							
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

<sup>1</sup>At end of period.

<sup>2</sup>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.

ratio in the District was 78 percent, a new high for the survey, though 3 percent below the ratio desired by the banks.

Agricultural interest rates rose for the ninth consecutive quarter (see chart 2). As of July 1, the District average for interest rates on new operating loans was 8.76 percent, the highest average in five years. Interest rates for farm mortgages climbed to 7.85 percent, still over one percent lower than the last peak of six years ago.

For the first half of 2006, the amount of farm loans generated was higher than normal for banks and the Farm Credit System (FCS), though a majority reported the same volumes as normal. With 30 percent more banks having higher versus lower than normal operating loan volume, the FCS still captured a larger share of the market, since 37 percent more banks reported FCS volumes increased rather than decreased. This trend was even more pronounced for farm mortgages, with just 7 percent more banks experiencing higher rather than lower volumes, whereas 42 percent more FCS lenders did so. Merchants, dealers, and other input suppliers also boosted their loan production above normal, as noted by 26 percent more of the respondents. The volume of loans provided by life insurance companies edged down again, with higher amounts of loans reported by 7 percent of responding banks and lower amounts by 15 percent.

### Looking forward

For the third quarter of 2006, 29 percent of the respondents anticipated farm non-real-estate loan volume to be higher

than in the third quarter of 2005, while 16 percent anticipated lower volume. Operating loans, Farm Service Agency guaranteed loans, and grain storage construction loans were expected to have higher volumes, whereas feeder cattle, dairy, and farm machinery loans were expected to have lower volumes. In Indiana and Iowa, 20 percent and 26 percent more of the bankers, respectively, expected higher rather than lower volumes of grain storage construction loans, probably due to forecasts of increased profits from storage of corn. Bankers also predicted a decline in real estate loan volume (15 percent higher versus 20 percent lower) from July through September of 2006.

David B. Oppedahl, *business economist*

*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.

© 2006 Federal Reserve Bank of Chicago  
*AgLetter* articles may be reproduced in whole or in part, provided the articles are not reproduced or distributed for commercial gain and provided the source is appropriately credited. Prior written permission must be obtained for any other reproduction, distribution, republication, or creation of derivative works of *AgLetter* articles. To request permission, please contact Helen Koshy, senior editor, at 312-322-5830 or email [Helen.Koshy@chi.frb.org](mailto:Helen.Koshy@chi.frb.org). *AgLetter* and other Bank publications are available on the Bank's website at [www.chicagofed.org](http://www.chicagofed.org).

## SELECTED AGRICULTURAL ECONOMIC INDICATORS

	Latest period	Value	Percent change from		
			Prior period	Year ago	Two years ago
<b>Prices received by farmers</b> ( <i>index, 1990-92=100</i> )	July	117	0.0	1	-6
<b>Crops</b> ( <i>index, 1990-92=100</i> )	July	123	-2.4	7	2
Corn (\$ per bu.)	July	2.20	2.8	4	-12
Hay (\$ per ton)	July	107.00	-1.8	7	18
Soybeans (\$ per bu.)	July	5.60	-0.2	-16	-34
Wheat (\$ per bu.)	July	4.09	2.0	28	21
<b>Livestock and products</b> ( <i>index, 1990-92=100</i> )	July	110	0.0	-6	-14
Barrow and gilts (\$ per cwt.)	July	50.30	-8.0	0	-13
Steers and heifers (\$ per cwt.)	July	90.4	2.1	2	-1
Milk (\$ per cwt.)	July	11.9	0.0	-20	-26
Eggs (¢ per doz.)	July	45.6	-19.0	-13	-22
<b>Consumer prices</b> ( <i>index, 1982-84=100</i> )	July	204	0.3	4	7
Food	July	195	0.3	2	4
<b>Production or stocks</b>					
Corn stocks ( <i>mil. bu.</i> )	June 1	4,363	N.A.	1	47
Soybean stocks ( <i>mil. bu.</i> )	June 1	990	N.A.	42	141
Wheat stocks ( <i>mil. bu.</i> )	June 1	568	N.A.	5	4
Beef production ( <i>bil. lb.</i> )	June	2.43	5.7	9	9
Pork production ( <i>bil. lb.</i> )	June	1.66	-3.4	-3	-1
Milk production ( <i>bil. lb.</i> )*	July	13.9	-0.7	1	6
<b>Agricultural exports</b> ( <i>mil. dol.</i> )	June	5,606	-4.0	15	27
Corn ( <i>mil. bu.</i> )	June	191	-9.1	21	37
Soybeans ( <i>mil. bu.</i> )	June	39	-16.1	13	85
Wheat ( <i>mil. bu.</i> )	May	75	4.8	-3	-21
<b>Farm machinery</b> ( <i>units</i> )					
Tractors, over 40 HP	July	8,247	-13.8	-9	-9
40 to 100 HP	July	7,264	-13.3	-5	-4
100 HP or more	July	1,163	-17.0	-27	-29
Combines	July	661	4.4	-11	-1

N.A. Not applicable

\*23 selected states.

Source: Data from the U.S. Department of Agriculture, U.S. Bureau of Labor Statistics, and the Association of Equipment Manufacturers.