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AgLetter

FARMLAND VALUES AND CREDIT CONDITIONS

Summary

The 2006 annual increase in farmland values was 9 percent for the Seventh Federal Reserve District, extending the strongest stretch of gains since the 1970s. Based on 213 survey responses from agricultural bankers, the quarterly rise in the value of "good" agricultural land was 5 percent in the fourth quarter of 2006. Almost 50 percent of the respondents expected farmland values to increase, as well as to remain stable, in the first quarter of 2007.

Agricultural credit conditions in the District improved from a year ago, reversing some of the slippage in recent quarters. Indexes of non-real-estate farm loan repayment rates and funds availability demonstrated stronger activity than both the last quarter of 2005 and the third quarter of 2006, as did loan renewals and extensions. Loan demand in the fourth quarter of 2006 was below the level of the prior quarter, but above that of the fourth quarter of 2005. Agricultural interest rates were stable for the third consecutive quarter. Loan-to-deposit ratios averaged 76.6 percent for the fourth quarter of 2006.

Farmland values

The value of "good" agricultural land in the District increased 9 percent in 2006, just missing a third consecutive double-digit annual gain. Annual farmland values adjusted for inflation have risen at least 5 percent for five years in a row (see chart on next page). Surging ahead of the other District states, Iowa posted a 13 percent annual increase because of a fourth quarter gain of 7 percent (see table and map below). Indiana and Wisconsin farmland value increases slowed to 6 percent and 10 percent for the year, respectively, while the Illinois and Michigan annual increases were unchanged from the third quarter of 2006. All District states had higher gains in farmland values in the fourth quarter compared with those of the third quarter.

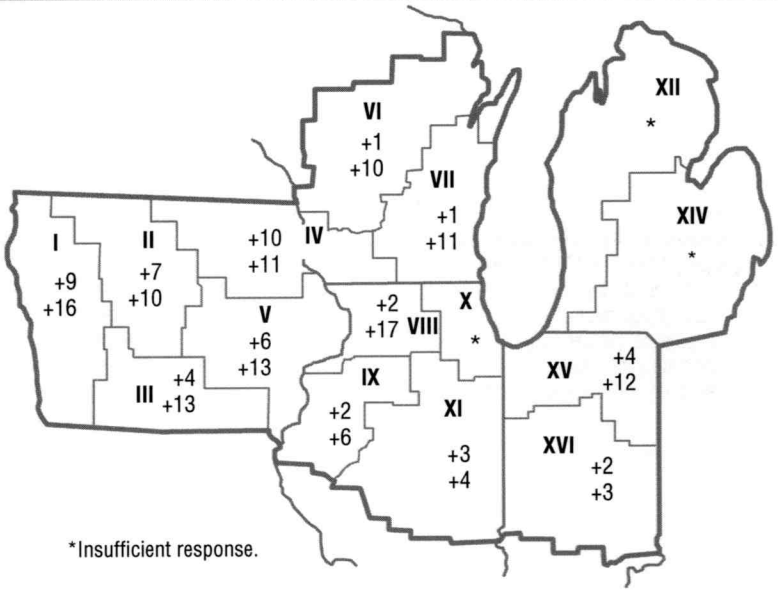
This shift to faster growth in farmland values during the last half of 2006 coincided with significantly higher corn and soybean prices, which boosted net farm income. Cash corn prices in central Illinois increased to $3.53 per bushel in December, 89 percent higher than those in December 2005 and the highest in over a decade. December cash soybean prices in central Illinois rose to $6.40 per bushel, 12 percent above the previous year's prices. Based on U.S. Department of Agriculture data for 2006, District corn production slipped 1.4 percent from that of 2005, falling to 5.40 billion bushels, whereas soybean production rose 4.7 percent to 1.44 billion bushels, a new record. In 2006, District states produced 51.3 percent of U.S. corn output and 45.1 percent of national soybean output, so the District reaped much of the benefits from higher prices.

Moreover, District states had the capacity to produce 55 percent of U.S. ethanol output in 2006, calculated using data from the Renewable Fuels Association. U.S.

Percent change in dollar value of "good" farmland

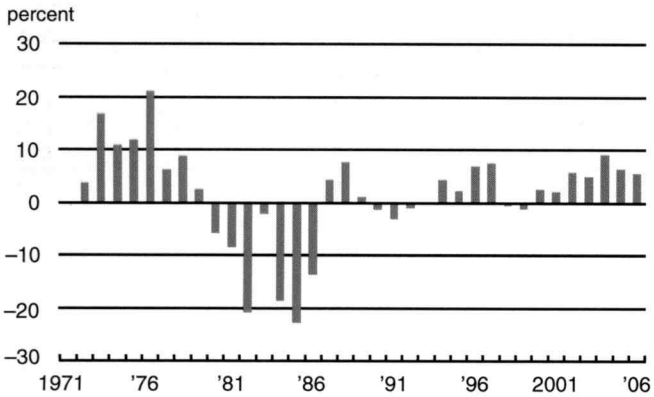
Top: October 1, 2006 to January 1, 2007
Bottom: January 1, 2006 to January 1, 2007

	October 1, 2006 to January 1, 2007	January 1, 2006 to January 1, 2007
Illinois	+2	+6
Indiana	+2	+6
Iowa	+7	+13
Michigan	+6	+5
Wisconsin	+2	+10
Seventh District	+5	+9



*Insufficient response.

1. Annual percentage change in Seventh District farmland values adjusted by CPI-U



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).

ethanol production (from 113 plants) increased to a capacity of 5.6 billion gallons per year by early 2007, 27 percent more than in January 2006. Projected ethanol production requires 20 percent of the 2006–07 corn crop, up from 14 percent for 2005–06. Because of both increased ethanol usage and higher corn exports (see chart below), feeding corn to livestock declined. Distillers grains, a coproduct of ethanol production, helped to fill the gap, though primarily for cattle.

The demand for corn to produce ethanol boosted projected total usage of corn to 11.8 billion bushels in 2006–07. This pace of demand would leave U.S. ending corn stocks at 752 million bushels, corresponding to a stocks-to-use ratio of 6.4 percent. The last time corn stocks were this low was the 1995–96 marketing year. In addition, global stocks were at the lowest level in three decades.

Higher farm incomes prompted many farmers to pursue land purchases, especially given the increases in cash rents in 2006 and those anticipated for 2007. Other factors mentioned by survey respondents included strong recreational demand, high interest in rural residences in certain areas, and stable farm mortgage rates. On the other hand, tax-deferred exchanges seemed to diminish as development has slowed in the region.

With expectations of corn and soybean prices remaining well above their five-year averages, almost 50 percent of respondents expected farmland values to keep rising in the first quarter of 2007. The outlook varied by state; that is, 58 percent of Indiana bankers and 73 percent of Iowa bankers expected land values to increase, while less than 40 percent agreed in the other states. Given the shift in sentiment from a quarter ago, gains in District farmland values look unlikely to slow down in the near future.

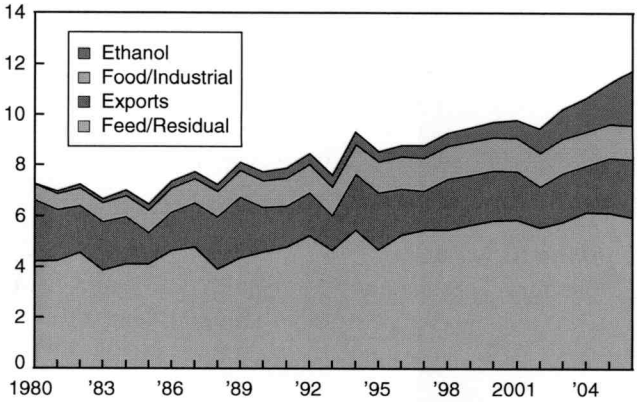
Credit conditions

Along with the acceleration in farmland value gains, credit conditions in the District turned around quickly from the slow decline in recent quarters. The index of non-real-estate farm loan repayment rates jumped to 130 in the fourth quarter of 2006, the highest level since 1988. With 38 percent of the bankers reporting higher rates of loan repayment and 8 percent reporting lower rates, the index moved up 43 points in a single quarter. Higher crop prices seemed to allow farmers to catch up on their farm loan payments. The turnaround missed Wisconsin, where repayment rates slipped again. Slightly less than 4 percent of the volume of the banks' agricultural loan portfolios was classified as having major or severe repayment problems, slightly up from six months ago but down from a year ago. The volume of farm loans with minor repayment problems dropped 2 percent from a year ago, and 90 percent of loan volume had no significant repayment problems.

There was also a rebound in the rate of renewals and extensions of loans in the fourth quarter of 2006 compared with the fourth quarter of 2005. With 31 percent of District bankers indicating lower renewals and extensions than a year ago and 59 percent indicating no change, only 10 percent experienced higher levels of renewals and extensions. Relatively more in this smallest group were based in Michigan and Wisconsin, where bankers reported higher levels of loan renewals and extensions in 2006.

Demand for non-real-estate loans during October, November, and December of 2006 was above the level of a year ago, but the increase was smaller than in any other quarter of the last two years. The index of loan demand declined to 109, as 29 percent of respondents saw an increase in the demand for non-real-estate loans and 20 percent saw a decrease. Increased non-real-estate loan demand

2. Corn utilization, by marketing year



Note: 2006–07 values are projections from the U.S. Department of Agriculture.
Sources: U.S. Department of Agriculture, Economic Research Service, Feed Grains Database, and author's calculations. The food/industrial category does not include ethanol in this chart.

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*
2004							
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
2005							
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
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

Note: Historical data on Seventh District agricultural credit conditions is available for download from the *AgLetter* homepage, www.chicagofed.org/economic_research_and_data/ag_letter.cfm.
[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.

in Illinois and Iowa offset decreased demand in Indiana, Michigan, and Wisconsin for the fourth quarter of 2006.

Funds availability increased across the District from a year ago, after a slight dip in the third quarter. The index of funds availability reached 116, the highest value in the last two years, as 26 percent of the respondents reported higher funds availability and 9 percent lower. Collateral requirements tightened a bit at District banks, with 8 percent raising and one percent lowering the amount of collateral required during the October–December period in 2006. Fewer bankers than a year ago indicated tightening credit standards for agricultural loans in the fourth quarter of 2006 versus the fourth quarter of 2005. Just 1 percent of District customers with operating credit were not likely to qualify for new credit in 2007, according to respondents, which was half the level of a year ago.

Interest rates for agricultural loans haven't increased in three quarters. As of January 1, 2007, the District averages for interest rates were 8.71 percent on new operating loans and 7.74 percent on farm real estate loans. Interest rates on agricultural loans were lowest in Illinois (8.41 percent on operating loans and 7.62 percent on farm mortgages). Interest rates on operating loans were highest in Iowa (8.93 percent), and Wisconsin had the highest farm real estate loan rates (8.15 percent).

Looking forward

For January, February, and March of 2007, 35 percent of the respondents expected higher non-real-estate loan volumes, compared with 18 percent expecting lower volumes. Higher loan volumes were anticipated for operating, farm machinery, and grain storage construction loans. Lower volumes were anticipated for feeder cattle loans, dairy loans, and loans guaranteed by the Farm Service Agency. With 27 percent of the bankers expecting higher real estate loan volumes in the first quarter of 2007 and 14 percent expecting lower volumes, the volume of mortgages on agricultural real estate will likely expand, mainly in Illinois, Indiana, and Iowa.

Finally, the surveyed bankers thought capital expenditures by farmers would increase in 2007. About 70 percent of the bankers anticipated increased purchases of machinery and equipment in 2007. Around 40 percent expected higher spending on land purchases, improvements, buildings, and facilities in 2007 than in 2006. With less than 10 percent expecting lower capital expenditures of each kind, the survey respondents indicated that capital spending by farmers will pick up in 2007.

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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	124	2.5	10	12
Crops *(index, 1990–92=100)*	January	132	3.1	22	29
Corn *($ per bu.)*	January	3.23	7.3	62	52
Hay *($ per ton)*	January	112.00	3.7	20	28
Soybeans *($ per bu.)*	January	6.42	3.9	9	15
Wheat *($ per bu.)*	January	4.50	−0.2	28	31
Livestock and products *(index, 1990–92=100)*	January	116	2.7	−2	−4
Barrow and gilts *($ per cwt.)*	January	42.00	−4.5	2	−21
Steers and heifers *($ per cwt.)*	January	90.3	1.1	−11	−4
Milk *($ per cwt.)*	January	14.4	2.1	−1	−9
Eggs *(¢ per doz.)*	January	91.5	13.4	50	64
Consumer prices *(index, 1982–84=100)*	December	202	0.1	3	6
Food	December	197	0.1	2	5
Production or stocks					
Corn stocks *(mil. bu.)*	December 1	8,930	N.A.	−9	−6
Soybean stocks *(mil. bu.)*	December 1	2,697	N.A.	8	17
Wheat stocks *(mil. bu.)*	December 1	1,315	N.A.	−8	−8
Beef production *(bil. lb.)*	December	2.02	−8.9	−2	−1
Pork production *(bil. lb.)*	December	1.79	−5.1	−4	−3
Milk production *(bil. lb.)**	December	14.0	4.7	3	7
Agricultural exports *(mil. dol.)*	November	6,852	−0.2	12	17
Corn *(mil. bu.)*	November	198	−0.1	26	11
Soybeans *(mil. bu.)*	November	131	−26.4	−7	−28
Wheat *(mil. bu.)*	November	62	−14.3	−21	−27
Farm machinery *(units)*					
Tractors, over 40 HP	January	6,192	−28.5	−6	−10
40 to 100 HP	January	4,631	−29.6	0	2
100 HP or more	January	1,561	−25.1	−19	−34
Combines	January	403	−50.2	20	14

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.

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