

# AgLetter



## FARMLAND VALUES AND CREDIT CONDITIONS

### Summary

An unusual array of agricultural events in 2004 culminated in the largest annual increase, 12 percent, in the value of “good” agricultural land for the Seventh Federal Reserve District during the last 15 years. The quarterly gain in farmland values for the District was 3 percent in the fourth quarter of 2004, according to surveys returned by 278 agricultural bankers. As of January 1, 2005, half the respondents expected farmland values to continue rising over the next three months and half expected them to remain stable.

District bankers reported improved agricultural credit conditions, continuing a trend that started a year ago. Indexes of loan demand, loan repayment rates, and fund availability rose for every quarter of 2004, the first string of four consecutive quarterly increases since 1995–96. Moreover, loan renewals and extensions in the fourth quarter once again were lower than a year ago. Fewer banks required increased collateral than for October to December of 2003. Interest rates on agricultural loans continued to move up, adding more than 50 basis points in 2004. Loan-to-deposit ratios dipped slightly from the third quarter to almost 5 percentage points below the average ratio considered most desirable by the bankers. However, the 2004 improvements in agricultural credit conditions are unlikely to continue

in 2005, given already lower agricultural prices, increased input costs, and recent interest rate movements.

### Farmland values

The 12 percent increase in 2004 District farmland values tied for the largest since 1979, only matched in 1988 (see chart 1). Nominal farmland values have risen 180 percent from the low established in 1986 for the District. The states of Indiana and Wisconsin showed the largest gains at 14 percent (see table and map below), their largest since 1979. Illinois land values increased 13 percent, its biggest increase since 1988. Iowa and Michigan had the smallest increases at 11 percent, their best results since the late 1990s.

The value of “good” agricultural land rose 3 percent, on average, for the District in the fourth quarter of 2004. Indiana exceeded the District average at 5 percent, while Michigan trailed at 1 percent. The surge in District farmland values in 2004 started with a 5 percent increase in the first quarter before ending with two quarters of 3 percent growth. There were several unusual factors that contributed to these increases.

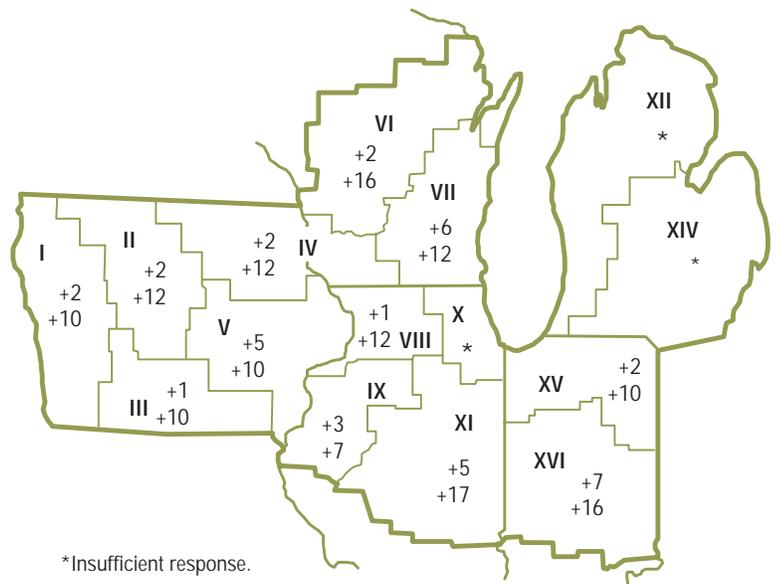
First, 2004 gains in farmland values reflected record net farm income for the U.S., as both crop and livestock producers saw higher margins. At \$73.7 billion, net farm income increased 25 percent in 2004 over the previous record set in 2003. For extended periods of the year, prices for the District’s major agricultural products were well above the seasonal

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

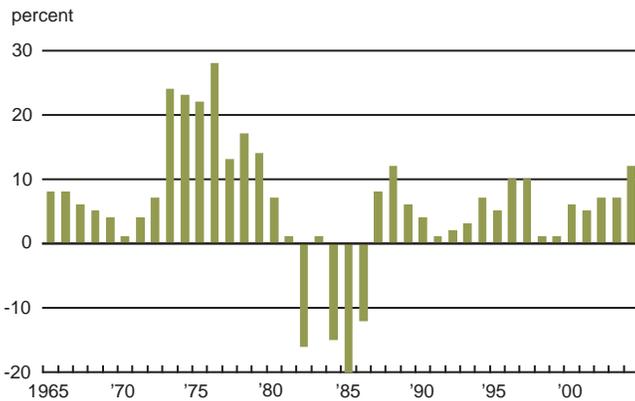
Top: October 1, 2004 to January 1, 2005

Bottom: January 1, 2004 to January 1, 2005

	October 1, 2004 to January 1, 2005	January 1, 2004 to January 1, 2005
Illinois	+3	+13
Indiana	+5	+14
Iowa	+3	+11
Michigan	+1	+11
Wisconsin	+3	+14
Seventh District	+3	+12



## 1. Annual percentage change in Seventh District farmland values



highs of the previous five years. By fall, when corn and soybean prices had fallen significantly, farmers had already forward-contracted a substantial portion of the harvest.

Moreover, the corn and soybean harvests set records too. Final USDA data for the 2004 harvest show that District corn production rose 15 percent from 2003 levels to 5.87 billion bushels, and soybean production was up 38 percent to 1.41 billion bushels. Record corn yields were experienced in all District states except Wisconsin. Illinois and Indiana had record soybean yields as well.

Ethanol was another important factor that boosted farmers' income. Corn prices have been supported by increased usage of corn in ethanol production (\$0.20–\$0.40 per bushel according to a USDA study). In the 2004/2005 marketing year, the USDA estimated that 1.425 billion bushels of corn will be converted into ethanol for fuel, a 13 percent increase from the prior year. The District produced over half of the total U.S. ethanol output in 2004. Profits from higher ethanol output and prices partly went to farmer owners of ethanol plants (38 percent of U.S. production, data from the Renewable Fuels Association).

In addition to record net farm income, the demand for farmland has remained strong. Bankers commented on the desire of farmers to expand their operations by buying land. But they must often compete with outside investors and other farmers displaced by development around metropolitan areas. In particular, tax-deferred exchanges seem to have spurred farmland values higher. Additionally, recreational usage of land has pulled up land values in parts of the District.

For the first quarter of 2005, 50 percent of respondents expected farmland values to keep rising. The other half expected farmland values to remain about the same during the next three months. Even so, there were comments that land values may have peaked or were too high. Yet, when adjusted for inflation, farmland values remained 40 percent below their 1979 peak (see chart 2). Real farmland values have risen more than 160 percent from their low in 1986, so inflation has

reduced the real returns from owning farmland. Still, bankers expressed concerns about the impact of elevated farmland values on working farmers and credit conditions going forward.

## Credit conditions

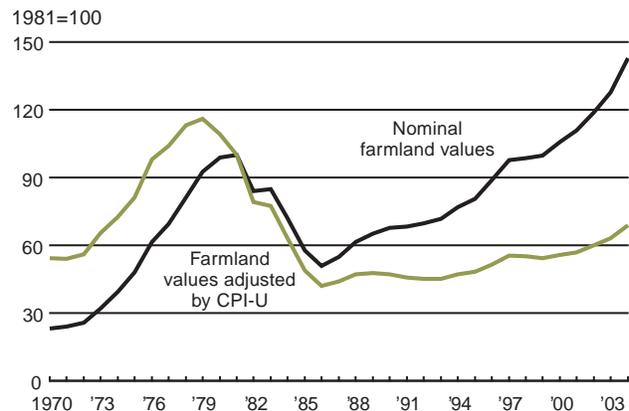
District credit conditions improved again in the fourth quarter of 2004, extending the string of positive results triggered a year ago by higher agricultural prices. The index of non-real-estate farm loan repayment rates jumped again to 127. With 35 percent of the bankers reporting higher rates of loan repayment and 58 percent reporting stable rates, less than 10 percent expected lower rates of repayments. Indiana, just ahead of Illinois and Iowa, showed the largest percentage of banks with higher rates of loan repayment versus a year ago. In addition, less than 4 percent of the volume of the banks' agricultural loan portfolios was classified as having major or severe repayment problems, about the same as six months ago and a slight decrease from a year ago.

Also, there has been a downshift in the rate of renewals and extensions of loans relative to the previous year. With 30 percent of bankers indicating lower renewals and extensions than a year ago and less than 10 percent indicating higher levels, renewals and extensions were down more than in recent quarters. In contrast with the fourth quarter a year ago when only Iowa bankers reported lower levels of loan renewals and extensions, all District states experienced lower levels in 2004.

Demand for non-real-estate loans was up again in the fourth quarter from a year ago, as the index of loan demand remained at 109. Almost 10 percent more bankers reported an increase in the demand for non-real-estate loans as reported a decrease, while half indicated the same level of demand. Wisconsin was the only state with lower demand for non-real-estate loans last quarter, though Illinois didn't show a gain. Indiana, Iowa, and Michigan demonstrated evidence of higher non-real-estate loan demand.

Fund availability increased across the District during October, November, and December compared with a year

## 2. Indexes of District farmland values



Note: Derived from Federal Reserve Bank of Chicago farmland value surveys and BLS Consumer Price Index series (annual average).

## Credit conditions at Seventh District agricultural banks

	Loan demand (index) <sup>2</sup>	Fund availability (index) <sup>2</sup>	Loan repayment rates (index) <sup>2</sup>	Average loan-to-deposit ratio <sup>1</sup> (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>2002</b>							
Jan-Mar	108	118	66	72.7	7.33	7.48	7.22
Apr-June	105	120	71	75.1	7.28	7.35	7.08
July-Sept	99	124	76	75.7	7.21	7.26	6.84
Oct-Dec	101	130	88	73.2	6.70	6.78	6.51
<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

<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.

earlier. Almost 30 percent of the respondents reported higher fund availability and just 7 percent lower, moving the index of fund availability up to 121. This was the fourth consecutive year of increased availability of funds.

Still, the amount of collateral required rose a bit, and more banks tightened credit standards in the fourth quarter versus the previous year. Collateral requirements inched up at District banks, with 5 percent more raising than lowering the amount of collateral required from October to December 2004. Similarly, respondents indicated there was less tightening in credit standards for agricultural loans in the fourth quarter (25 percent versus 30 percent in 2003). Even with modest tightening of credit standards, only 1 percent of customers with operating credit are not likely to qualify for new credit this year from the responding banks.

The rise in interest rates for agricultural loans continued throughout 2004. As of January 1, 2005, the District average for interest rates on new operating loans was 6.39 percent, 59 basis points higher than the first quarter cyclical low. At an average of 6.81 percent, interest rates for farm real estate loans were up for a third consecutive quarter by a total of 52 basis points. Interest rates on agricultural loans were lowest in Illinois. The largest increases occurred in Wisconsin, which had the highest interest rate on operating loans.

### Looking forward

In terms of the near future, the responding bankers tended to see higher levels of loan volumes, especially for operating and farm machinery loans. A third of the bankers reported expectations of higher non-real-estate loan volume in the first quarter of 2005, compared to only 9 percent projecting lower volume. Substantially more respondents expected higher volumes for operating and farm machinery loans rather than lower volumes (about 40 percent

versus 10 percent for both, respectively). Fifteen percent more bankers anticipated higher rather than lower real estate loan volume in the first quarter of 2005. Grain storage construction loans were also expected to increase in volume a bit. Marginally lower volumes were anticipated for feeder cattle, dairy, and Farm Service Agency (FSA) loans.

Respondents expected farmers to boost capital expenditures in the year ahead. The strongest outlook was for machinery and equipment, with 62 percent of the bankers seeing higher spending, as well as 46 percent for higher spending on trucks and automobiles. For buildings and facilities, 29 percent were looking for higher expenditures and just 10 percent lower levels. More than one-third of respondents (36 percent) expected expenditures on land purchases or improvements to be higher, while 10 percent expected such expenditures to be lower.

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## 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> )	January	110	-0.9	-2	11
<b>Crops</b> ( <i>index, 1990–92=100</i> )	January	100	-2.9	-12	-3
Corn (\$ per bu.)	January	1.98	-2.9	-17	-15
Hay (\$ per ton)	January	84.20	-0.1	5	-8
Soybeans (\$ per bu.)	January	5.32	-2.4	-28	-3
Wheat (\$ per bu.)	January	3.42	0.9	-7	-12
<b>Livestock and products</b> ( <i>index, 1990–92=100</i> )	January	121	0.8	10	26
Barrow and gilts (\$ per cwt.)	January	53.30	1.3	43	59
Steers and heifers (\$ per cwt.)	January	94.2	2.6	10	21
Milk (\$ per cwt.)	January	15.9	-3.0	20	35
Eggs (¢ per doz.)	January	55.8	-14.7	-40	-19
<b>Consumer prices</b> ( <i>index, 1982–84=100</i> )	December	190	-0.4	3	5
Food	December	189	0.2	3	6
<b>Production or stocks</b>					
Corn stocks ( <i>mil. bu.</i> )	December 1	9,449	N.A.	19	24
Soybean stocks ( <i>mil. bu.</i> )	December 1	2,305	N.A.	36	9
Wheat stocks ( <i>mil. bu.</i> )	December 1	1,431	N.A.	-6	8
Beef production ( <i>bil. lb.</i> )	December	2.04	5.3	3	-3
Pork production ( <i>bil. lb.</i> )	December	1.86	3.2	-1	8
Milk production ( <i>bil. lb.</i> )*	January	13.2	1.5	1	-9
<b>Receipts from farm marketings</b> ( <i>mil. dol.</i> )	November	23,873	-5.4	6	28
Crops**	November	13,461	-11.5	5	32
Livestock	November	10,412	3.8	7	23
<b>Agricultural exports</b> ( <i>mil. dol.</i> )	December	5,681	-3.2	15	14
Corn ( <i>mil. bu.</i> )	November	177	11.4	5	22
Soybeans ( <i>mil. bu.</i> )	November	183	3.8	-2	20
Wheat ( <i>mil. bu.</i> )	November	86	-9.0	10	8
<b>Farm machinery</b> ( <i>units</i> )					
Tractors, over 40 HP	January	6,954	-20.3	19	76
40 to 100 HP	January	4,577	-30.1	21	60
100 HP or more	January	2,377	9.2	17	118
Combines	January	356	-42.9	41	102

N.A. Not applicable

\*23 selected states.

\*\*Includes net CCC loans.