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AgLetter

FARMLAND VALUES AND CREDIT CONDITIONS

Summary
The annual growth in agricultural land values was 12 percent in 2010 for the Seventh Federal Reserve District—the second-largest increase in the past 30 years. There was a 6 percent rise in the value of "good" farmland in the fourth quarter relative to the third quarter of 2010, based on 212 surveys returned by agricultural bankers from around the District. Slightly more than half of the respondents expected farmland values to keep rising during the January through March period of 2011.

Agricultural credit conditions strengthened in the fourth quarter of 2010, even with non-real-estate loan demand about the same as a year ago. For the October through December period of 2010 compared with the same period of the previous year, funds availability, farm loan repayment rates, and rates of loan renewals and extensions all improved. Interest rates on farm loans moved even lower. The average loan-to-deposit ratio of 71.8 percent was the lowest in seven years.

Farmland values

The 12 percent annual increase in the value of "good" agricultural land for 2010 was in a tie for the second-largest increase of the past 30 years (see chart 1 on next page). After adjusting for inflation, the 2010 annual increase (10 percent) became the second largest since 1976 all by itself. Iowa farmland values led the surge, closely followed by those of Illinois and Indiana; Michigan and Wisconsin farmland values brought up the rear (see table and map below). The diversity of agriculture in Michigan and Wisconsin probably limited the growth in farmland values, since the principal driver of the current boom has been corn and soybean production.

District agricultural land values increased 6 percent from the third quarter to the fourth quarter of 2010. This quarterly gain matched the largest rise in any quarter since 1977. Illinois, Indiana, and Iowa had larger quarterly increases than Wisconsin, while Michigan had a decrease.

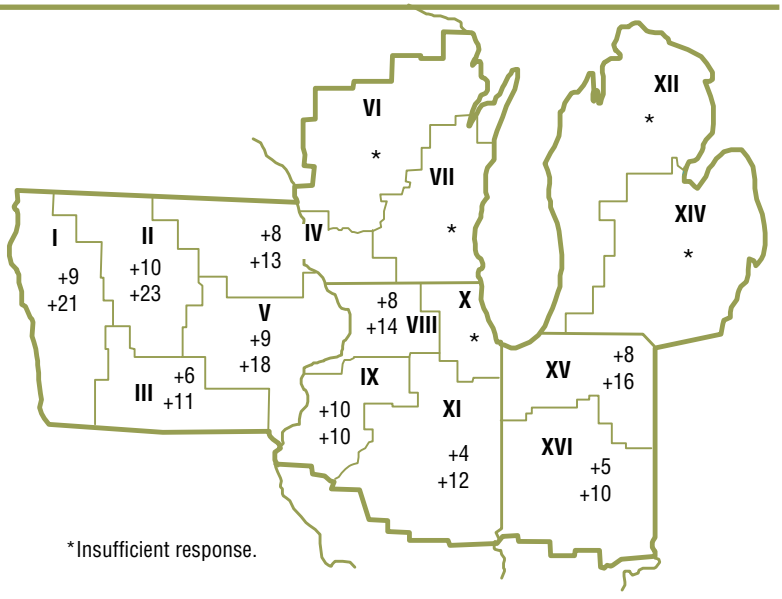
Although the annual index of nominal farmland values set a new high, the index of inflation-adjusted farmland values remained a shade below the peak of 1979 (see chart 2 on next page). In contrast with the prior peak, economic conditions reflected historically low interest rates and inflation rates, dampening the returns on traditional savings vehicles (such as certificates of deposit). Thus, farmers sought to maximize the returns on their funds by plowing money into farmland purchases and expanding their operations to enhance future earnings. Since farmland values bottomed in 1986, the compound annual growth rate for farmland values (adjusted for inflation) has been 4 percent.

Overall, 2010 was a stellar year for agriculture in the Midwest. The only major sector that did not finish the year strongly was dairy, which still had seen milk prices move

Percent change in dollar value of "good" farmland

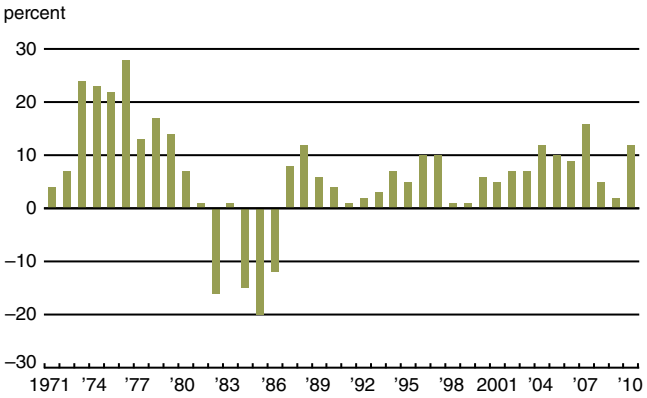
Top: October 1, 2010 to January 1, 2011
Bottom: January 1, 2010 to January 1, 2011

	October 1, 2010 to January 1, 2011	January 1, 2010 to January 1, 2011
Illinois	+7	+11
Indiana	+6	+12
Iowa	+8	+18
Michigan	–1	+4
Wisconsin	+2	+7
Seventh District	+6	+12



*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.

up for much of the year before tailing off in the fourth quarter. According to the U.S. Department of Agriculture (USDA), national corn production was 12.4 billion bushels for 2010—5 percent less than in 2009 and the third-largest corn harvest on record. U.S. soybean production in 2010 was estimated as the second largest on record, at 3.33 billion bushels, 0.9 percent below the level of 2009. District production of corn in 2010 was estimated at 5.82 billion bushels, 6 percent below the level of 2009. District production of soybeans in 2010 was estimated at 1.39 billion bushels, 5 percent above the level of 2009.

The USDA pegged the 2010 national corn yield at 153 bushels per acre—the fourth highest ever. The District corn yield was the sixth highest, at 160 bushels per acre. In the District, Iowa and Illinois ended up with their lowest corn yields in seven and five years, respectively. For the U.S., the 2010 soybean yield of 43.5 bushels per acre almost matched the previous year's record. A record soybean yield (50.1 bushels per acre) was set for the District.

Cash corn prices climbed to $5.65 per bushel in December 2010—57 percent higher than in December 2009. Cash soybean prices finished at $12.89 per bushel in December 2010—27 percent above prices a year earlier. In December 2010, cattle and hog prices were 24 percent and 16 percent above year-ago levels, respectively. Milk prices ended 2010 about where they began the year. According to the most recent estimates by the USDA, rising agricultural prices boosted net farm income in 2010 to $79.0 billion, which was 27 percent higher than in 2009. The ten-year average of net farm income, after accounting for inflation, was the highest since 1979, when farmland values peaked in real terms. Moreover, the USDA predicted net farm income to rise to $94.7 billion in 2011—a gain of 20 percent. Given the low interest rate environment, the current surge in farmland values has been supported by market fundamentals. However, potential pitfalls lurk behind the positive scenario depicted for Midwest agriculture.

About half of the responding District bankers expected agricultural land values to continue increasing from January through March of 2011, while the other half expected values to remain stable.

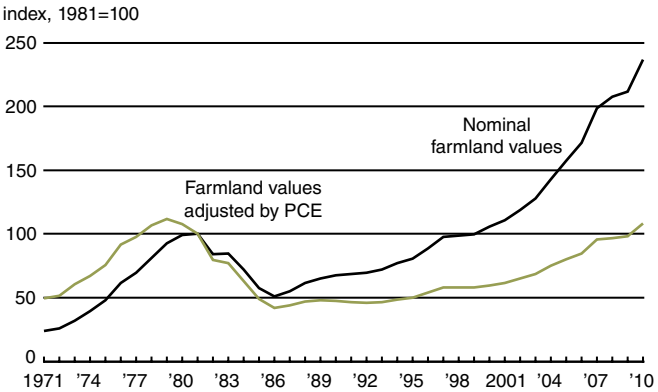
Credit conditions

The District's credit conditions showed solid improvements for the fourth quarter of 2010 compared with the fourth quarter of 2009. With a wider stream of earnings, more agricultural producers were able to pay off loans and catch up on payments. Renewals and extensions of non-real-estate agricultural loans in the fourth quarter of 2010 fell relative to the fourth quarter of the previous year in all District states. Reporting bankers who saw higher rates of renewals and extensions (7 percent) were outnumbered by those who saw lower rates (30 percent) for the fourth quarter of 2010 compared with the same quarter of 2009.

Non-real-estate farm loan repayment rates accelerated in the fourth quarter of 2010 compared with the same quarter of the prior year. The index of repayment rates was 142 in the final quarter of 2010, with 47 percent of respondents noting higher rates of loan repayment and just 5 percent noting lower rates. This was the highest value for the index since early in 2008. Repayment rates strengthened in all District states, including Wisconsin. The percentage of problem loans declined as well. District bankers classified 3 percent of the volume of their banks' farm loan portfolios as having major or severe repayment problems. This figure was highest for Wisconsin (5 percent).

Demand for non-real-estate farm loans during October, November, and December of 2010 was almost the same as a year ago. The index of loan demand was 101, with 25 percent of respondents reporting an increase in the demand for non-real-estate loans and 24 percent reporting a decrease. Without more demand for loans, there were more funds still available to lend during the fourth quarter of 2010 relative to the same period of 2009. The index of

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)*
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
2010							
Jan–Mar	109	127	79	73.7	6.13	6.25	6.04
Apr–June	98	122	85	74.5	6.12	6.25	5.99
July–Sept	90	138	114	73.2	6.05	6.14	5.81
Oct–Dec	101	142	142	71.8	5.85	6.02	5.70

[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.

funds availability edged up to 142, as funds availability was higher for 44 percent of the responding bankers and lower for 2 percent. Only 11 percent of the banks increased the required amount of collateral to qualify for farm loans during the October through December period of 2010. Thirty-one percent of the banks tightened credit standards for agricultural loans in the fourth quarter of 2010 relative to the fourth quarter of 2009, and 6 percent eased credit standards. Thus, agricultural operators should have noted credit availability had deteriorated less than in the prior year. Responding bankers ascertained that less than 2 percent of their customers with operating credit were unlikely to obtain new lines of credit in 2011. Michigan and Wisconsin had higher levels of financially distressed customers; 4 percent of customers in those states were likely to be denied new credit lines.

Agricultural interest rates decreased yet again in the fourth quarter of 2010. As of January 1, 2011, the average interest rates in the District were 5.85 percent for operating loans and 5.70 percent for farm real estate loans.

Looking forward

Responding bankers expected similar volumes of non-real-estate farm loans to be generated in the January through March period of 2011 as in the same period of 2010. Respondents anticipated higher volumes of operating, farm machinery, and grain storage construction loans, as well as more loans guaranteed by the Farm Service Agency. They expected lower volumes for feeder cattle and dairy loans, although there was more hope for generating dairy loans in Wisconsin. Respondents predicted farm real estate loan volumes would pick up during the first quarter of 2011 relative to the same quarter of 2010.

There was a major turnaround in expectations for capital expenditures by farmers in 2011 compared with 2010. With 54 percent of the responding bankers predicting higher spending in 2011 on land purchases or improvements and just 7 percent predicting lower spending, the spending climate shifted dramatically from a year ago. For buildings and facilities, 44 percent of responding bankers anticipated increased expenditures and 8 percent anticipated decreased expenditures. The biggest reversal was for sales of machinery and equipment, with 67 percent of respondents forecasting higher purchases and 3 percent forecasting lower purchases. Truck and auto sales to farmers were expected to rise also: 57 percent of the responding bankers predicted higher expenditures by farmers and 5 percent predicted lower expenditures in 2011. The expected willingness of farmers to make renewed investments in land, buildings, machinery, equipment, and vehicles indicated that the agricultural sector rebounded from the recession more quickly than the overall economy. Now, the issues facing agriculture will be how to manage the volatility seen in recent years and how to prepare for when the good times slow down.

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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	169	7.0	21	22
Crops *(index, 1990–92=100)*	January	195	11.4	27	21
Corn *($ per bu.)*	January	5.37	11.4	47	23
Hay *($ per ton)*	January	112	0.0	6	–17
Soybeans *($ per bu.)*	January	12.60	8.6	29	26
Wheat *($ per bu.)*	January	7.40	14.7	51	19
Livestock and products *(index, 1990–92=100)*	January	135	0.0	11	18
Barrows & gilts *($ per cwt.)*	January	55.40	5.1	13	30
Steers & heifers *($ per cwt.)*	January	110.00	5.8	26	28
Milk *($ per cwt.)*	January	16.20	–3.0	1	22
Eggs *($ per doz.)*	January	0.85	–21.3	–17	–17
Consumer prices *(index, 1982–84=100)*	December	220	0.5	1	4
Food	December	221	0.1	2	1
Production or stocks					
Corn stocks *(mil. bu.)*	December 1	10,040	N.A.	–8	0
Soybean stocks *(mil. bu.)*	December 1	2,277	N.A.	–3	0
Wheat stocks *(mil. bu.)*	December 1	1,928	N.A.	8	36
Beef production *(bil. lb.)*	December	2.27	1.6	6	9
Pork production *(bil. lb.)*	December	2.06	–0.6	4	0
Milk production *(bil. lb.)**	December	15.0	4.2	3	2
Agricultural exports *($ mil.)*	November	12,918	8.6	21	39
Corn *(mil. bu.)*	November	158	7.8	20	10
Soybeans *(mil. bu.)*	November	258	–10.9	–12	49
Wheat *(mil. bu.)*	November	92	6.6	35	20
Farm machinery *(units)*					
Tractors, over 40 HP	January	5,767	N.A.	6	13
40 to 100 HP	January	3,213	N.A.	15	5
100 HP or more	January	2,554	N.A.	–3	26
Combines	January	891	N.A.	54	75

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, the Association of Equipment Manufacturers, and Haver Analytics.