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AgLetter

FARMLAND VALUES AND CREDIT CONDITIONS

Summary
Farmland prices in the Seventh Federal Reserve District increased a little more rapidly in the first quarter of 2002 than has been the case since mid-1998. Based on the Chicago Fed's end-of-first quarter Land Value and Credit Conditions Survey, prices for "good" farmland rose, on average, a little less than 3 percent between January 1, 2002, and April 1, 2002. In addition, data from 381 agricultural bankers indicated that farmland prices rose nearly 6 percent, on average, relative to a year ago. By comparison, the end-of-first-quarter 2001 Survey reported farmland prices were up about 4 percent from a year earlier.

Survey responses indicated some deterioration in credit conditions. Summary measures that reflect the rate of loan repayment, the rate of request for loan renewals or extensions, and the level of collateral requirements required to secure loans, all deteriorated. Bankers also noted increased demand for farm loans, and the recent decline in interest rates was reported to have bottomed out.

Farmland values

The almost 3 percent increase in the value of District farmland in the first quarter of 2002 was the largest quarterly gain since the first quarter of 1996. It was also the first quarter in two years where each of the five states recorded increased farmland values. The District's year-over-year gain of about 6 percent in the latest period was up about 1 percentage point from the quarterly average in 2001.

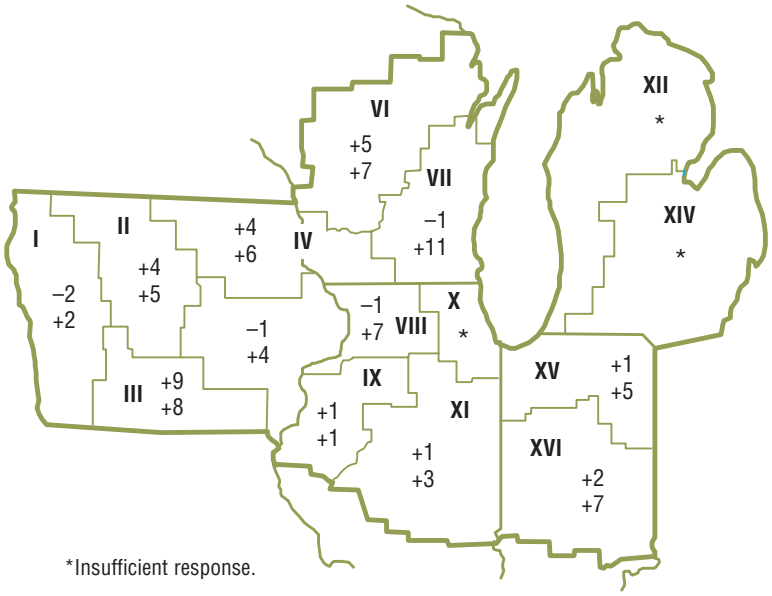
District-wide, 30 percent of the bankers observed that the amount of farmland up for sale was higher than a year ago. A year ago, 34 percent of respondents noted an increase in the amount of land for sale. Demand for farmland was up, as 36 percent of the bankers noted increased demand as compared with the survey a year ago when 24 percent reported higher demand.

Respondents continued to report strong demand for farmland to be converted into non-farm purposes. Bankers also noted that demand for land by other farmers increasingly came from IRS Section 1031 tax-deferred exchanges. A "1031 exchange" allows a farmer with "high-value" land in an "urban fringe" area favorable to non-farm development to sell such land and purchase a more remote parcel. The key to these transactions is the tax deferral on capital gains derived from the sale of urban fringe farms. Some bankers observed that this form of transaction was a significant factor in bidding up farmland prices in outlying areas.

Percent change in dollar value of "good" farmland

Top: January 1, 2002 to April 1, 2002
Bottom: April 1, 2001 to April 1, 2002

	January 1, 2002 to April 1, 2002	April 1, 2001 to April 1, 2002
Illinois	+1	+3
Indiana	+2	+6
Iowa	+2	+5
Michigan	+7	+8
Wisconsin	+3	+9
Seventh District	+3	+6



*Insufficient response.

An increase in cash rents for farmland reflected the higher market prices reported, although rents increased more slowly than did sale prices. On average, cash rents were up about 2 percent from a year ago. Cash rental arrangements accounted for 72 percent of the farmland rental contracts according to respondents; about 25 percent of rental arrangements were on a share crop basis. A substantial disparity in the form of rental contracts continued across the District states. In Illinois, 55 percent of rentals were reported to be on a cash basis and 40 percent were share basis. By contrast, the proportions in Wisconsin were 89 percent cash and 8 percent share crop.

Nominal and real farmland values

In addition to questions about land values and credit conditions, we asked the bankers to comment on concerns about production agriculture in their respective service area. During the past two to three years a recurring theme in these responses has focused on three components of the same issue—farm income.

The first component centers on the negative impact of low commodity prices on District farmers' financial statements. The second centers on what they view as the critical role the federal farm program plays in keeping many farmers financially viable. And the third is an observation that many farmers continue to operate by drawing down their equity base to finance operating expenses—making them more susceptible to financial stress and increasingly dependent on agricultural subsidies for their survival. The value of farmland is a major portion of that equity base.

The last issue of *AgLetter* observed that in 2000, after 19 years, District farmland prices had recovered to match their previous high. Farmland prices, for the District overall, have since increased further. While farmland prices for the District overall are at record levels, that fact may not be as favorable to the industry as a casual review might suggest. Compared to the previous price peak in 1981, the end-of-2001 average was up only 11 percent (about 0.5 percent per year, on average). Of course, the rate of appreciation in farmland prices depends importantly on the point of reference. For example, relative to the most recent trough in prices, 1986, the annual average price appreciation was about 8 percent. And, over the 30-year period, 1971 to 2001, farmland prices increased 275 percent (9.1 percent per year, on average). However, all of these changes reflect asset value changes in the *nominal* price of farmland.

How does this *nominal* appreciation in the price of District farmland compare with the *real*, or inflation-adjusted, change? Furthermore, how does the *real* change in District farmland prices compare with the *real* change in an alternative measure of equity investment—for example, the Standard and Poor's (S&P) index of the stock value of 500 major industrial firms? Not well, as it turns out.

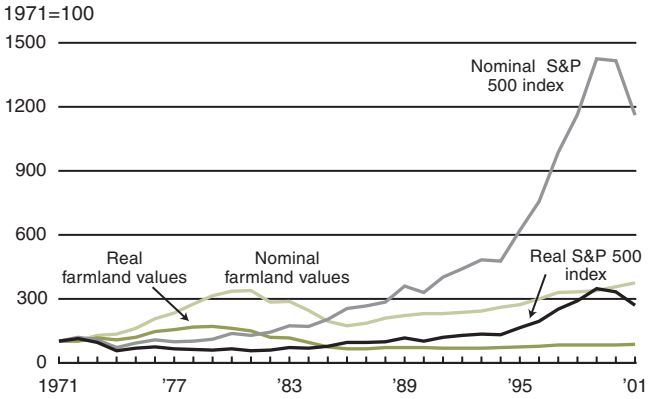
There is not space in this *AgLetter* for an exhaustive analysis of issues associated with *nominal/real* changes in farmland values. However, we visit this issue to point out the complexity associated with nominal/real asset valuation (an issue not unique to farmland) and to raise the question of risk associated with a key farm asset whose value has not kept pace with inflation over a substantial period of time. For example, between the fourth quarter of 1979 (the peak in District *real* farmland values) and the end of 2001, average *real* farmland values in the District *declined* 49 percent (an average of about 2.2 percent per year). Over the 30-year period 1971 to 2001, there was still a *real decline* of 14 percent (an average negative 0.5 percent per year). On the other hand, since the most recent trough in farmland prices, 1986, the annual average price appreciation was about 2.4 percent (see chart).

Alternatively, consider an example of the change in the *real* value of a non-farm equity. The *inflation adjusted* S&P 500 Composite index in the fourth quarter of 2001 stood 354 percent above its fourth-quarter 1979 average, 168 percent above its fourth-quarter 1971 average, and 185 percent above its fourth-quarter 1986 average (annual average *increases* of 16 percent, 5.6 percent, and 12.4 percent, respectively). In short, for these three periods the inflation adjusted appreciation of an investment in S&P 500 "index-industries" exceeded by a substantial amount a comparable investment in District average farmland. (Of course, the magnitude and direction of change critically depends upon the period selected for comparison.)

Credit conditions

Bankers reported deterioration in agricultural credit conditions in the first quarter of 2002. Less than 4 percent of

Indexes of selected equity values



Note: Data are constructed from Federal Reserve Bank of Chicago Land Value and Credit Conditions Survey, S&P 500 Composite Index, and Bureau of Labor Statistics CPI-U.

Credit conditions at Seventh District agricultural banks

	Loan demand	Fund availability	Loan repayment rates	Average loan-to-deposit ratio[1]	Interest rates on farm loans: Operating loans[1]	Interest rates on farm loans: Feeder cattle[1]	Interest rates on farm loans: Real estate[1]
	(index)[2]	*(index)*[2]	*(index)*[2]	*(percent)*	*(percent)*	*(percent)*	*(percent)*
1998							
Jan-Mar	134	113	84	68.9	9.52	9.51	8.50
Apr-June	127	102	74	72.7	9.54	9.55	8.52
July-Sept	117	104	60	72.0	9.43	9.41	8.33
Oct-Dec	113	121	57	70.3	9.09	9.07	8.06
1999							
Jan-Mar	120	119	40	69.9	9.03	9.01	8.06
Apr-June	115	107	50	71.7	9.11	9.08	8.18
July-Sept	109	94	63	72.7	9.32	9.28	8.42
Oct-Dec	107	104	72	72.7	9.44	9.41	8.59
2000							
Jan-Mar	121	95	77	72.9	9.78	9.72	8.89
Apr-June	109	76	72	75.5	10.43	10.14	9.21
July-Sept	106	82	77	76.9	10.17	10.14	9.18
Oct-Dec.	105	92	81	74.9	9.92	9.90	8.90
2001							
Jan-Mar	118	101	67	75.0	9.16	9.17	8.23
Apr-June	106	109	73	75.1	8.60	8.58	7.91
July-Sept	91	127	86	74.9	8.01	8.07	7.47
Oct-Dec	101	129	75	72.8	7.41	7.51	7.21
2002							
Jan-Mar	108	118	66	72.7	7.33	7.48	7.22

[1]At end of period.
[2]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.

the respondents indicated that the rate of loan repayment increased (relative to a year ago) while 38 percent noted a lower rate of loan repayment. Both of these responses represented deterioration in the rate of loan repayment relative to the fourth quarter of last year. Bankers also said the rate of request for loan renewals or extensions rose, with 39 percent of the bankers noting an increase, while only 6 percent reported a reduction.

Bankers' concern regarding credit worthiness was reflected by additional requirements to secure loans. The proportion of respondents reporting higher collateral requirements increased from 24 percent in the final quarter of 2001 to 31 percent in the first quarter of 2002, the highest proportion of bankers reporting increased collateral requirements since the third-quarter of 1987.

Higher loan demand was reported by a larger proportion of bankers than was the case in the two previous surveys. However, 55 percent of the respondents noted that demand remained unchanged from a year ago, suggesting a high degree of stability in agricultural loan demand.

Recent declines in farm loan interest rates virtually halted in the first quarter of 2002. By contrast, during 2001 the average quarterly decline reported in operating loan rates was 63 basis points.

Looking forward

Bankers reported they expect the demand for non-real-estate farm lending to increase in the second quarter of 2002, relative to a year ago. They continued to expect the increase would be concentrated in operating loans, with 40 percent of the respondents expecting an increase in this category. Demand for category-specific lending for feeder cattle, grain storage construction, and farm machinery loans remained weak with a substantially larger proportion of the bankers expecting decreased loans than those who expected increases.

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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)*	April	95	–9.5	–10	–5
Crops *(index, 1990–92=100)*	April	100	–14.5	–3	–2
Corn *($ per bu.)*	April	1.86	–4.1	–2	–8
Hay *($ per ton)*	April	99.90	9.3	1	28
Soybeans *($ per bu.)*	April	4.38	0.0	4	–12
Wheat *($ per bu.)*	April	2.80	–2.4	–2	9
Livestock and products *(index, 1990–92=100)*	April	90	–5.3	–17	–8
Barrows and gilts *($ per cwt.)*	April	30.70	–15.4	–36	–36
Steers and heifers *($ per cwt.)*	April	71.20	–4.2	–11	–5
Milk *($ per cwt.)*	April	12.50	–1.6	–14	5
Eggs *(¢ per doz.)*	April	51.9	–24.2	–20	–20
Consumer prices *(index, 1982–84=100)*	April	180	0.6	2	5
Food	April	176	0.1	3	6
Production or stocks					
Corn stocks *(mil. bu.)*	March 1	5,796	N.A.	–4	3
Soybean stocks *(mil. bu.)*	March 1	1,336	N.A.	–5	–4
Wheat stocks *(mil. bu.)*	March 1	1,211	N.A.	–9	–15
Beef production *(bil. lb.)*	April	2.19	6.6	13	8
Pork production *(bil. lb.)*	April	1.67	5.8	9	20
Milk production* *(bil. lb.)*	April	12.5	–2.0	3	1
Receipts from farm marketings *(mil. dol.)*	February	12,900	–25.1	–3	–2
Crops**	February	5,235	–39.7	1	–1
Livestock	February	7,665	–10.2	–5	–2
Government payments	February	N.A.	N.A.	N.A.	N.A.
Agricultural exports *(mil. dol.)*	March	4,436	–4.8	–9	–5
Corn *(mil. bu.)*	February	161	8.9	13	12
Soybeans *(mil. bu.)*	March	64	–52.0	–53	–42
Wheat *(mil. bu.)*	February	67	–10.3	–24	–5
Farm machinery sales *(units)*					
Tractors, over 40 HP	April	8,220	39.6	–8	1
40 to 100 HP	April	5,684	43.2	2	12
100 HP or more	April	2,536	32.2	–25	–17
Combines	April	419	17.7	15	7

N.A. Not applicable

*20 selected states.

**Includes net CCC loans.