

# Agricultural *FINANCE* Monitor

agricultural credit conditions in the Eighth Federal Reserve District

2014 ■ First Quarter

The eighth quarterly survey of agricultural credit conditions was conducted by the Federal Reserve Bank of St. Louis from March 17, 2014, through March 31, 2014. The results presented here are based on the responses from 49 agricultural banks within the boundaries of the Eighth Federal Reserve District.<sup>1</sup> The Eighth District includes all or parts of seven Midwest and Mid-South states. Because this survey is relatively new, these data are not adjusted for any seasonal patterns (should they exist). Accordingly, users are cautioned to interpret the results carefully. Users are also cautioned against drawing firm conclusions about longer-run trends in farmland values and agricultural lending conditions.<sup>2</sup>

## Executive Summary

Farm income declined in the first quarter of 2014 from a year earlier according to a survey of 49 agricultural banks in the Eighth District. However, farm income in the first quarter turned out to be modestly stronger than respondents expected three months earlier. Quality farmland prices fell slightly in the first quarter, a reversal of the gain reported in the fourth quarter of 2013. Despite the decline in value, quality farmland prices in the first quarter were 7.5 percent higher than a year earlier. Proportionately more respondents continue to expect farm income and quality farmland values to decline over the next three months compared with year-earlier levels. Similarly, respondents also expect farm household expenditures and farm equipment expenditures in the second quarter of 2014 to be lower than a year earlier. This survey included one special question: The vast majority of bankers' responses indicate that the expectation of lower farm income in 2014 has not changed the highly competitive agriculture loan market.

### Selected Quotes from Banker Respondents Across the Eighth Federal Reserve District

*"Anticipated lack of direct payments [will have an effect]."*  
(Arkansas)

*"Certain segments of farmers will have less cash flow to support operations, resulting in slower (loan) payments and possibly further consolidation of the industry."* (Arkansas)

*"Some poultry company expansion has increased capital spending."*  
(Arkansas)

*"The overall farm economy is still good. Farmers are spending more conservatively. Land purchases are being made only by those with lots of cash or equity. No highly leveraged buyers."* (Missouri)

NOTE: These are generally verbatim quotes, but some were lightly edited to improve readability.

## Survey Results

### Farm Income and Expenditures

Farm income decreased in the first quarter of 2014 compared with the same period a year earlier. Farm income levels in the second quarter of 2014 are also expected to be lower than a year earlier (index value of 80). Nonetheless, the forward-looking index for the second quarter of 2014 is slightly less pessimistic than the expectations were for the first quarter (index value of 76). Readers are cautioned that farm income is highly volatile and subject to seasonal patterns that occur in the agricultural sector.

Table 1 also shows that a slight majority of survey respondents (index value of 102) believe that farm household spending increased in the first quarter of 2014 compared with a year earlier. By contrast, a majority of respondents reported that capital equipment spending in the first quarter was below year-earlier levels (index value of 90). However,



The survey is produced by staff at the Federal Reserve Bank of St. Louis: Gary Corner, Senior Examiner, Bank Supervision and Regulation Division; and Lowell R. Ricketts, Senior Research Associate, and Kevin L. Kliesen, Business Economist and Research Officer, Research Division. We thank staff at the Federal Reserve Bank of Kansas City for initial and ongoing assistance with the agricultural credit survey. If you have comments or questions, please contact Kevin Kliesen at [kevin.l.kliesen@stls.frb.org](mailto:kevin.l.kliesen@stls.frb.org).

The Eighth Federal Reserve District is headquartered in St. Louis and includes branch offices in Little Rock, Louisville, and Memphis; the District includes the state of Arkansas and portions of Illinois, Indiana, Kentucky, Mississippi, Missouri, and Tennessee.

**Table 1**

**Income and Expenditures, Land Values, and Cash Rents**

**Income and expenditures (versus year-ago levels)**

Farm income	
2014:Q1 (actual)	91
2014:Q2 (expected)	80
Household spending	
2014:Q1 (actual)	102
2014:Q2 (expected)	93
Capital spending	
2014:Q1 (actual)	90
2014:Q2 (expected)	73

**Land values (per acre)**

Quality farmland	\$5,496
Expected 3-month trend	89
Ranchland or pastureland	\$2,499
Expected 3-month trend	100

**Cash rents (per acre)**

Quality farmland	\$182
Expected 3-month trend	102
Ranchland or pastureland	\$62
Expected 3-month trend	108

NOTE: In the survey, bankers were asked two types of questions: (i) estimates of current dollar values and interest rates and (ii) expectations for future values. Dollar values and rates refer to the first quarter of 2014. Regarding expectations for future values, bankers were asked whether they expect values to increase, decrease, or remain constant (either relative to a year ago or relative to current values; see table descriptions). A "diffusion index" value was then created for "income and expenditures" and for the 3-month trends in "land values" and "cash rents" (per acre). The diffusion index was created by subtracting the percent of bankers that responded "decrease" from the percent that responded "increase" and then adding 100. Index values from 0 to 99 indicate overall expectations of decreasing values; index values from 101 to 200 indicate overall expectations of increasing values; and an index value of 100 indicates an even split.

The results reported in these tables refer to the entire Eighth Federal Reserve District.

**Table 2**

**Expected and Actual 2014:Q1 Variables (versus year-ago levels)**

**Farm income**

Expected	76
Actual	91
Difference	15

**Household spending**

Expected	88
Actual	102
Difference	15

**Capital spending**

Expected	78
Actual	90
Difference	12

**Demand for loans**

Expected	114
Actual	122
Difference	8

**Availability of funds**

Expected	108
Actual	118
Difference	9

**Rate of loan repayment**

Expected	100
Actual	111
Difference	11

NOTE: All variables are reported using a diffusion index. See the note below Table 1 for details about interpreting diffusion indexes. Components may not sum to totals due to rounding.

despite lower capital spending the actual level did surpass their prior expectation (index value of 78) reported last quarter. Consistent with their more cautious view of farm income, bankers expect that household and capital equipment expenditures in the second quarter of 2014 will follow the trend and decline from year-earlier levels.

**Current and Expected Land Values and Cash Rents**

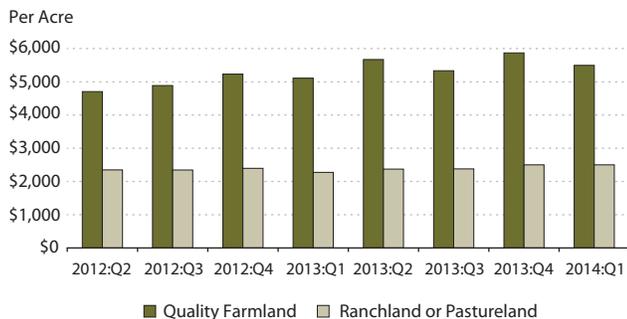
Table 1 also reports values for farmland and cash rents. Our survey found that quality farmland values across the

District averaged \$5,496 per acre in the first quarter of 2014. The first-quarter average was modestly lower than the fourth-quarter average of \$5,868 per acre (see Figure 1).<sup>3</sup> Yet when measured from a year earlier, the value of quality farmland in the Eighth District increased by 7.5 percent.

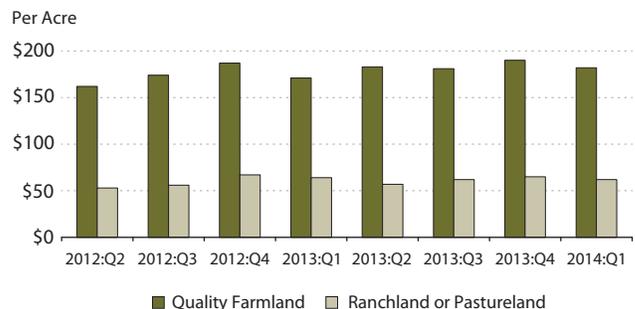
The value of Eighth District ranchland or pastureland averaged \$2,499 per acre in the first quarter of 2014, essentially unchanged from last quarter. Compared with a year earlier, the value of ranchland or pastureland increased 9.9 percent. Cash rents for quality farmland across the District averaged \$182 per acre in the first quarter, down 4 percent from the fourth quarter. Cash rents for ranchland or pastureland also fell slightly in the first quarter (\$62 per acre) compared with their fourth-quarter average (\$65 per acre).

For the third consecutive survey, proportionately more bankers expect quality farmland values to decline over the next three months relative to a year earlier (an index value

**Figure 1**  
**Average Land Values Across the Eighth District**



**Figure 2**  
**Average Cash Rents Across the Eighth District**



**Table 3**  
**Lending Conditions**

**Loans (versus year-ago levels)**

Demand for loans	
2014:Q1 (actual)	122
2014:Q2 (expected)	107
Availability of funds	
2014:Q1 (actual)	118
2014:Q2 (expected)	112
Rate of loan repayment	
2014:Q1 (actual)	111
2014:Q2 (expected)	100

NOTE: Demand for loans, availability of funds, and rate of loan repayment are reported using a diffusion index. See the note below Table 1 for details about interpreting diffusion indexes.

**Table 4**  
**Interest Rates**

	2014:Q1	2013:Q4	Change
<b>Interest rates (%)</b>			
Operating			
Fixed	5.28	5.39	-0.12
Variable	4.84	5.01	-0.17
Machinery/ intermediate-term			
Fixed	5.53	5.65	-0.12
Variable	5.02	5.21	-0.19
Farm real estate			
Fixed	5.20	5.23	-0.03
Variable	4.77	4.93	-0.16

of 89). In contrast, bankers are evenly split on the future value of ranchland or pastureland (an index value of 100) while expectations for cash rents for quality farmland reflect a slight upward bias (index value of 102). Respondents have a slightly stronger expectation of upward movement of average cash rents for ranchland or pastureland over the next three months, relative to a year earlier (index value of 108). Figures 1 and 2 show farmland values and average cash rents since the inception of the *Agricultural Finance Monitor* (second quarter of 2012).

**Outcomes Relative to Previous-Quarter Expectations**

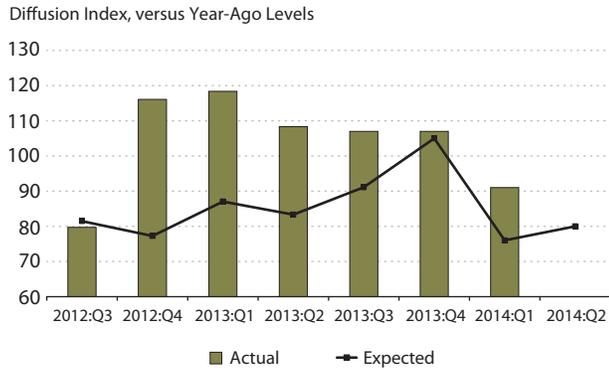
Table 2 provides an assessment of farm income, expenditures, and several other key variables in the first quarter of 2014 relative to bankers' expectations from three months

earlier: Respondent reports on actual farm income, household spending, and capital spending all came in stronger than expectations. In terms of financial variables, the demand for loans and the supply of funds to extend loans were modestly higher than respondents expected. In addition, loan repayments in the first quarter proceeded at a modestly faster pace than bankers expected three months ago. Figures 3 through 8 plot the actual and expected values for the six variables shown in Table 2 since the second quarter of 2012.

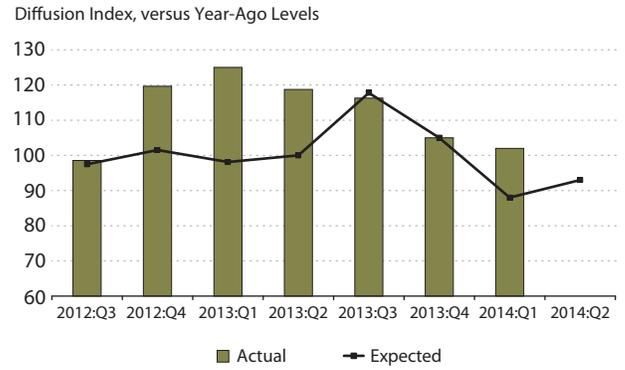
**Financial Conditions**

Table 3 reports our survey respondents' assessment of key commercial lending indicators for the farm sector in the Eighth District. Our survey showed that the demand

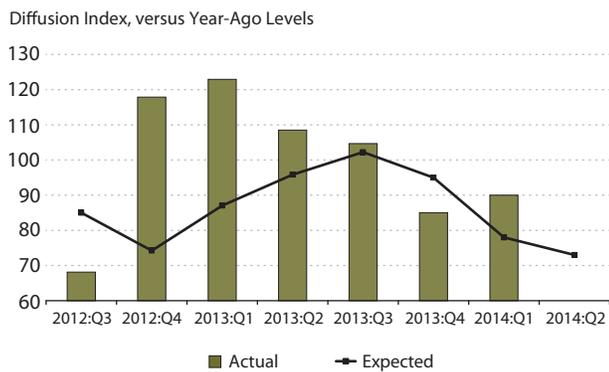
**Figure 3**  
**Farm Income: Expected and Actual Values**



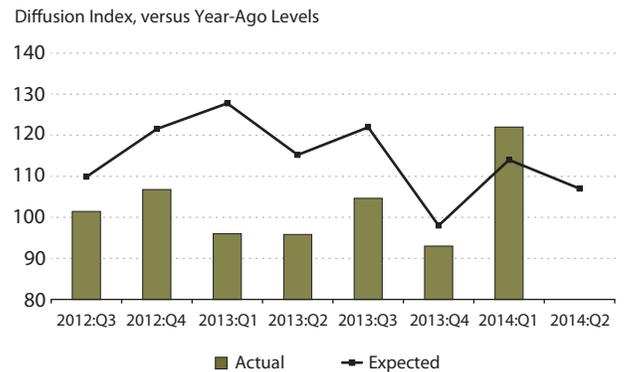
**Figure 4**  
**Household Spending: Expected and Actual Values**



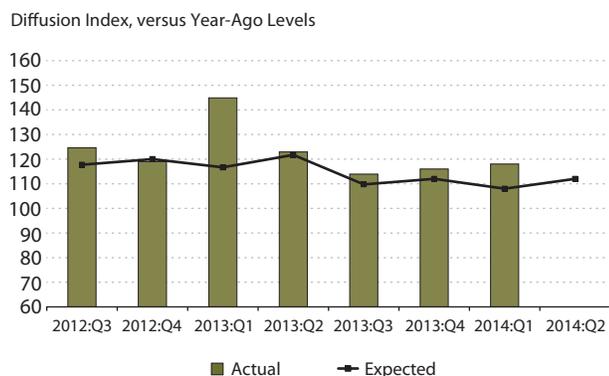
**Figure 5**  
**Capital Spending: Expected and Actual Values**



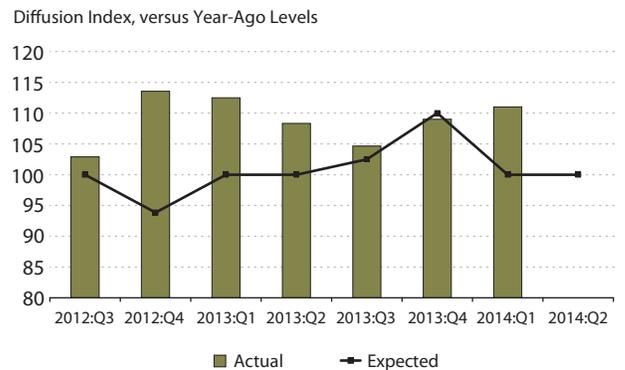
**Figure 6**  
**Demand for Loans: Expected and Actual Values**



**Figure 7**  
**Availability of Funds: Expected and Actual Values**



**Figure 8**  
**Rate of Loan Repayment: Expected and Actual Values**



for farm loans in the first quarter of 2014 was notably higher than a year ago (index value of 122). Further, on balance, more respondents expect that higher demand for farm loans will continue in the second quarter of 2014 compared with a year earlier (index value of 107). Survey respondents reported that more funds were available to prospective borrowers in the first quarter than at the same time last year (index value of 118) and that adequate funds are also expected to be available in the second quarter of 2014. District loan repayment rates in the first quarter were above year-earlier levels (index value of 111), but repayment rates are expected to return to year-earlier levels in the second quarter of 2014 (index value of 100).

Table 4 reports average interest rates on fixed- and variable-rate loan products across the District. During the first quarter of 2014, interest rates on fixed-rate loans declined modestly from their fourth-quarter averages across two of three major loan types. The yield on farm real estate fixed-rate loans was reported firmest across both fixed and variable loan types. Interest rates on variable-rate loans experienced the highest decline from three months earlier when compared with the change in yield across all three loan categories.

### Special Question

We asked our agricultural bankers one additional question in this quarter’s survey. This is reported in Table 5. The question pertains to the change in lending competition relative to the expectation of lower farm sector income in 2014. Three of four bankers believe that the lower farm-sector income expectation has had no change on lending competition. On the other hand, 16 percent responded that competition has indeed increased, while just 9 percent have affirmed some easing of lending competition. Overall, slightly better than 90 percent of responses indicate that, despite lower farm income expectations, lending competition remains as strong as or stronger in some markets than in previous periods. ■

**Table 5**

#### Special Question

In your primary market(s), has agricultural lending competition changed with the expectation of lower farm income?	% of responses
No change	75
Competition has decreased	9
Competition has increased	16
Other	0

### Notes

<sup>1</sup> An agricultural bank, for survey purposes, is defined as a bank for which at least 15 percent of its total loans outstanding finances agricultural production or purchases of farmland, farm equipment, or farm structures.

<sup>2</sup> Readers are also cautioned that the number of responses in each zone is relatively small. Statistically, this tends to suggest that the responses in each zone have a larger plus-or-minus margin of error than for the District as a whole. We have eliminated the zone-by-zone responses until the response rate improves.

<sup>3</sup> Since the composition and number of survey respondents tends to change each quarter, it might be more accurate to compare the results reported from the same respondents to this survey and the previous survey (fourth quarter of 2013). Such an exercise reveals that the average land price of quality farmland in the District was \$5,829 per acre in the first quarter of 2014, which is a 1.9 percent decrease from the \$5,943 per acre average reported in the fourth quarter of 2013.

