

Selected Quotes from Banker Respondents Across the Eighth Federal Reserve District

"Poultry expansion has slowed down, but some expansion is still in the pipeline." (Arkansas)

"Farmers continue to pay a premium for farm ground in our area. Buyers are older farmers that either have substantial cash down or are able to pledge additional acres. We are surprised that prices have held so strong considering low commodity prices. There have been smaller land sales (40-acre tracts) that have sold in the \$15,000 per acre range in the first quarter of 2016." (Illinois)

"Lower commodity prices, in addition to no commodity subsidies, have made it difficult to realize a positive cash flow projection for 2016." (Tennessee)

"Funding needs are normally high this time of year because of slow grain sales and the need to purchase inputs for the coming year. Conditions are definitely trending toward tighter cash flows. Discussions with our local Farm Service Agency (FSA) officer indicates that guaranteed loans are in high demand. We are expecting lower prices for grain this fall and thus for farm income to be down sharply this year. On a brighter note, crop insurance guarantees are still excellent, which is controlling downside risks." (Missouri)

"Last year's extremely wet conditions that affected the soybean and corn crops have severely affected cash flows and profits." (Missouri)

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

The sixteenth quarterly survey of agricultural credit conditions was conducted by the Federal Reserve Bank of St. Louis from March 15, 2016, through March 31, 2016. The results presented here are based on the responses from 32 agricultural banks within the boundaries of the Eighth Federal Reserve District.¹ The Eighth District includes all or parts of seven Midwest and Mid-South states. These data are not adjusted for any seasonal patterns. 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.²

Executive Summary

According to the latest survey of agricultural bankers in the Eighth Federal Reserve District, a majority of bankers reported that farm income in their area declined in the first quarter of 2016 relative to a year earlier. The erosion in the farm sector is continuing to reduce farm household expenditures and capital spending from year-earlier levels, as well as putting downward pressure on farmland values and cash rents. On average, Eighth District agricultural bankers reported that the value of quality farmland declined by 6.4 percent from year-earlier levels. This decline surpassed the previous quarter's decline (2.5 percent) and was the largest drop since our survey began in the second quarter of 2012. This survey found that, relative to three months earlier, proportionately more bankers than expected reported a higher demand for loans and availability of funds in the first quarter compared with a year earlier. However, the rate of loan repayment was worse than expected. Compared with their average in the fourth quarter of 2015, interest rates on fixed-rate loans fell slightly, while interest rates on variable-rate loans rose slightly. This survey contained two special questions that asked bankers about their bank's farm loan portfolio repayment rates and the percentage of their customers who had borrowed up to their loan limits. On balance, agricultural bankers in the Eighth District reported no significant repayment problems and that a sizable majority of their customers had not yet borrowed up to their loan limits.

Survey Results

Farm Income and Expenditures

A majority of Eighth District agricultural bankers reported that farm income in their area declined in the first quarter of 2016 relative to a year earlier. In the first quarter, the index value of farm income was 20, down modestly from the previous quarter but the lowest level in the *Agricultural Finance Monitor's* relatively short history. [NOTE: An index value of 100 would indicate that an equal percentage of bankers reported increases and decreases in farm income relative to a year earlier.] Indeed, the index of farm income has been below the breakeven level of 100 for the eleventh quarter in the past 12 quarters (see Table 1 and Figure 3). Although the percentage of bankers expecting declines in farm income in the second quarter of 2016 continued to outweigh the percentage expecting increases in farm income, the index was modestly higher than its first-quarter value (index value of 28).

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 2016. 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 1
Income and Expenditures (versus year-ago levels)

	Index value
Farm income	
2016:Q1 (actual)	20
2016:Q2 (expected)	28
Household spending	
2016:Q1 (actual)	50
2016:Q2 (expected)	54
Capital spending	
2016:Q1 (actual)	30
2016:Q2 (expected)	21

NOTE: Actual and expected values for the indexes use all responses from the 2016:Q1 survey.

Table 1 also reports the assessment of Eighth District agricultural bankers on household expenditures and capital spending by farmers and ranchers in their area. Not surprisingly, the majority of bankers reported that the downturn in the farm sector is continuing to reduce farm household expenditures and capital spending from year-earlier levels. In the first quarter of 2016, the index of household spending registered 50, down sharply from the previous quarter’s value of 72. Similarly, the index of capital equipment expenditures fell from 38 in the fourth quarter of 2015 to 30 in the first quarter of 2016. As with the farm income index, the farm household spending and capital spending indexes registered all-time lows in the first quarter of 2016. A majority of agricultural bankers believe that household spending and capital spending will continue to decline in the second quarter of 2016 compared with a year earlier.

Current and Expected Land Values and Cash Rents

As reported in Table 2, quality farmland values continued to decline from year-earlier levels, though rangeland and pastureland values held steady. In the first quarter of

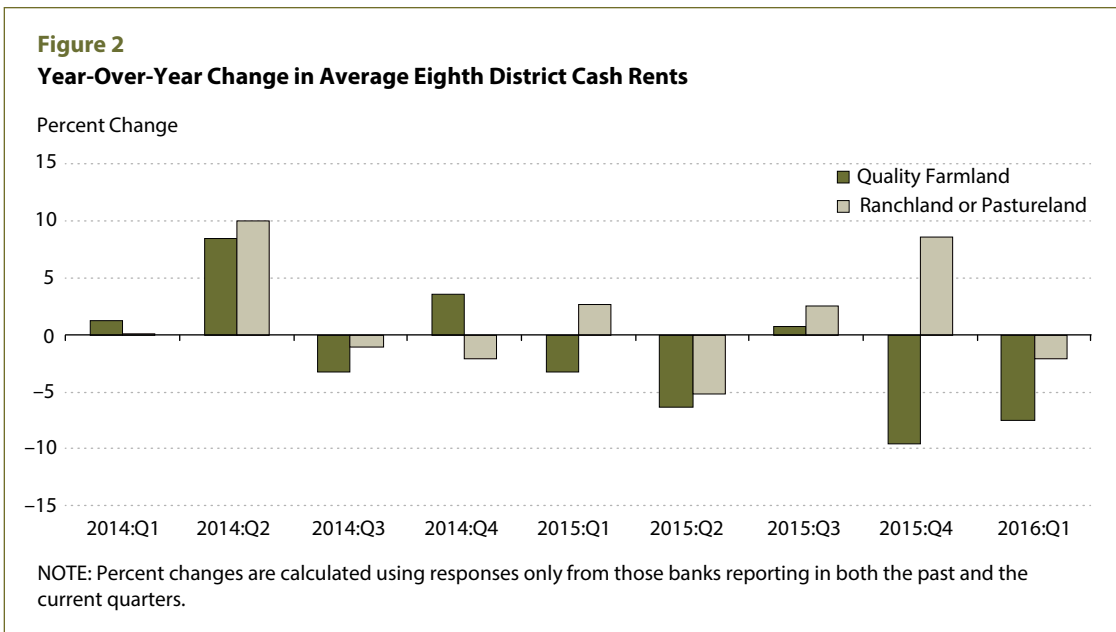
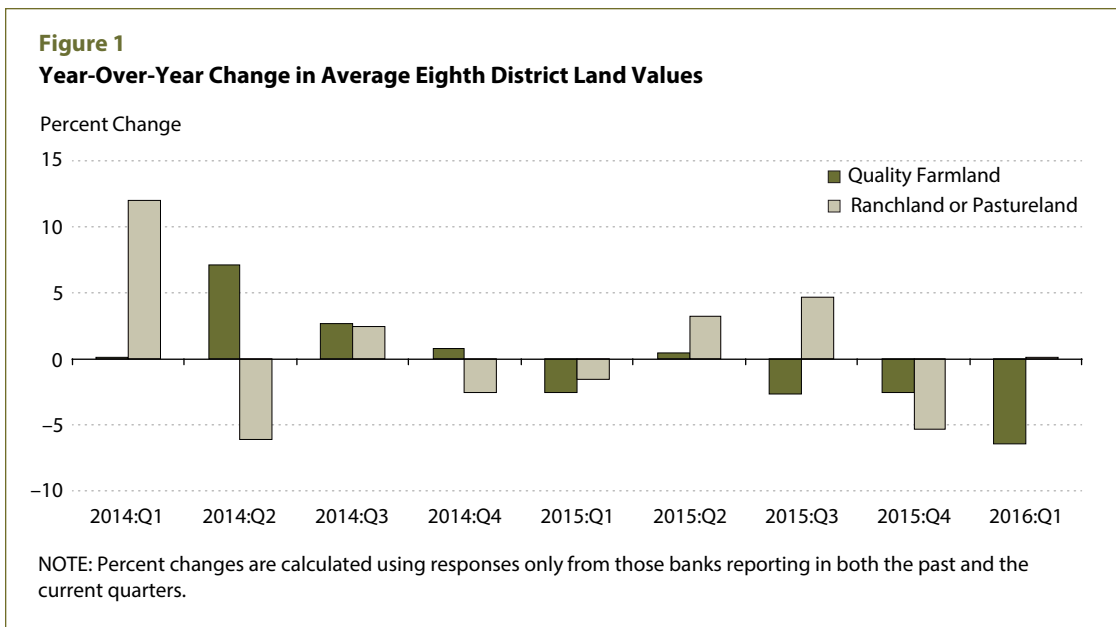
Table 2
Land Values and Cash Rents (year/year change)

	Percent or index value
Land values	
Quality farmland	-6.4%
Expected 3-month trend	61
Rangeland or pastureland	0.1%
Expected 3-month trend	75
Cash rents	
Quality farmland	-7.5%
Expected 3-month trend	63
Rangeland or pastureland	-2.2%
Expected 3-month trend	63

NOTE: Changes in land values and cash rents are calculated using a common sample of respondents for the most recent survey as well as the survey conducted a year ago. Expected trends of land values and cash rents are calculated using all responses from the 2016:Q1 survey. Expected trends are presented as a diffusion index; see note above for details about interpreting diffusion indexes.

2016, quality farmland values were 6.4 percent below last year’s level (on average). This decline surpassed the previous quarter’s decline (2.5 percent) and was the largest drop in the survey’s history. Quality farmland values have now declined from year-earlier levels in four of the past five quarters. After falling by a relatively large amount, 5.3 percent, in the fourth quarter of 2015, rangeland or pastureland values were about unchanged in the first quarter of 2016 relative to a year earlier (up 0.1 percent). As indicated by an index value below 100, proportionately more bankers expect the values of both quality farmland (index value of 61) and rangeland or pastureland (index value of 75) to decline in the second quarter of 2016 compared with a year ago.

Table 2 indicates that cash rents for quality farmland and rangeland or pastureland also fell in the first quarter



of 2016 compared with a year earlier. After falling by 9.5 percent in the fourth quarter of 2015, cash rents on quality farmland fell by an additional 7.5 percent in the first quarter (relative to a year earlier). After increasing over the previous two quarters, cash rents for ranchland or pastureland fell by an average of 2.2 percent in the first quarter of 2016. Proportionately more bankers expect that cash rents for both quality farmland and pastureland or ranchland will decline in the second quarter, as indicated by their respective index values of 63. A historical view of the data is provided in Figures 1 and 2.³

Outcomes Relative to Previous-Quarter Expectations

Table 3 reports farm income, farm household expenditures, and several other key variables in the first quarter relative to the expectations of agricultural bankers from the survey taken three months earlier (fourth quarter of 2015). The results suggest that farm income fell in line with expectations, but proportionately more bankers reported that household spending and capital spending fell compared with year-earlier levels. By contrast, proportionately more bankers than expected reported a higher demand for loans and availability of funds from a year earlier. However,

Table 3

2016:Q1 Variables (versus year-ago levels)

	Index value
Farm income	
Expected	22
Actual	22
Difference	0
Household spending	
Expected	61
Actual	48
Difference	-13
Capital spending	
Expected	30
Actual	17
Difference	-13
Demand for loans	
Expected	120
Actual	130
Difference	10
Availability of funds	
Expected	95
Actual	115
Difference	20
Rate of loan repayment	
Expected	75
Actual	55
Difference	-20

NOTE: All variables are reported using a diffusion index. See the note above Table 1 for details about interpreting diffusion indexes. For comparison purposes, we compute diffusion indexes using only those banks that responded to the given questions in both the past and the current quarters. Components may not sum to totals due to rounding.

Table 4

Lending Conditions (versus year-ago levels)

	Index value
Demand for loans	
2016:Q1 (actual)	113
2016:Q2 (expected)	104
Availability of funds	
2016:Q1 (actual)	107
2016:Q2 (expected)	104
Rate of loan repayment	
2016:Q1 (actual)	53
2016:Q2 (expected)	56

NOTE: Demand for loans, availability of funds, and rate of loan repayment are reported using a diffusion index. See the note above Table 1 for details about interpreting diffusion indexes. Actual and expected values for indices use all responses from the 2016:Q1 survey.

the rate of loan repayment was worse than expected, as indicated by the actual index value for the first quarter of 2016 (55) compared with the expected value from three months earlier (75). Indeed, as seen in Figure 8, the index of loan repayment fell to its lowest level on record in the first quarter. Figures 3 through 8 show the indexes of actual and expected farm income, household spending, capital spending, loan demand, availability of funds, and loan repayment rates since the second quarter of 2013.

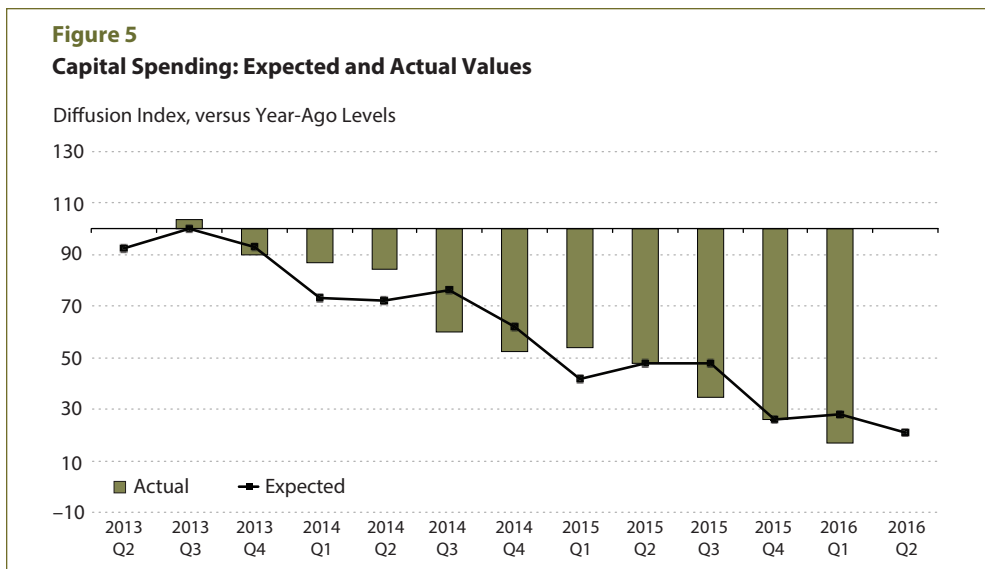
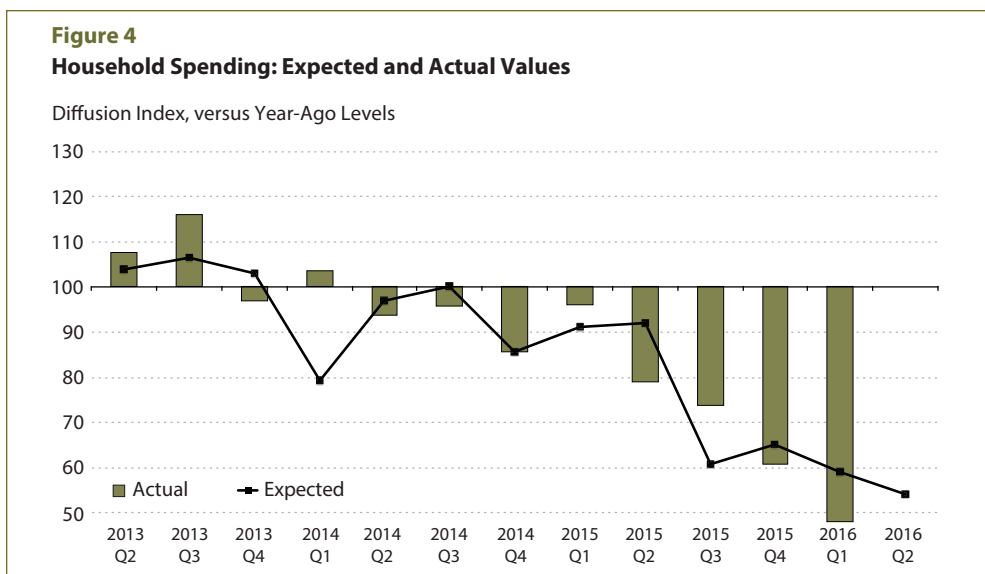
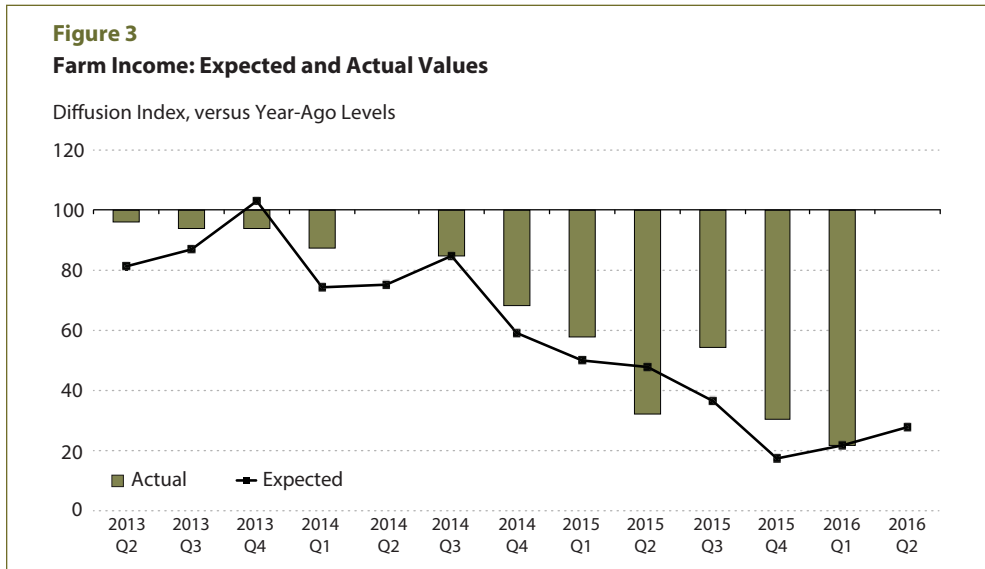
Financial Conditions

Table 4 reports our survey respondents’ assessment of current and prospective bank lending conditions in the

Eighth District in the first and second quarters of 2016, respectively. [NOTE: Each assessment is relative to a year earlier.] As noted in previous surveys, the actual index values reported in Table 4 may differ from those reported in Table 3 because Table 4 uses all responses to the first quarter 2016 survey, instead of a common sample between the current and previous surveys. The results from Table 4 suggest that proportionately fewer bankers—though still a majority—expect an increase in loan demand in the second quarter of 2016 compared with the previous quarter (index value of 104 versus 113). Similar sentiment was expressed for the availability of funds in the second quarter relative to the first quarter. The percentage of bankers expecting loan repayment rates to be lower than a year earlier in the second quarter is comparable to the first-quarter responses—index values of 56 versus 53, respectively.

Table 5 presents average interest rates on fixed- and variable-rate loan products in the fourth quarter of 2015 and the first quarter of 2016. Similar to our previous survey, interest rates across the three fixed- and variable-rate loan categories changed modestly during the first quarter of 2016 (compared with the previous quarter). Interest rates on fixed-rate operating loans and loans to purchase machinery or for other intermediate-term loans fell by an average of 9 and 6 basis points, respectively, whereas variable-rate loans for these three loan types rose by an average of 19 basis points. However, interest rates on variable-rate loans secured by real estate rose by only 2 basis points.

NOTE: All variables in Figures 3 through 8 are reported using a diffusion index. See the note above Table 1 for details about interpreting diffusion indexes. For comparison purposes, we compute diffusion indexes using only those banks that responded to the given questions in both the past and the current quarters. Expected values for indices in 2016:Q2 are calculated using only the responses from the 2016:Q1 survey.



NOTE: All variables in Figures 3 through 8 are reported using a diffusion index. See the note above Table 1 for details about interpreting diffusion indexes. For comparison purposes, we compute diffusion indexes using only those banks that responded to the given questions in both the past and the current quarters. Expected values for indices in 2016:Q2 are calculated using only the responses from the 2016:Q1 survey.

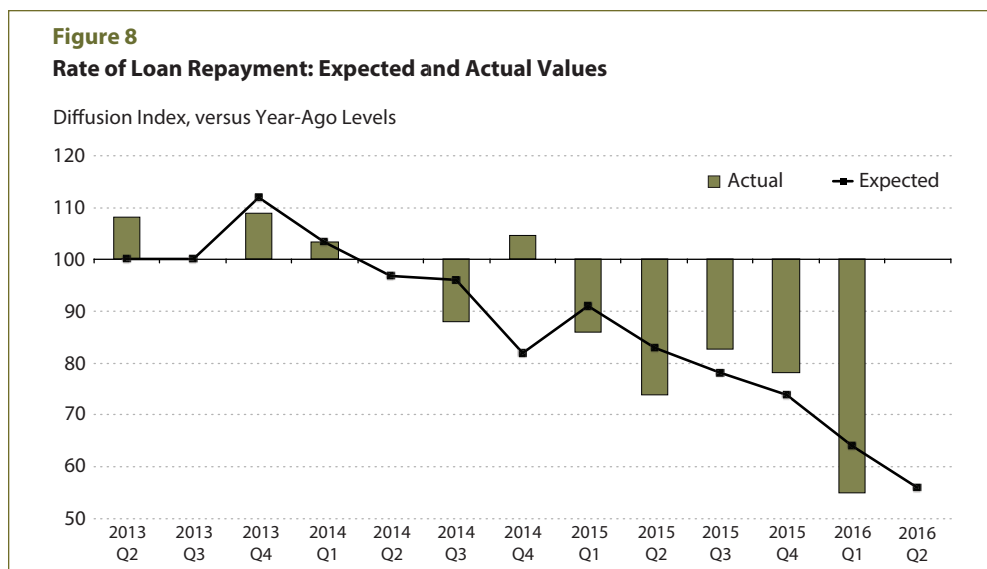
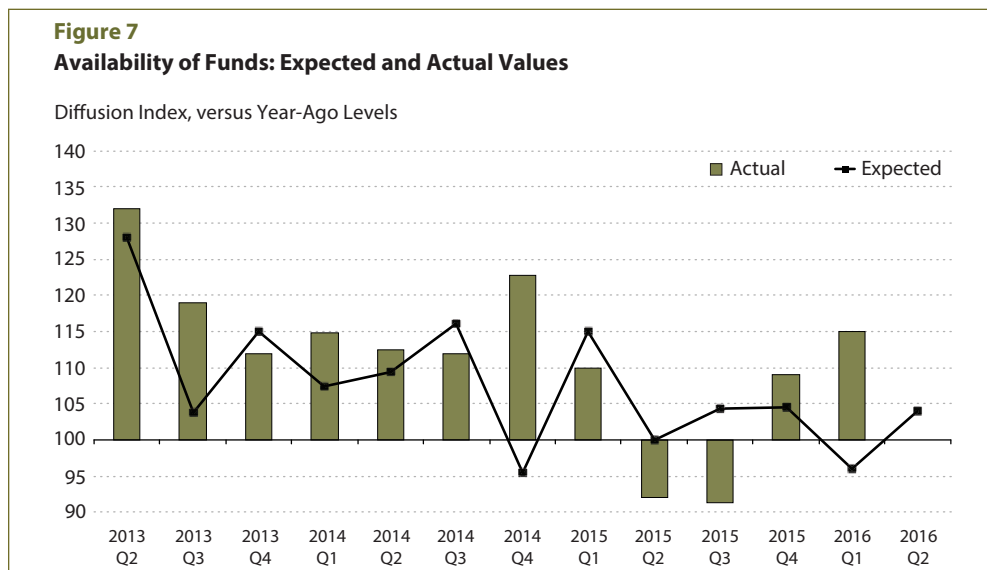
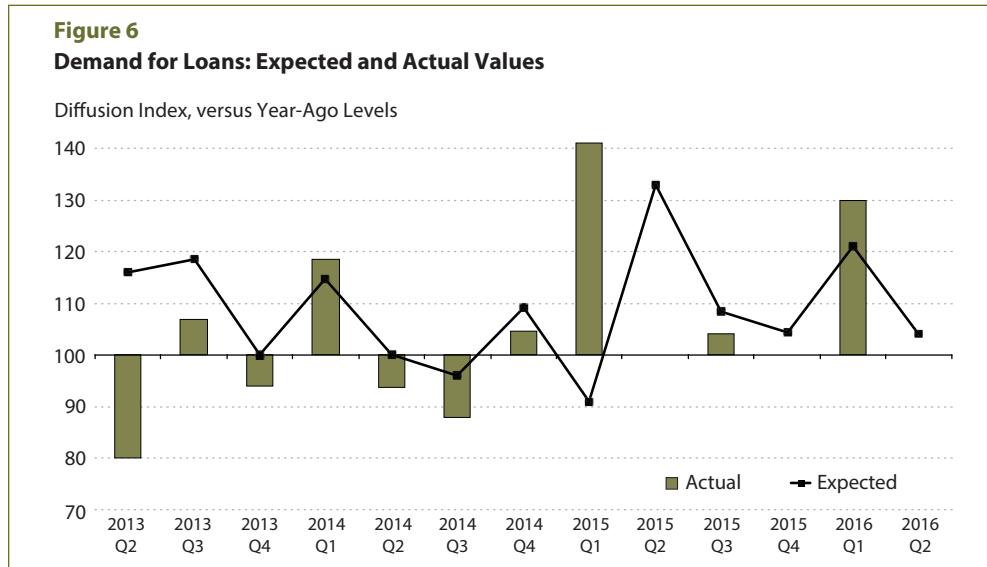


Table 5

Interest Rates (%)

	2016:Q1	2015:Q4	Change
Operating			
Fixed	5.42	5.51	-0.09
Variable	5.30	5.09	0.21
Machinery/ intermediate-term			
Fixed	5.68	5.74	-0.06
Variable	5.45	5.28	0.17
Farm real estate			
Fixed	5.10	5.14	-0.03
Variable	4.97	4.95	0.02

NOTE: For comparison purposes, we calculate interest rates in both periods using a common sample of banks that responded to the given questions in both the past and the current quarters. Components may not sum to totals due to rounding.

Table 6

Special Questions

Please indicate the percentage of the dollar amount of your bank's farm loan portfolio that currently falls within each of the following repayment classifications.

<i>Percent of farm loans</i>	
No significant repayment problems	78
Minor repayment problems which can be remedied fairly easily	14
Major repayment problems requiring more collateral and/or long-term workouts	7
Severe repayment problems which will likely result in loan losses and/or require forced sales of borrower's real assets	2
	100

Approximately what percent of your customers have borrowed up to their loan limit?

<i>Percent of customers</i>	
	34

Special Questions

Table 6 reports the results of two special questions about repayment rates for banks' farm loan portfolios. The first question asked bankers what percentage of the dollar amount of their bank's portfolio falls within four classifications: (i) no significant repayment problems, (ii) minor repayment problems, (iii) major repayment problems, and (iv) severe repayment problems. The vast majority of loan portfolios—an average of 78 percent—were classified in the first category (no significant repayment problems). An average of 14 percent of portfolios was classified as having an issue that can be remedied fairly easily, while an average of 7 percent of portfolios was classified as having a major repayment problem requiring more collateral and/or a long-term workout arrangement. Only 2 percent of portfolios was classified as having a severe repayment problem that will likely result in loan losses and/or a forced sale of the borrower's real assets.

The second question asked bankers what percent of their customers have borrowed up to their loan limit. Our survey showed that, on average, about a third (34 percent) of their customers have borrowed up to their loan limit. ■

Notes

¹ 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. As of December 31, 2015, there were 240 banks in the Eighth Federal Reserve District that met this criteria.

² 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.

³ The annual percentage changes in land values and cash rents are based on common responses. That is, a respondent must have been in both the 2016:Q1 and 2015:Q1 samples.

The survey is produced by staff at the Federal Reserve Bank of St. Louis: Larry D. Sherrer, Senior Examiner, Banking Supervision and Regulation Division; Jonas Crews, Research Associate, and Usa Kerdnunvong and Joseph T. McGillicuddy, Senior Research Associates; 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.

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.

Posted on May 12, 2016

