The eighteenth quarterly survey of agricultural credit conditions was conducted by the Federal Reserve Bank of St. Louis from September 15, 2016, through September 30, 2016. The results presented here are based on the responses from 34 agricultural banks within the boundaries of the Eighth Federal Reserve District. 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, particularly with respect to agricultural lending conditions. Users are also cautioned against drawing firm conclusions about longer-run trends in farmland values.

Executive Summary

According to the latest survey of agricultural bankers in the Eighth Federal Reserve District, a solid majority reported that farm income declined in the third quarter of 2016 relative to a year ago. Consistent with previous surveys, proportionately more bankers continue to report that falling farm income is pressuring farmers to trim their household expenditures and farming- and ranching-related capital outlays. Given the difficulties in the farm sector, it is perhaps surprising that our survey results showed that quality farmland values were unchanged and ranch or pastureland values were up slightly from a year earlier in the third quarter. Nonetheless, cash rents for both quality farmland and ranch or pastureland declined modestly in the third quarter. Our survey results also revealed that demand for loans in the third quarter was a bit stronger than what was expected three months earlier, while the availability of funds mostly met expectations. Loan repayment rates were slower in the third quarter, but consistent with bankers’ expectations from three months earlier. Our two special questions focused on those farmers who are experiencing loan repayment issues. According to our lender survey, the largest increase in repayment problems is for operating lines of credit. A majority of bankers believe that, in response, unpaid portions of operating lines of credit will require additional collateral to roll over this debt.

Survey Results

Farm Income and Expenditures

Survey results continue to show that a majority of bankers report a decrease in farm income compared with a year earlier. In the third quarter, the diffusion index of farm income was 41 (see Table 1). Although this was modestly higher than in the second quarter (24), the third-quarter survey was the eleventh consecutive quarter where the index of farm income was below 100. [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.] Expectations for the fourth quarter are slightly better (index value of 47), but proportionately more bankers continue to expect a decline in farm income from a year earlier. Bankers hold broadly similar views of farm household spending and farm capital expenditures. Namely, a majority of bankers continue to report declines in household spending and capital expenditures.
In the third quarter relative to a year earlier. As reflected in the smaller diffusion index, a slightly larger percentage of bankers expect that household spending and capital expenditures will also fall in the fourth quarter compared with a year earlier. Readers are cautioned that farm income is highly volatile and subject to seasonal fluctuations.

Current and Expected Land Values and Cash Rents

Trends in land values improved slightly in the third quarter according to the results of the survey reported in Table 2. Compared with four quarters earlier, quality farmland values in the Eighth District were unchanged in the third quarter. This compares favorably with the second quarter, when quality farmland values fell by 1 percent from a year earlier. Similarly, ranch or pastureland values rose 1.1 percent in the third quarter after falling by 7.4 percent in the second quarter. Still, proportionately more bankers expect values to decline over the next 3 months for both quality farmland and ranch or pastureland. By contrast, cash rents for quality farmland and ranch or pastureland fell by 6.1 percent and 3.9 percent, respectively, in the third quarter relative to a year earlier. Like land values, bankers expect that cash rents will decline in the fourth quarter.

Outcomes Relative to Previous-Quarter Expectations

Table 3 reports farm income, household expenditures, and several other key economic metrics in the third quarter relative to the expectations of agricultural bankers from the survey taken in the second quarter of 2016. [NOTE: For Table 3, we compute diffusion indexes using only those banks that responded to the first- and second-quarter surveys.] The results show that proportionately more bankers reported that farm incomes and capital expenditures declined in the third quarter compared with their expectations from three months earlier. However, as indicated by an expected value of 43 and actual value of 57,
proportionately fewer bankers reported that household spending declined in the third quarter compared with their expectations from three months earlier. In terms of key financial indicators, bankers reported that the demand for loans in the third quarter was a bit stronger than expected from three months earlier, while the availability of funds was slightly less than expected. Loan repayment rates, however, were in line with expectations. Components displayed here may not sum to totals due to rounding.

Financial Conditions

Table 4 reports our survey respondents’ assessment of current and prospective bank lending conditions in the Eighth District in the third and fourth 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 third quarter 2016 survey, instead of a common sample between...
the current and previous surveys. The results from Table 4 suggest that proportionately more bankers expect an increase in loan demand in the fourth quarter of 2016 relative to a year earlier (index value of 121). By contrast, the index value of loan demand was 100 in the third quarter, which indicated no change in demand from a year earlier. However, a slightly smaller percentage of bankers expect the availability of funds to decline in the fourth quarter of 2016 (index value of 93) compared with the third quarter (index value of 100). Although the index of loan repayment rates expected in the fourth quarter (93) is larger than that reported in the third quarter (81), the majority of respondents still report that loan repayment rates remain below year-earlier levels.

Table 5 presents average interest rates on fixed- and variable-rate loan products in the second and third quarters of 2016. Interest rates on fixed-rate operating loans were unchanged in the third quarter, while rates on fixed-rate loans for machinery and other intermediate-term investments fell 5 basis points in the third quarter. By contrast, fixed-rate farm real estate loans rose by a healthy 25 basis points in the third quarter to an average of 5.37 percent. For variable-rate loan products, rates fell modestly for operating loans, but increased slightly for machinery and other intermediate-term investments and farm real estate loans.

### Special Questions

Table 6 reports the results of two special questions that we posed to our agricultural bankers. Given recent declines in farm incomes, we asked bankers about their expectations for loan repayment problems with their borrowers and how these problems were likely to be resolved. The first question asked bankers to identify which loan categories were expected to have the largest increase in repayment problems. More than half of bankers (59 percent) reported that operating loans were expected to have the largest repayment problems. More than half of bankers (59 percent) reported that operating loans were expected to have the largest repayment problems; 13 percent of bankers identified machinery and equipment loans as an area of concern. However, nearly one in five bankers (19 percent) reported that they anticipated no increase in loan repayment problems.

The second question asked bankers about the likely outcome they expect for borrowers who are experiencing loan repayment problems. A little more than half of respon-
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:Q4 are calculated using only the responses from the 2016:Q3 survey. There is no actual value (and hence no bar) for the final quarter shown in this figure. For all previous quarters, if no bar is shown, the actual value is 100.
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:Q4 are calculated using only the responses from the 2016:Q3 survey. There is no actual value (and hence no bar) for the final quarter shown in this figure. For all previous quarters, if no bar is shown, the actual value is 100.
(53 percent) reported that borrowers will be forced to put up additional collateral to cover the unpaid portion of their operating line of credit. A little more than one in five bankers (22 percent) believe that some belt-tightening will be required, but with no defaults expected; 19 percent of bankers expect to see a longer-term workout with their existing borrower. Only 3 percent of bankers expect their borrowers to refinance with another lender, while 3 percent expect their borrowers to reduce the size of their operations or exit the farming industry.

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 September 30, 2016, there were 252 banks in the Eighth Federal Reserve District that met the 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.