



## Farm Loan Volumes Holding at High Levels

by: Nate Kauffman, Courtney Cowley and Matt Clark

January 26, 2016

Levels of non-real estate farm lending at commercial banks remained high in the fourth quarter of 2015 despite a modest decline from a year earlier.

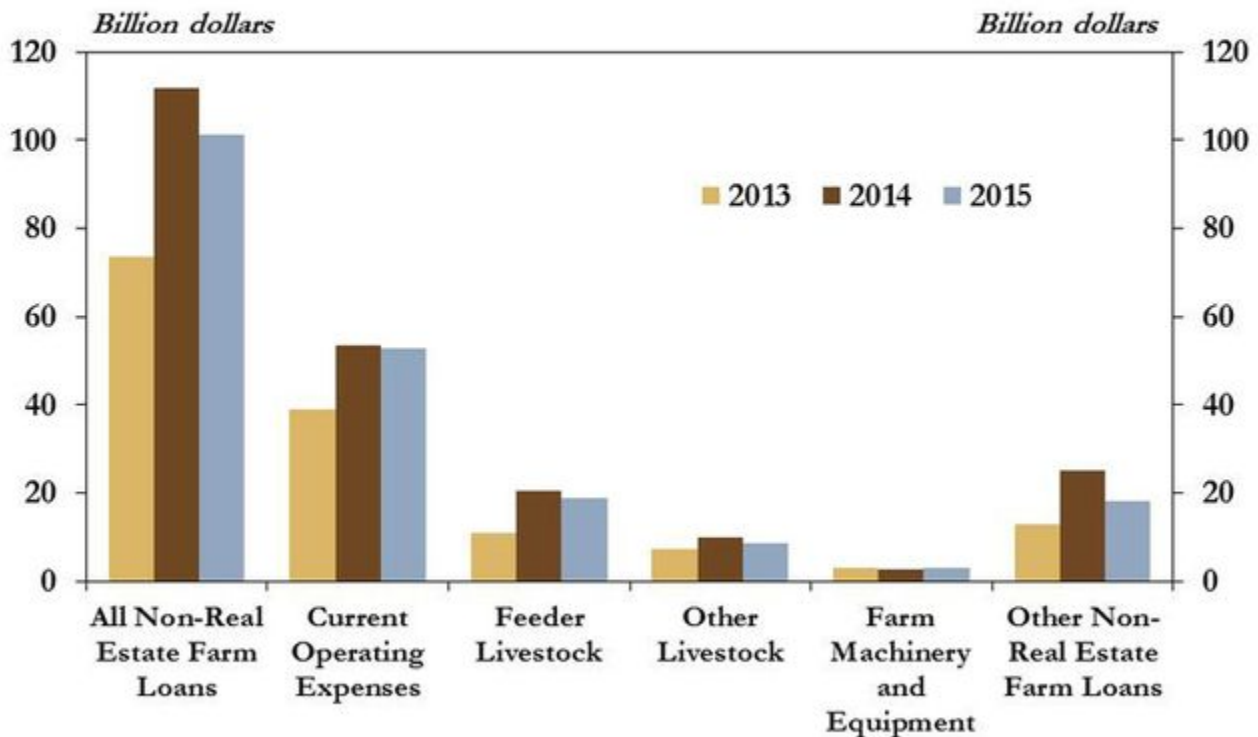
---

*Levels of non-real estate farm lending at commercial banks remained high in the fourth quarter of 2015 despite a modest decline from a year earlier. Loans used to finance current operating expenses remained at record levels, while volumes for most other types of non-real estate loans declined slightly. As farm income declined again in 2015, persistently high short-term lending needs amplified concerns about farm sector liquidity moving into 2016, especially if farmers' profit margins remain low. Despite these concerns, agricultural banks continued to report strong loan performance and solid returns on their assets.*

### Section A – Fourth Quarter National Farm Loan Data

The volume of new farm loans originated at commercial banks declined, but only slightly, in the fourth quarter. Data from the Survey of Terms of Bank Lending to Farmers showed commercial banks originated \$101.4 billion of non-real estate farm loans in the quarter, down 9 percent from a year earlier (Chart 1). Still, farm loans used to cover operating expenses were largely unchanged, underscoring the persistent demand for short-term cash flow support amid an ongoing environment of reduced profits. Farm loans used to finance the purchase of feeder and other livestock, however, declined slightly, coinciding with sharp losses on feedlot closeouts in late 2015.

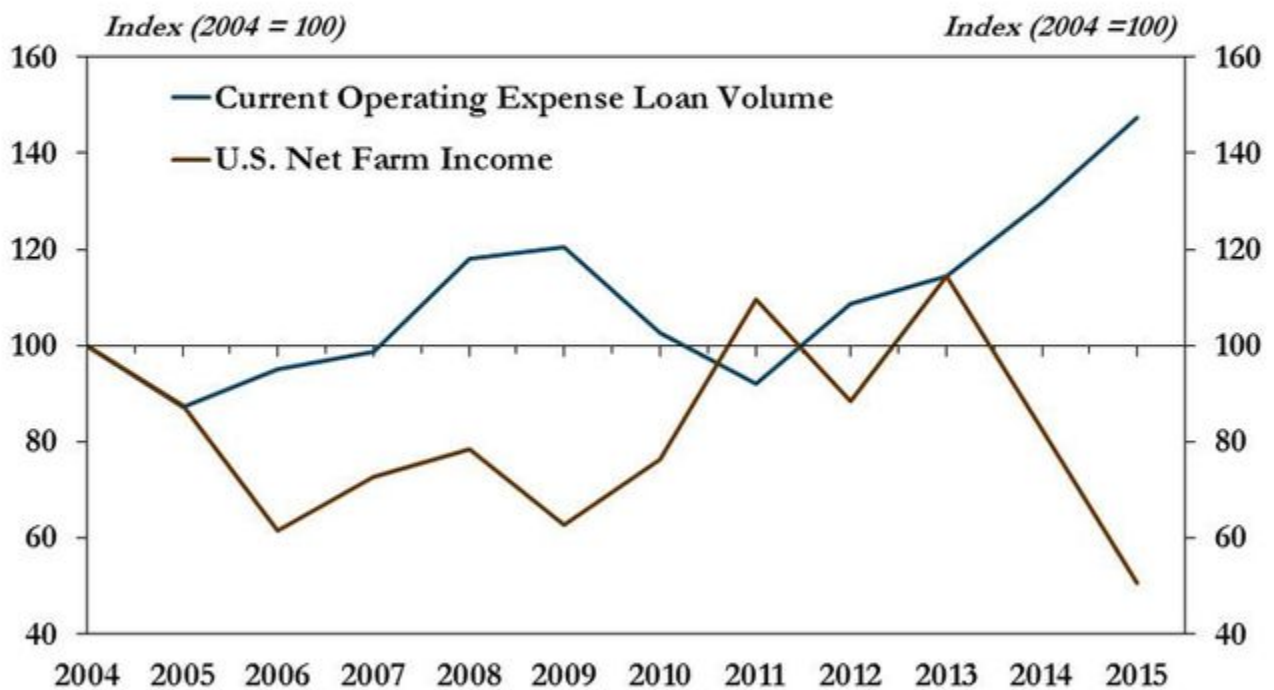
# Chart 1: Non-Real Estate Farm Loan Volumes by Purpose, Fourth Quarter



Source: Agricultural Finance Databook, Table A.3.

Recent acceleration in the demand for short-term loans, combined with renewed expectations of lower farm income highlight intensifying concerns surrounding liquidity. The volume of loans to cover current operating expenses remained historically high in the fourth quarter. In fact, the average volume of operating loans in 2015 was 6 percent higher than 2014 and more than double the low mark set in 2011. The increases in short-term lending, however, have occurred amid a significant decline in income (Chart 2).

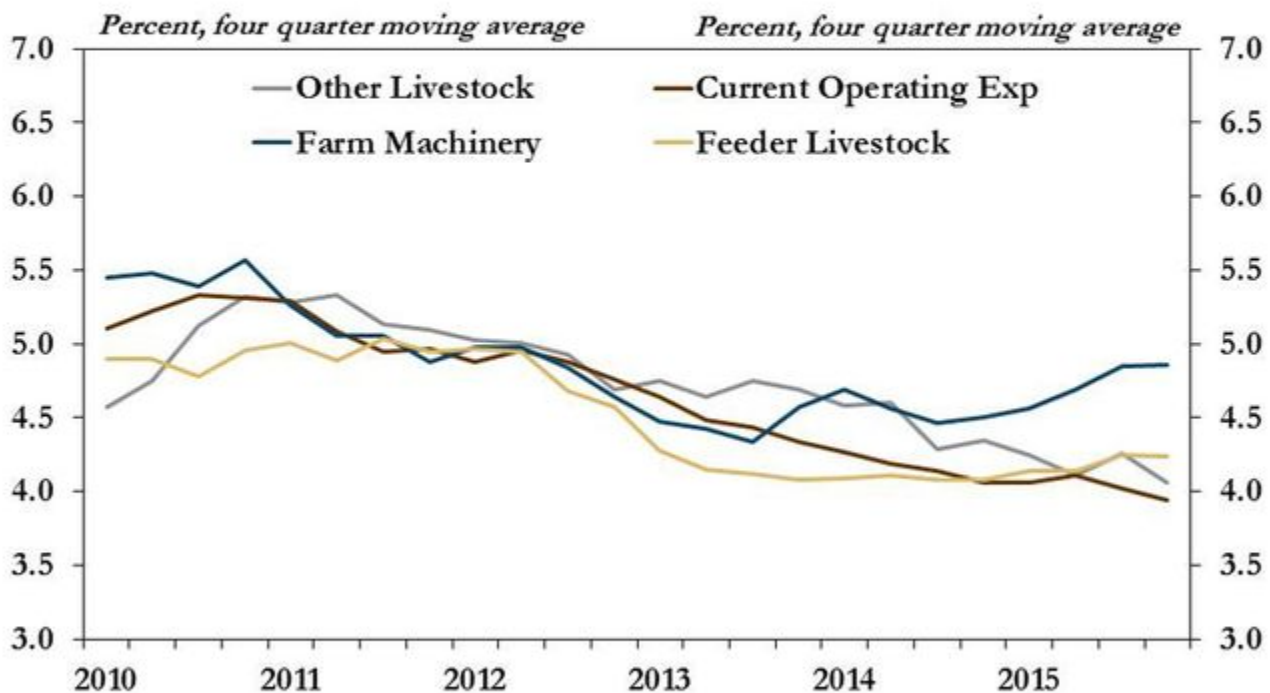
## Chart 2: U.S. Farm Income and Current Operating Expenses



Sources: Agricultural Finance Databook Table A.3 and USDA.

Though farm income has continued to weaken, interest rates generally have remained unchanged. For most loan types, average interest rates trended lower through 2015 (Chart 3). Loans for farm machinery, however, were a notable exception to this downward trend. These loans typically carry much longer maturities and may be priced higher due to forward-looking risks. Farm sector interest rates generally have remained historically low due, in part, to relatively strong loan performance, historically low delinquency rates, low debt-to-asset ratios in the farm sector and regional loan competition. Moreover, interest rates in each loan category declined in the fourth quarter.

### Chart 3: Interest Rates on Non-Real Estate Farm Loans

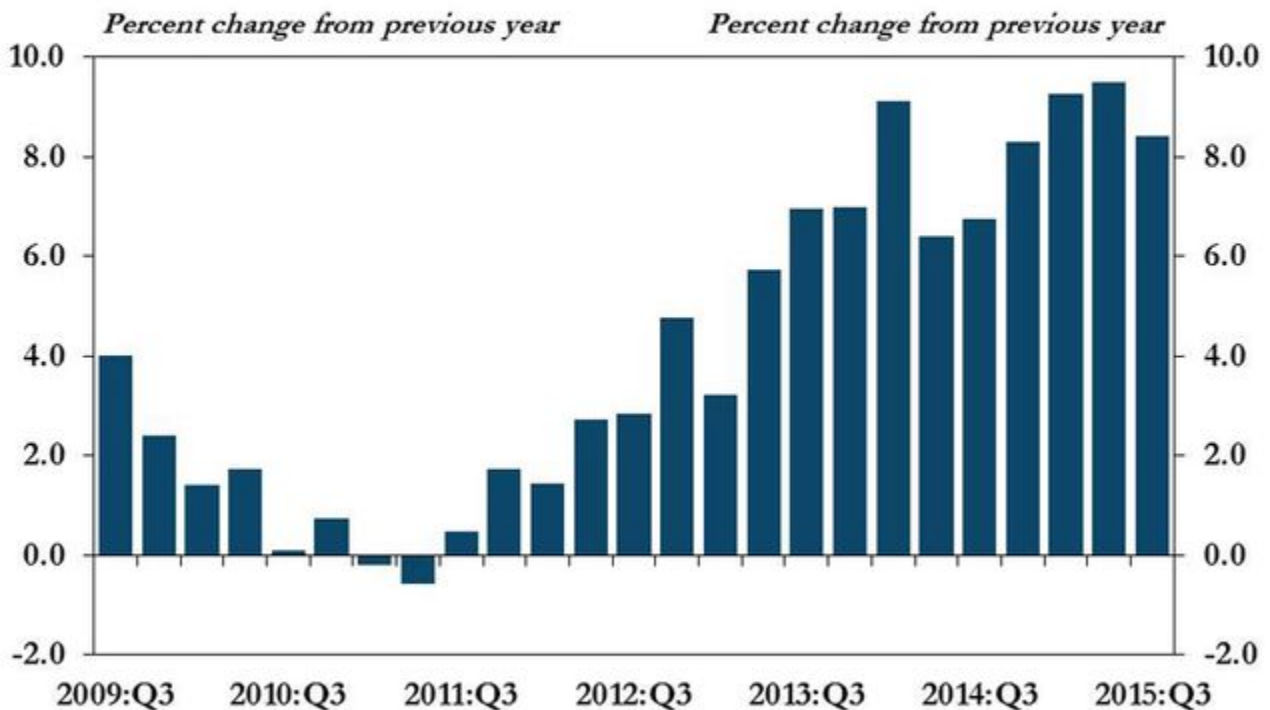


Source: Agricultural Finance Databook, Table A.5.

#### Section B – Third Quarter Call Report Data

Through the third quarter, farm debt outstanding at commercial banks continued to increase, but at a slower rate than in previous quarters. Debt for both non-real estate and real estate farm loans increased more than 8 percent in the third quarter, more than a year earlier, but slightly less than in the first half of 2015. Although the pace of debt expansion slowed slightly from the previous quarter, the pace remained elevated when compared to recent years (Chart 4). Amid growing debt levels, average loan-to-deposit ratios at agricultural banks climbed for the third consecutive year and rose to almost 80 percent in the third quarter.

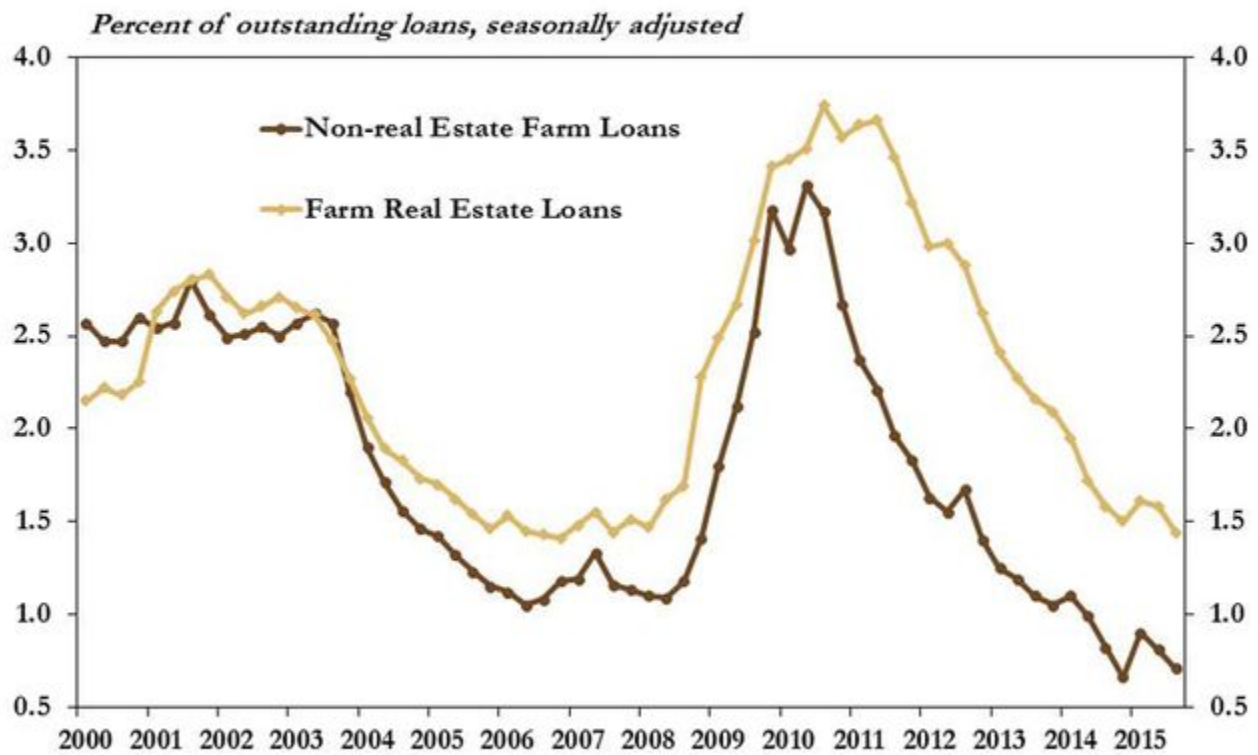
## Chart 4: Farm Debt Outstanding at Commercial Banks



Source: Agricultural Finance Databook, Table B.1

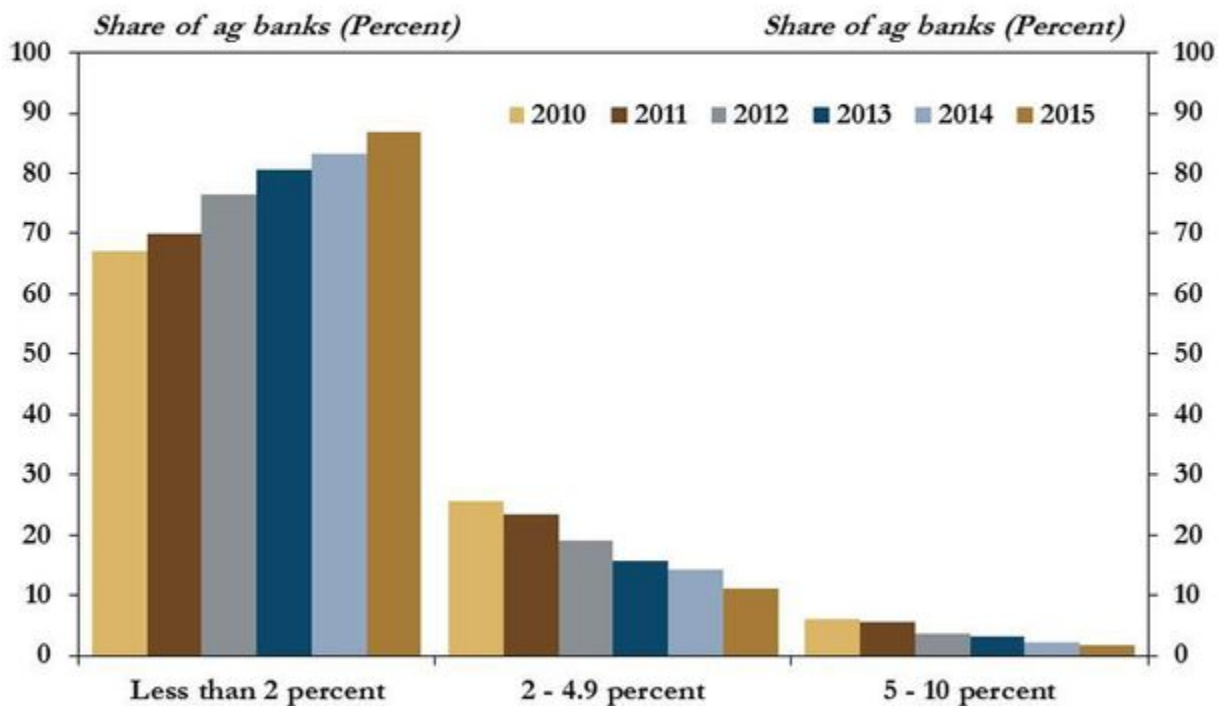
Despite increasing debt levels, loan quality at agricultural banks remained strong and shares of delinquent and nonperforming loans declined in the third quarter. Delinquency rates on loans for farm real estate and non-real estate dropped to 1.4 percent and 0.7 percent, respectively (Chart 5). According to commercial bank call report data, 98 percent of agricultural banks had less than 5 percent of their total loans listed as nonperforming (Chart 6). In fact, the average share of nonperforming farm production loans at agricultural banks was 0.5 percent, the lowest on record for non-real estate farm loans.

## Chart 5: Delinquency Rates on Farm Loans



Source: Federal Reserve Board of Governors.

## Chart 6: Share of Agricultural Banks by Percent of Nonperforming Loans, Third Quarter

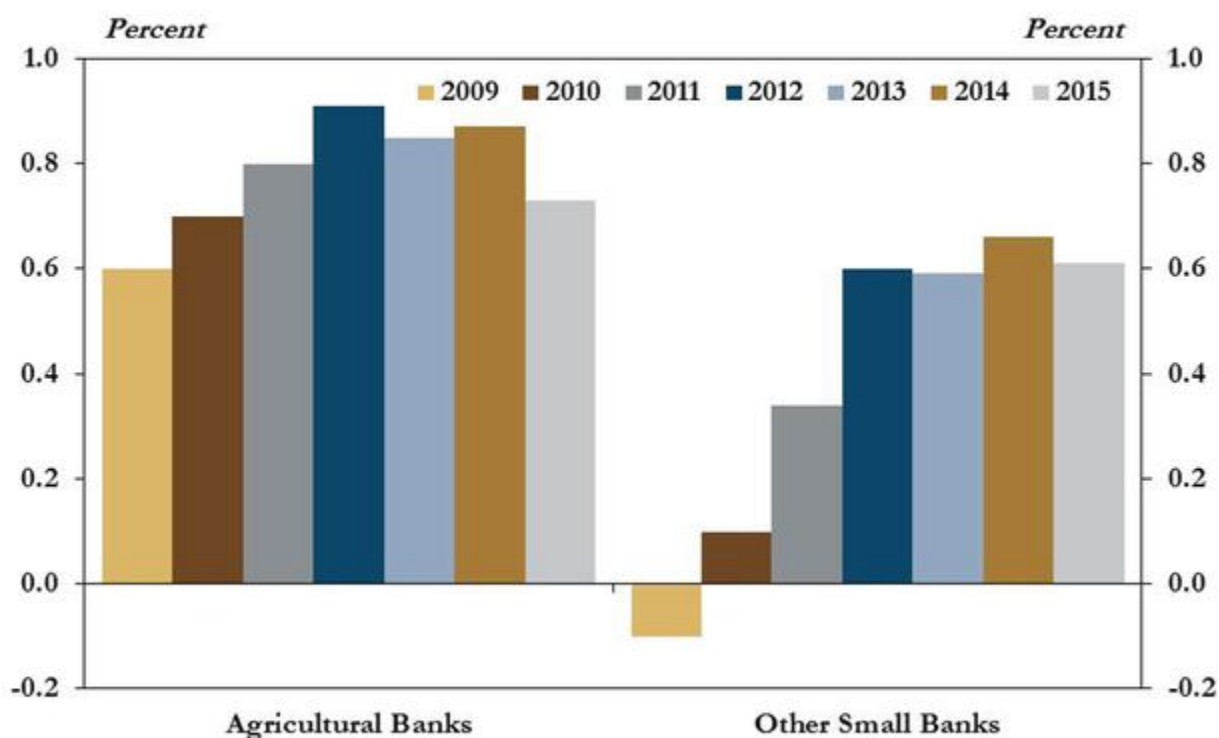


Source: Agricultural Finance Databook, Table B.6.

Although loan quality remained stable, the performance of agricultural banks slowed slightly. Amid increased lending activity and strong credit quality, returns at agricultural banks had grown steadily in recent years (Chart 7). In the third quarter, however, the average rate of return on assets at agricultural banks declined to 0.73 percent from 0.87 percent a year earlier. Despite the recent decline, though, returns at agricultural banks remained higher than at other banks of similar size.



## Chart 7: Rate of Return on Assets, Third Quarter



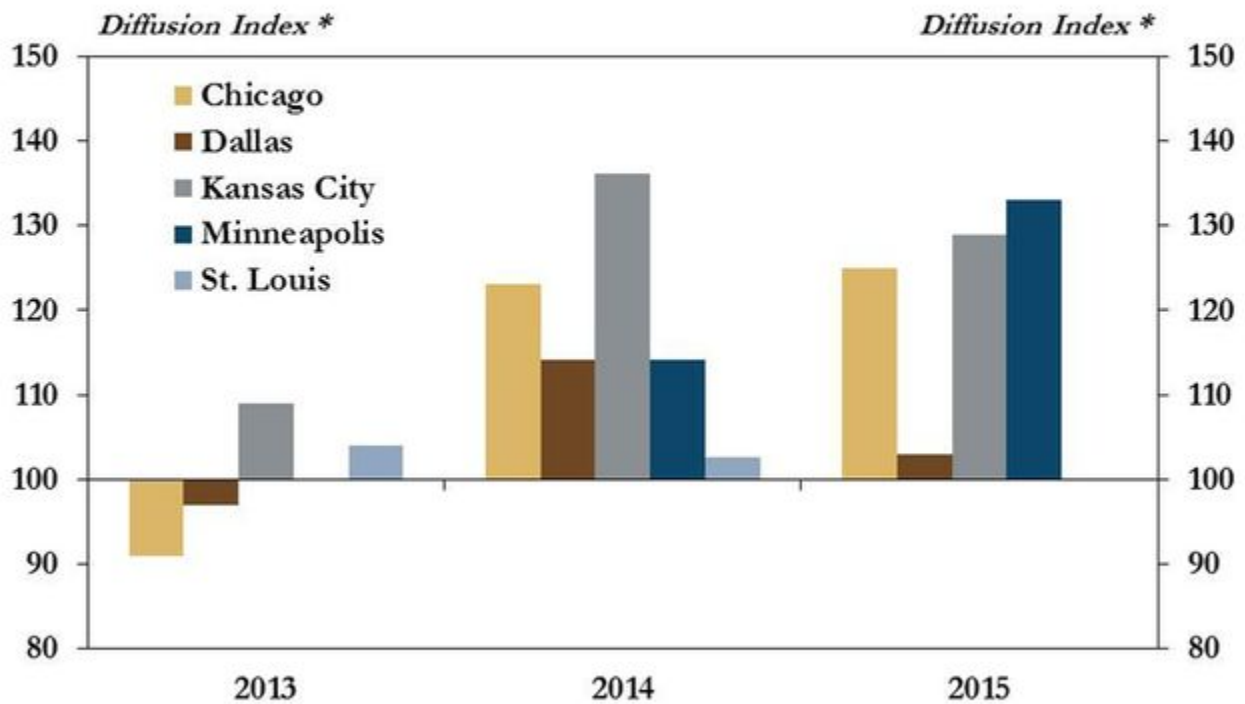
Source: Agricultural Finance Databook, Table B.7.

### Section C – Third Quarter Regional Agricultural Data

Regional Federal Reserve surveys of agricultural credit conditions also pointed to persistently strong demand for non-real estate farm loans. Districts with a relatively high concentration of agricultural production—Chicago, Dallas, Kansas City and Minneapolis—reported increased demand for non-real estate farm loans in the third quarter (Chart 8). The increase reported in third-quarter Federal Reserve surveys marked the fourth consecutive quarter of higher demand for farm loans and was consistent with recent national trends.



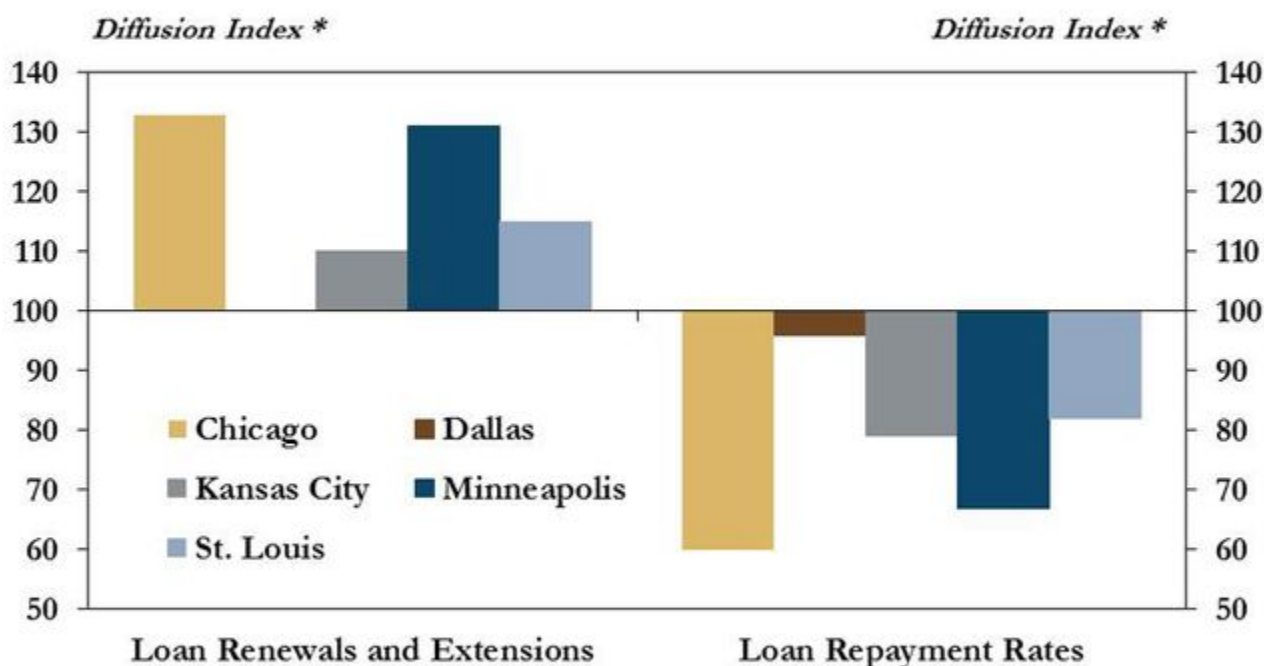
## Chart 8: Demand for Non-Real Estate Farm Loans, Third Quarter



\*Diffusion Index is calculated by subtracting the percentage of respondents who indicated "lower" from the percentage of respondents who indicated "higher" and adding 100.  
Source: Agricultural Finance Databook, Table C.1.

In addition to heightened demand for non-real estate farm loans, demand for renewals and extensions also rose in the third quarter. For the third consecutive quarter in 2015, the Federal Reserve Districts of Chicago, Kansas City, Minneapolis and St. Louis reported an increase in the demand for loan renewals and extensions while also reporting further decreases in loan repayment rates (Chart 9). The changes in the third quarter were especially pronounced in the Chicago and Minneapolis Districts.

## Chart 9: Selected Agricultural Credit Conditions, Third Quarter 2015



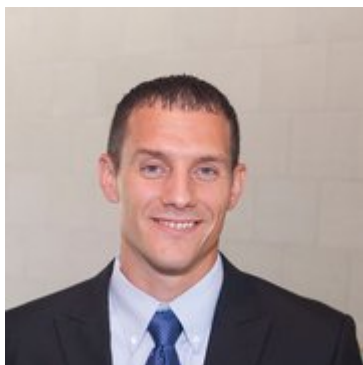
\*Diffusion Index is calculated by subtracting the percentage of respondents who indicated "lower" from the percentage of respondents who indicated "higher" and adding 100.  
Source: Agricultural Finance Databook, Table C.1.

Despite increased demand for non-real estate farm loans and declining repayment rates, farmland values generally remained steady in the third quarter. According to Federal Reserve surveys, values of good quality, nonirrigated farmland continued to rise modestly in states on the periphery of the Corn Belt, with the largest gains in the southern plains (Map). Consistent with recent trends, farmland values declined modestly throughout the Corn Belt, with Minnesota and South Dakota experiencing the largest declines.

### Conclusion

Farm lending activity at commercial banks remained elevated through the end of 2015. Agricultural credit conditions continued to tighten somewhat as repayment rates softened further and demand for renewals and extensions continued to rise. Overall loan performance, however, generally remained strong through 2015. Still, persistently high demand for farm loans coupled with further declines in farm income remains a concern heading into the 2016 production season.

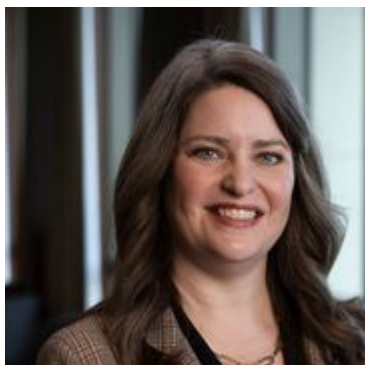
## Authors



### Nate Kauffman

#### Senior Vice President, Economist, and Omaha Branch Executive; Executive Director of the Center for Agriculture and the Economy

Nate Kauffman is Senior Vice President and Omaha Branch Executive at the Federal Reserve Bank of Kansas City. In his role as the Kansas City Fed's lead economist and representative in the state of Nebraska, Nate provides strategic direction and oversight for the Omaha Branch, regional research, and economic outreach throughout the state. He serves as a local connection to the nation's central bank and is responsible for briefing the Kansas City Fed's president – a member of the Federal Open Market Committee – on regional economic and business activity. In addition, Nate serves as Executive Director of the Bank's Center for Agriculture and the Economy. He is a leading voice on the agricultural economy throughout the seven states of the Tenth Federal Reserve District and the broader Federal Reserve System. Nate oversees several Bank and Federal Reserve efforts to track agricultural economic and financial conditions. He also speaks regularly on the agricultural economy to industry audiences and the news media, including providing testimonies at both U.S. Senate and U.S. House Agriculture Committee hearings. Nate joined the Federal Reserve in 2012. He received his Ph.D. in economics from Iowa State University. Prior to receiving his Ph.D., Nate spent three years in Bosnia and Herzegovina coordinating agricultural economic development projects. Nate lives in Omaha with his wife and four children.



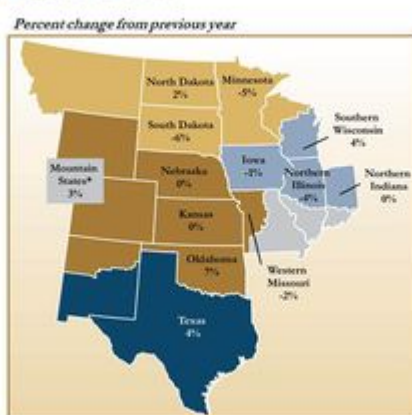
## Cortney Cowley

### Assistant Vice President and Oklahoma City Branch Executive

Cortney Cowley serves as **Oklahoma City** Branch Executive and Assistant Vice President for the Federal Reserve Bank of Kansas City. Cowley joined the Bank in 2015 as an economist and was promoted to senior economist in 2021. In 2025, Cowley began her role as Branch Executive. As Oklahoma City Branch Executive, Cowley is the Bank's lead officer and economist in Oklahoma. She recruits and works closely with the Oklahoma City Branch Board of Directors and is responsible for briefing Kansas City Fed President Jeff Schmid, a member of the Federal Open Market Committee, on economic trends in the state. She also serves as a special advisor on agriculture to Governor Miki Bowman at the Federal Reserve Board of Governors. Cowley's team conducts research and surveys on key regional issues such as energy, manufacturing and migration. Cowley holds a Ph.D. in Agricultural Economics from Oklahoma State University, as well as a master's degree in Civil Engineering from Colorado State University and a bachelor's degree in Biosystems Engineering from Oklahoma State University, where she was named a Harry S. Truman Scholar. She is a member of the Economic Club of Oklahoma, Downtown Club of Oklahoma City, the Agricultural and Applied Economics Association and serves as an economic advisor on the campaign cabinet of the United Way of Central Oklahoma. Cowley, along with her husband and eight-year-old twins, lives on a small farm northwest of Oklahoma City.

## Media

Map: Value of Nonirrigated Cropland,  
Third Quarter 2015



\*Mountain States include Colorado, northern New Mexico and Wyoming, which are grouped because of limited survey responses from each state.  
Sources: Federal Reserve District Agricultural Credit Surveys (Chicago, Dallas, Kansas City and Minneapolis).