



## Farm Lending Declines at End of 2019

by: Nate Kauffman and Ty Kreitman

January 16, 2020

Farm lending activity declined for a second consecutive quarter at commercial banks as 2019 closed.

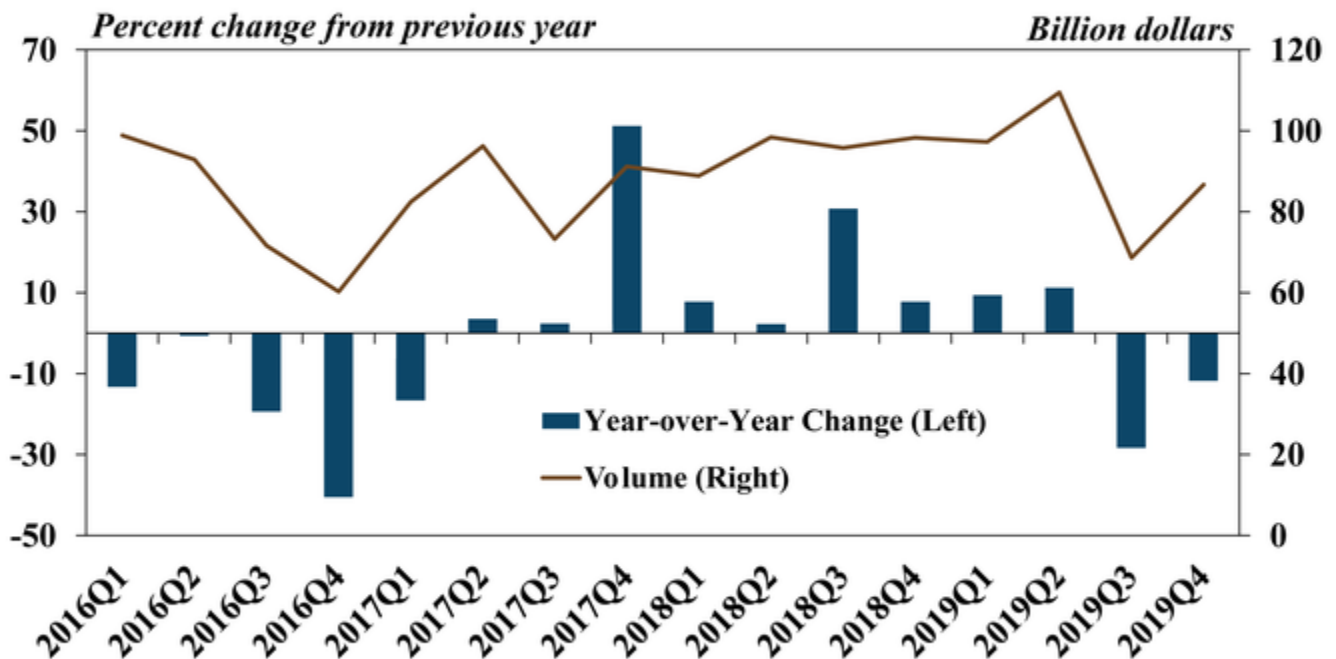
---

*Farm lending activity declined for a second consecutive quarter at commercial banks as 2019 closed. A reduction in non-real estate farm lending, particularly for operating loans, was the primary contributor to a reduced volume of loans at banks with portfolios concentrated in agriculture. The declines came alongside an additional reduction in production expenses, but reduced loan demand likely also was due to an increase in revenue from government payments (Market Facilitation Program) connected to trade disputes that lingered through the year.*

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

The volume of agricultural lending at commercial banks remained elevated, but declined for a second consecutive quarter. Total non-real estate farm loans decreased about 12 percent in the fourth quarter and declined over consecutive quarters for the first time since early 2017 (Chart 1). Following average annual growth of more than 10 percent in 2017 and 2018 and several quarters of sharp increases, lending activity contracted in the second half of the year and, on average, was 5 percent lower in 2019.

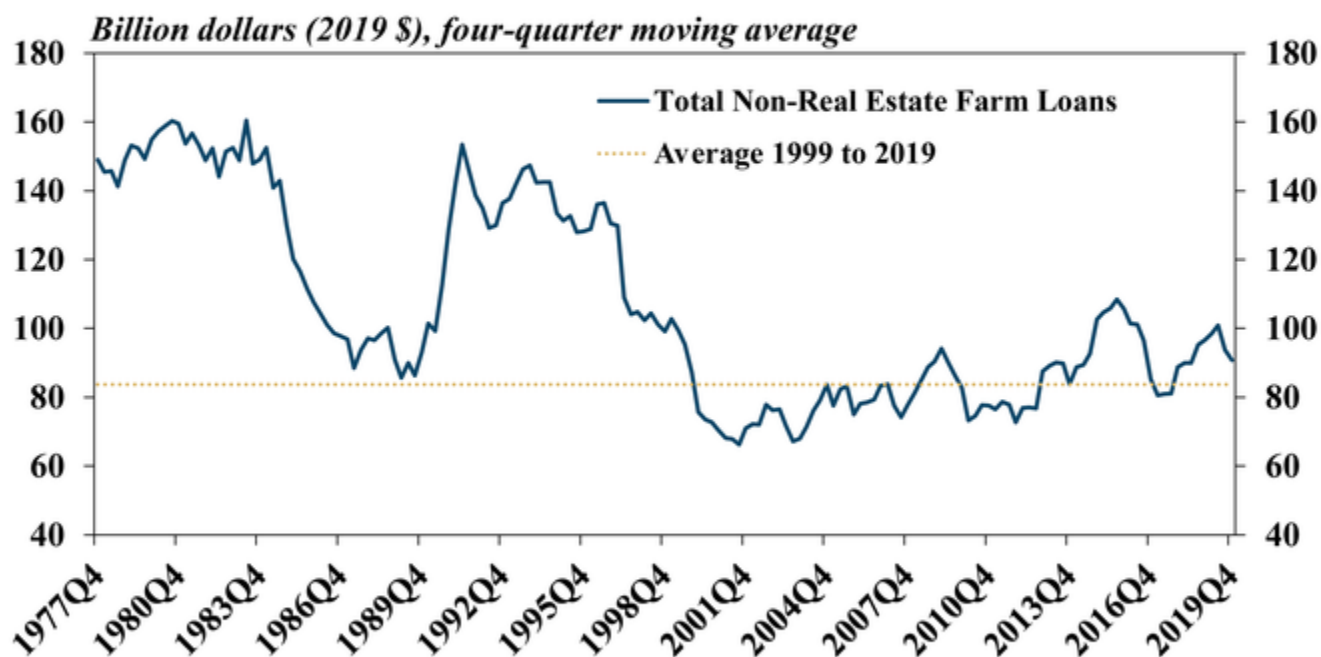
## Chart 1: Total Non-Real Estate Farm Loans



Source: Agricultural Finance Databook, Table A.3.

Despite decreasing from a year ago, farm lending volumes remained higher than the 20-year average. Total volume of non-real estate loans averaged about \$90 billion in 2019 and was about 8 percent above the average since 1999 (Chart 2). Overall, persistent weaknesses in the farm sector have continued to stimulate strong demand for agricultural lending, although Market Facilitation Program payments in the second half of 2019 and relatively strong crop yields may have curbed demand in the fourth quarter. In fact, on a rolling four-quarter basis, farm lending has been above the recent historical norm for all but three quarters since 2014.

## Chart 2: Volume of Non-Real Estate Farm Loans

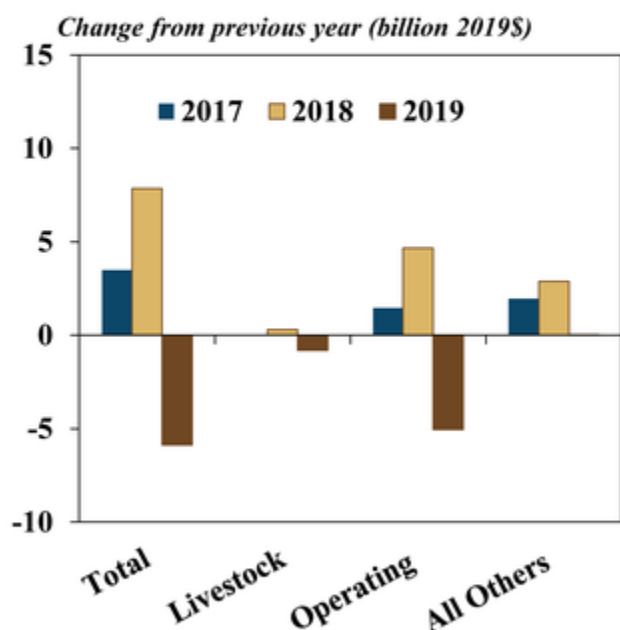


Source: Agricultural Finance Databook, Table A.3.

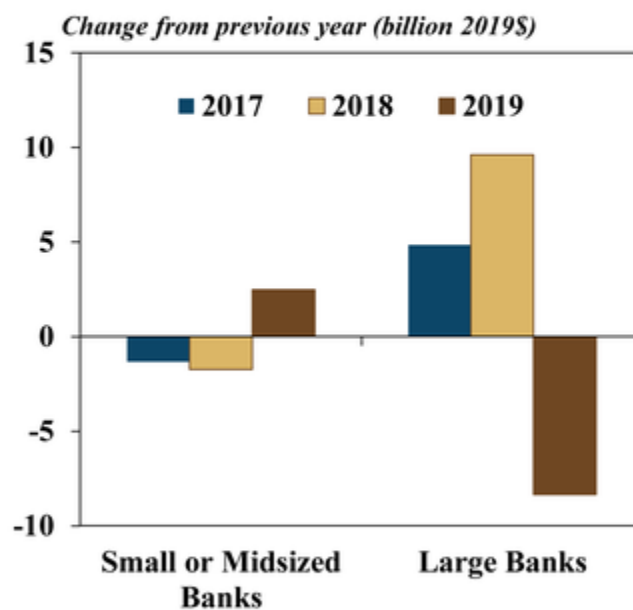
The slight pullback in agricultural lending during 2019 was driven by a decrease in the volume of operating loans and lending at banks with large farm loan portfolios. Nearly all of the \$6 billion decline in the average volume of non-real estate loans in 2019 was attributed to operating loans (Chart 3). In addition, non-real estate lending at banks with farm loan portfolios larger than \$25 million decreased about \$8 billion, but increased more than \$2 billion at banks below that threshold in 2019.

# Chart 3: Average Annual Volume of Non-Real Estate Farm Loans

By Loan Type



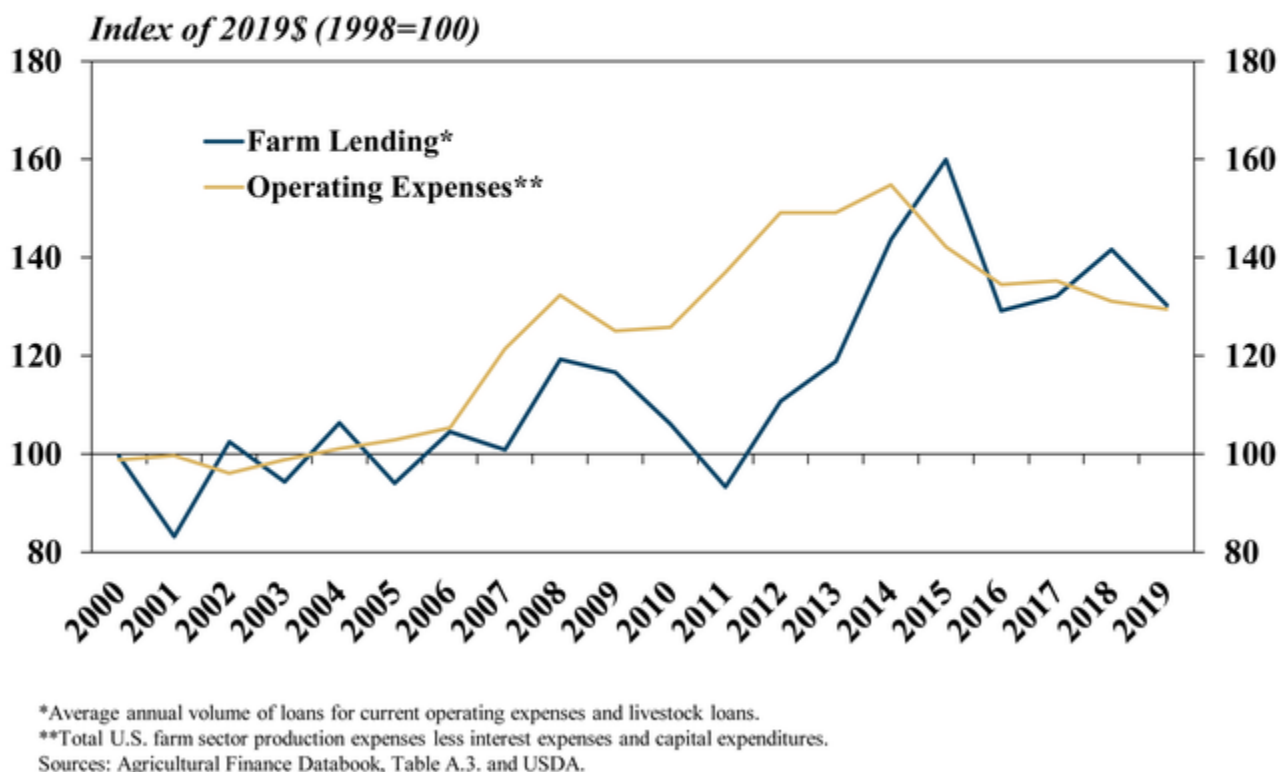
By Farm Loan Portfolio Size



Source: Agricultural Finance Databook, Tables A.3.

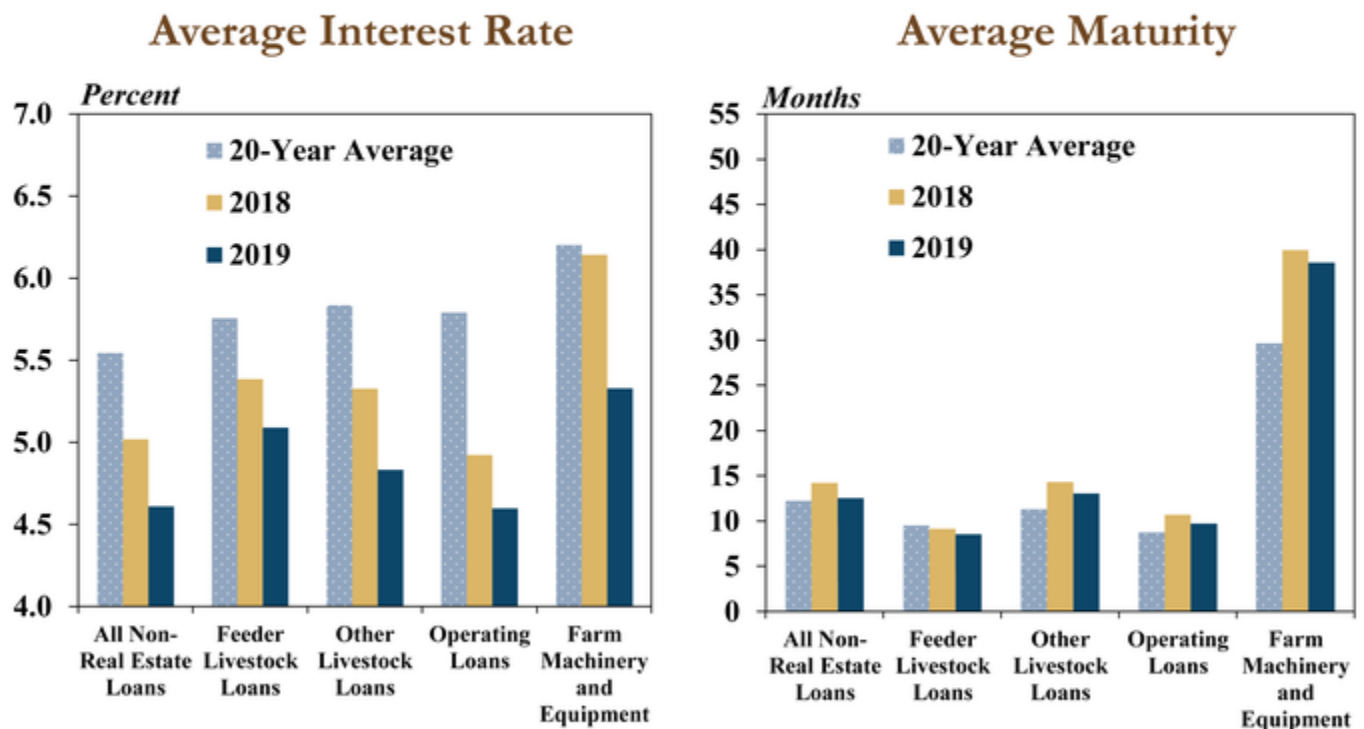
In addition to recent government payments and increased production, lower production expenses likely also have limited demand for farm loans. Adjusted for inflation, 2019 agricultural production expenses were more than 15 percent lower than the historical highs in 2014. Similarly, farm operating and livestock loans have edged lower in 2019 and have declined about 9 percent since 2014 (Chart 4). A decrease in crop input expenses and lower feed costs accounted for the majority of the decline in total expenses, and that drop has contributed to a modest reduction in demand for credit.

## Chart 4: Farm Lending and Operating Expenses



Alongside reduced loan volumes in the fourth quarter, the average interest rate and maturity of new loans declined slightly. Interest rates on all loan types remained well below the 20-year average while maturities remained slightly above the average for most loan types (Chart 5). The decline in both interest rates and maturities was largest for machinery and equipment loans. In addition, the decreases also were slightly greater at banks with larger farm loan portfolios.

## Chart 5: Farm Loan Terms at Commercial Banks, Fourth Quarter



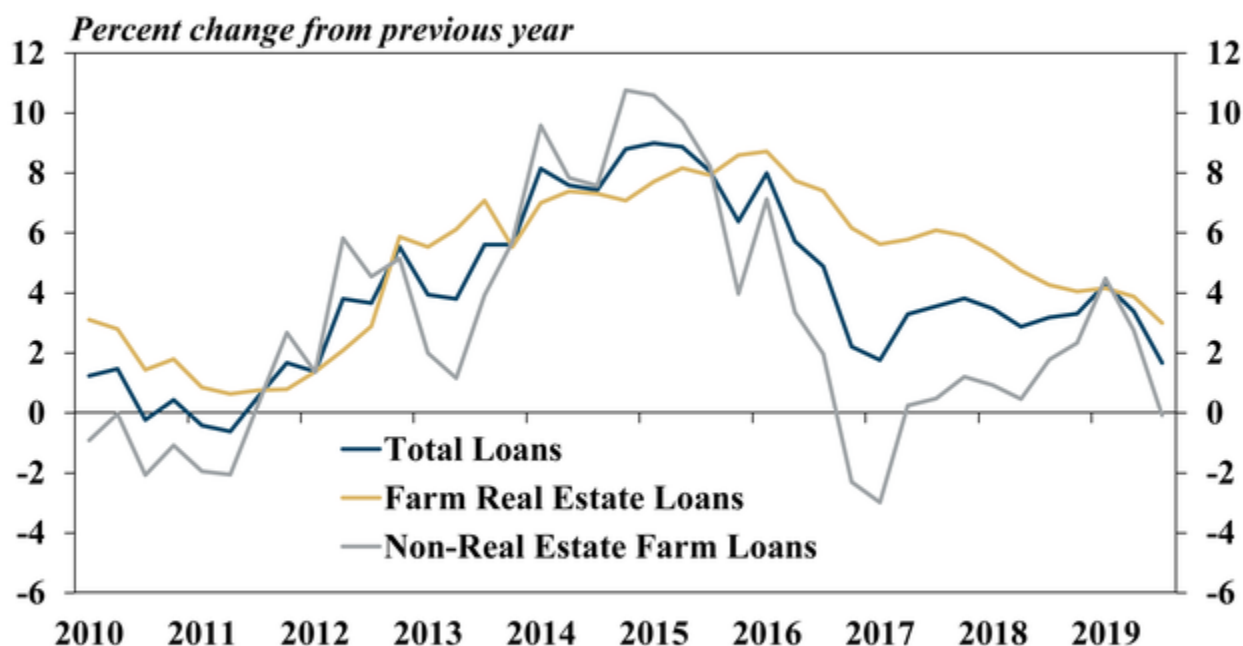
Source: Agricultural Finance Databook, Tables A.4. and A.5.

### Section B – Third Quarter Call Report Data

Farm loans outstanding at commercial banks declined through the third quarter, according to Call Report data. Total agricultural loans decreased from the previous year for the first time since 2011, due primarily to the exit of a large agricultural loan portfolio from commercial bank reporting (Chart 6). Excluding all loans at that institution, farm real estate debt increased 3 percent and non-real estate loan balances were little changed. Increases in farm real estate loans continued to support steady growth in total agricultural debt at commercial banks through the third quarter, but the pace of growth slowed.

## Chart 6: Farm Loans Outstanding at Commercial Banks

(Excluding Rabobank, National Association)\*

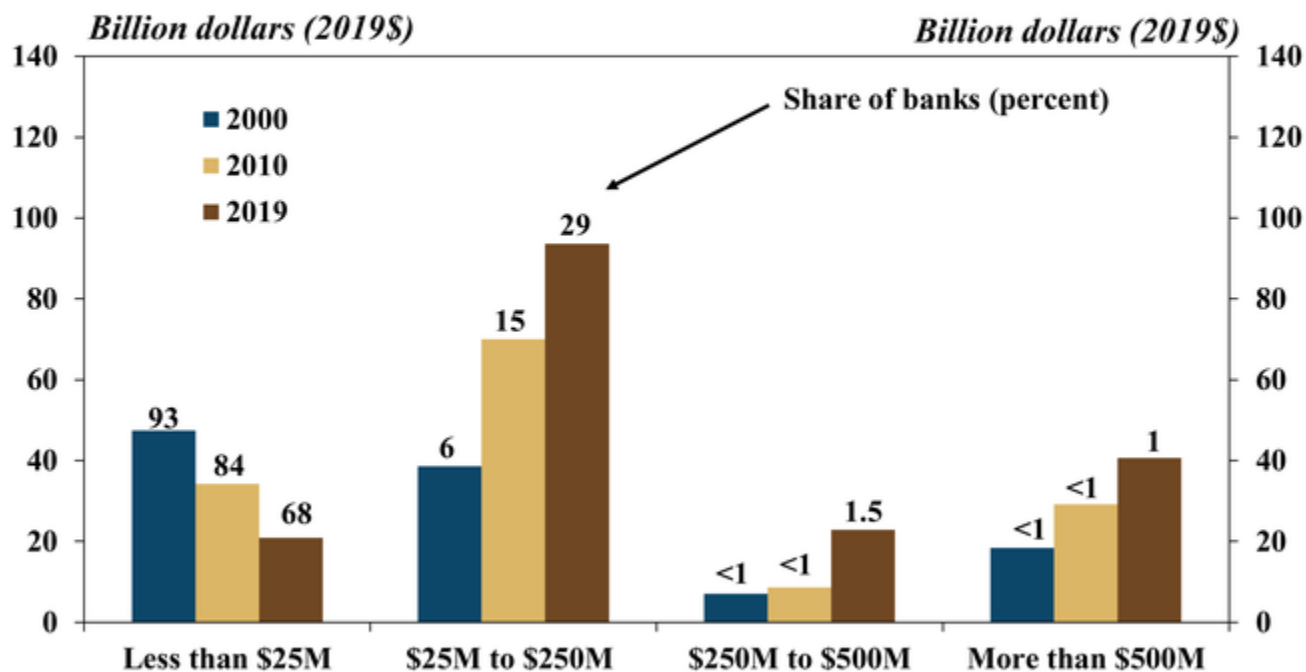


\*See footnote 1.

Source: Agricultural Finance Databook, Table B.1. and Board of Governors.

As farm debt at commercial banks has increased in recent years, lending also has become more concentrated among a smaller share of institutions. Banks with farm loan portfolios greater than \$250 million held 36 percent of outstanding balances through the third quarter, compared with 23 percent in 2000 (Chart 7). General inflation has contributed to the growth in the size of farm loan portfolios at larger institutions. However, consolidation and other factors also are likely to have contributed to an increased concentration of agricultural lending at commercial banks.

## Chart 7: Farm Loans Outstanding at Commercial Banks by Farm Loan Portfolio Size, Third Quarter

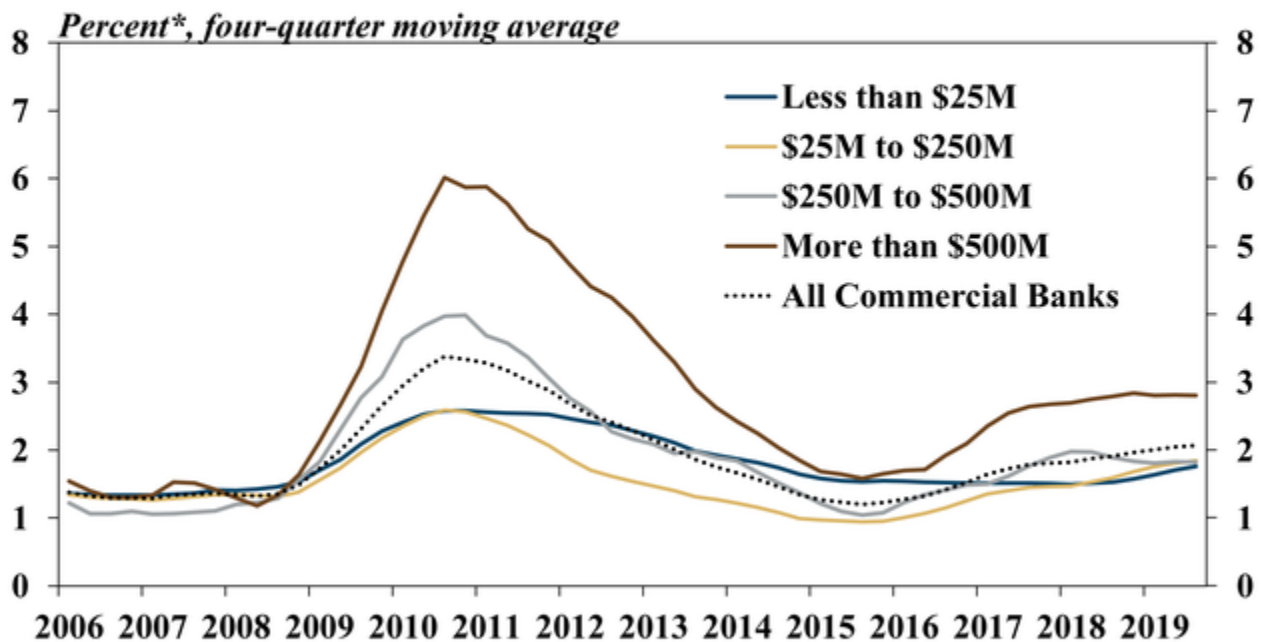


Source: Board of Governors.

Delinquency rates on farm loans continued to increase at a modest pace through the third quarter alongside elevated levels of farm debt. While remaining historically low, loans that were considered past due at banks with the largest farm loan portfolios were higher than at institutions smaller in size (Chart 8). Since 2015, the share of farm loans past due at banks with farm loan portfolios more than \$500 million have been about 70 basis points higher than the rate at all banks.



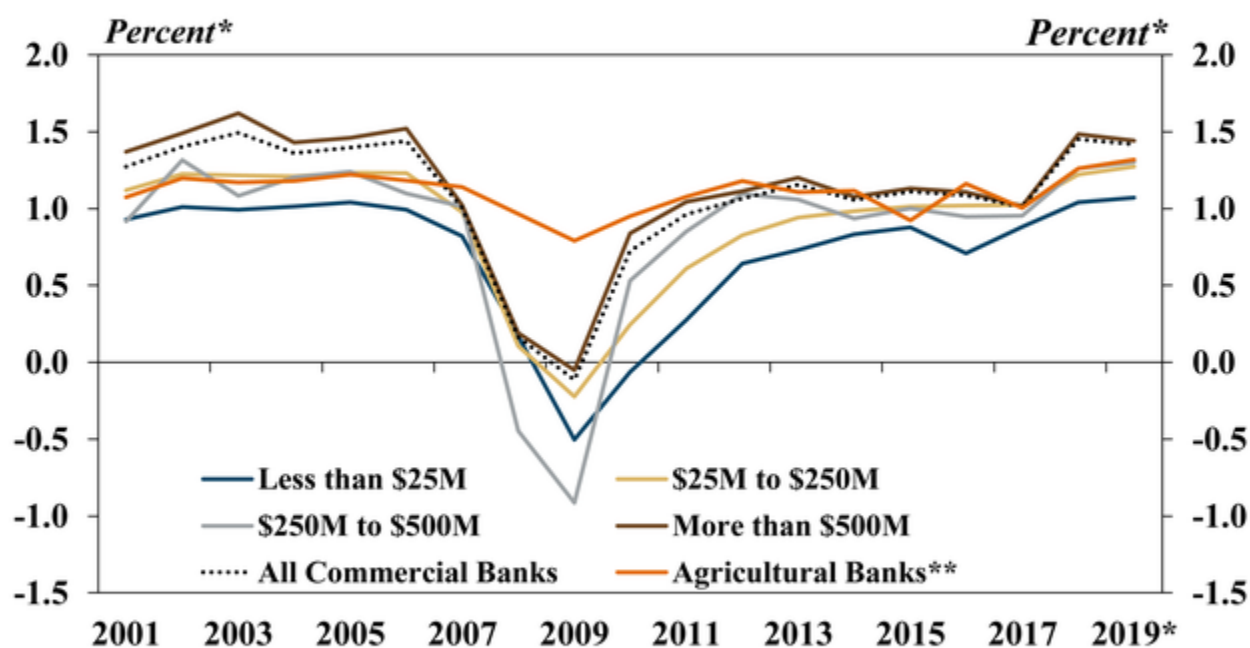
## Chart 8: Rate of Past Due Loans at Commercial Banks by Farm Loan Portfolio Size



\*All past due and nonaccruing agricultural loans as a share of total agricultural loans.  
Source: Board of Governors.

Despite an ongoing trend of increasing delinquency rates on farm loans, financial performance has remained relatively strong at agricultural banks. The return on assets at agricultural banks remained at a 20-year high, increasing slightly from a year ago (Chart 9). Moreover, even as profit margins among agricultural producers have remained subdued, returns at agricultural banks have kept pace with most other banks in recent years.

## Chart 9: Return on Average Assets at Commercial Banks by Farm Loan Portfolio Size



\*Annualized based on performance through Q3 2019.

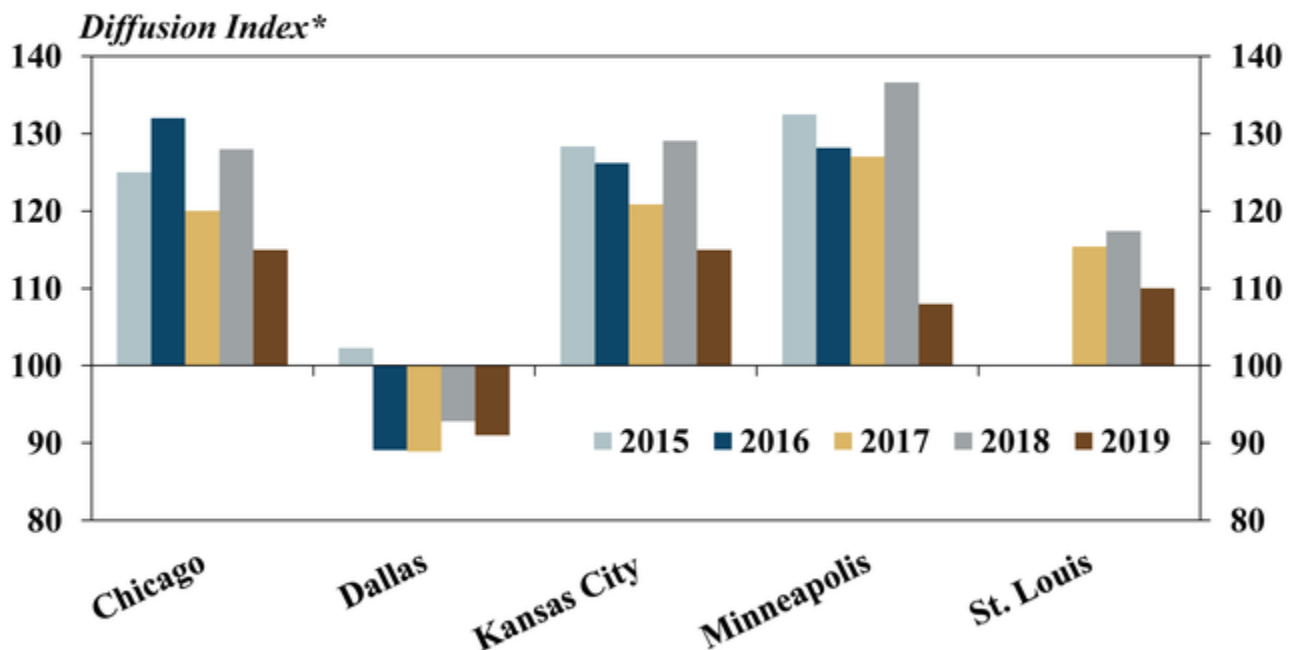
\*\*All commercial banks with total agricultural loans equaling 25% or more of total loans.

Sources: Agricultural Finance Databook, Table B.7. and Board of Governors.

### Section C – Third Quarter Regional Agricultural Data

Similar to national trends, regional Federal Reserve surveys of agricultural credit conditions also indicated that demand for farm loans increased at a slower pace than recent years. While loan demand remained strong overall, the share of bankers reporting higher farm loan demand was lower in nearly all participating Districts (Chart 10). The pace slowed the most in the Minneapolis District and loan demand continued to contract in the Dallas District.

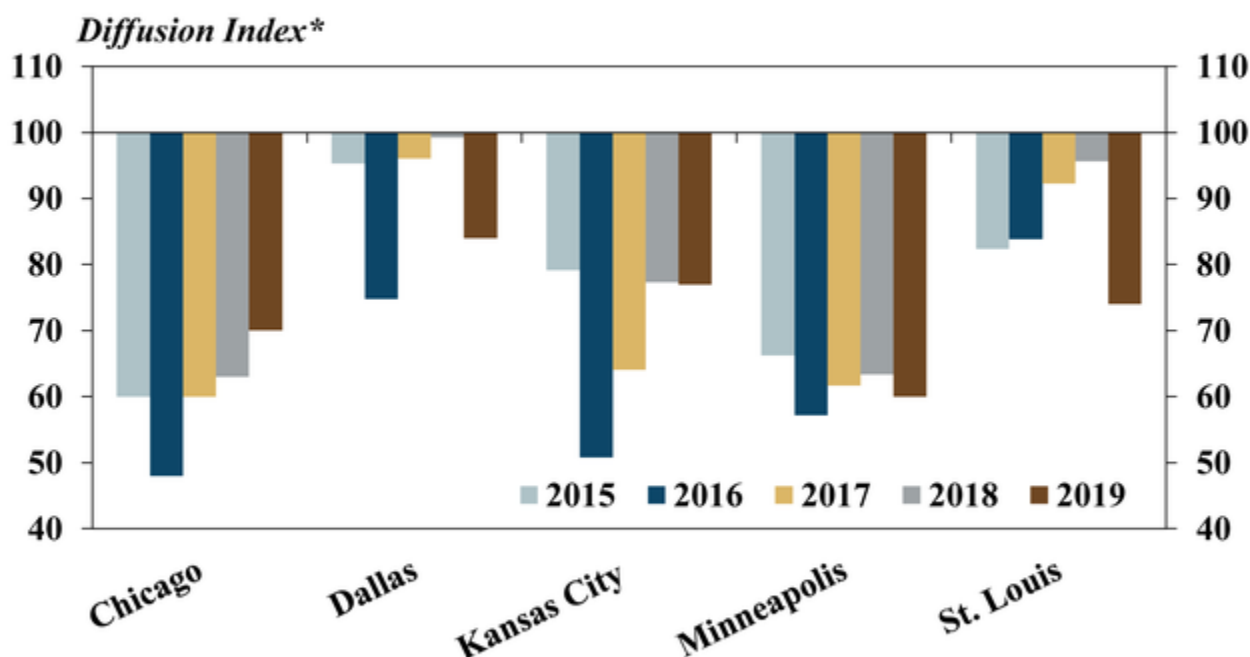
## Chart 10: Changes in Demand for Non-Real Estate Farm Lending, Third Quarter



\*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.

Alongside a slight increase in farm loan delinquency rates, regional contacts continued to report declines in farm loan repayment rates. The pace of decline in repayment rates increased from a year ago in all Districts except Chicago (Chart 11). The pace of decline increased moderately in the Dallas and St. Louis Districts and slightly in Kansas City and Minneapolis.

## Chart 11: Farm Loan Repayment Rates, Third Quarter

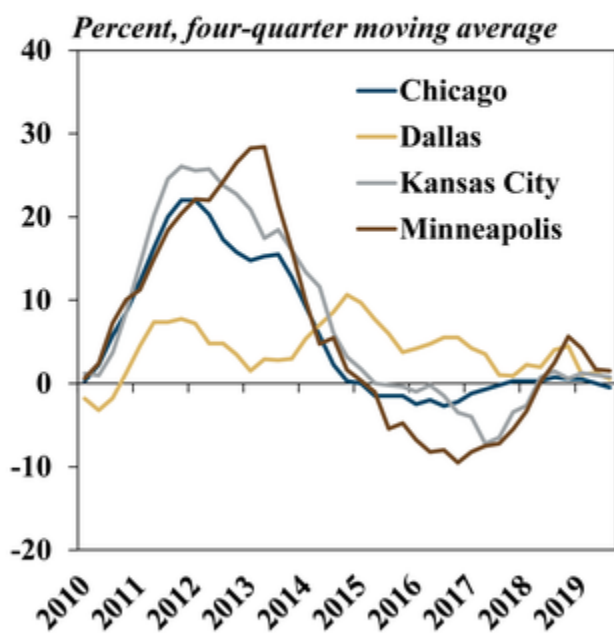


\*Diffusion Index is calculated by subtracting the percentage of respondents who indicated "lower" from the percentage of respondents who indicated "higher" and adding 100  
Source: Agricultural Finance Databook, Table C.1.

Similar to recent quarters, farm real estate values remained relatively stable. The average value of non-irrigated farmland in all participating Districts changed less than 2 percent in the third quarter (Chart 12). Declines were slightly larger in the northern most states during the third quarter, but remained modest; values increased slightly in Texas and Oklahoma.

## Chart 12: Value of Nonirrigated Cropland

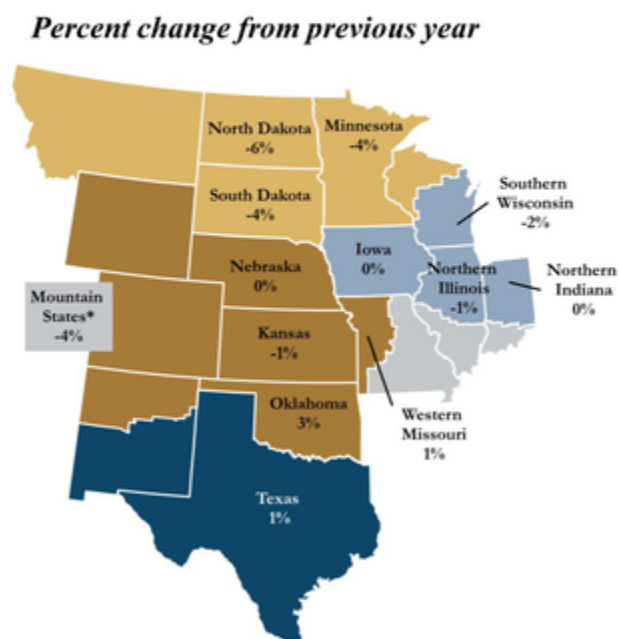
### By Federal Reserve District



\*Mountain States include Colorado, northern New Mexico and Wyoming, which are grouped because of limited survey responses from each state

Sources: Agricultural Finance Databook, Table C.6. and Federal Reserve District Agricultural Credit Surveys (Chicago, Dallas, Kansas City and Minneapolis).

### By State, Third Quarter 2019



## Conclusion

The volume of new farm loans originated at commercial banks remained above recent historical norms, but continued to ease in the fourth quarter. The decrease in lending activity was driven by operating loans, which have declined in the past several years alongside relatively lower agricultural production expenses and, more recently, government payments. However, delinquency rates on farm loans continued to edge higher and the outlook for farm finances in 2020 will depend critically on cash flow projections and the need for financing operating loans in the new year.

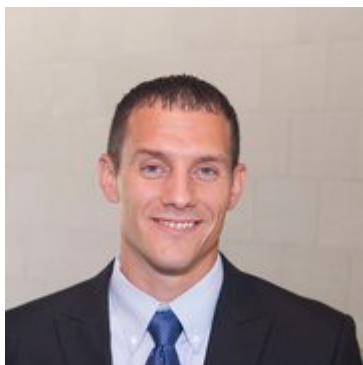
## Data and Information

[Historical Data](#)

[Tables](#)

[About](#)

## 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.



### Ty Kreitman

#### Associate Economist

Ty Kreitman is an associate economist in the Regional Affairs Department at the Omaha Branch of the Federal Reserve Bank of Kansas City. In this role, he primarily supports the Federal Reserve Bank of Kansas City and the Federal Reserve System efforts surrounding agricultural economics research, analysis and outreach. His responsibilities include co-authoring the *Tenth District Survey of Agricultural Credit Conditions* and *Agricultural Finance Updates*. Ty joined the Bank in 2015 as an assistant bank examiner in the Examinations & Inspections Department at the Omaha Branch and transferred to his current position in 2018. He holds a B.A. degree in Economics and Finance from the University of Nebraska-Lincoln and a M.A. degree in Financial Economics from Youngstown State University.