Statement of

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Before the

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Thank you Mr. Chairman and members of the committee. My name is Nathan Kauffman, and I am an economist and Omaha Branch Executive with the Federal Reserve Bank of Kansas City, a regional Reserve Bank that has long devoted significant attention to U.S. agriculture. In my role, I lead several efforts to track the agricultural and rural economy, including a regional agricultural credit survey and the Federal Reserve System's Agricultural Finance Databook, a national survey of agricultural lending activity at commercial banks. Our Bank remains committed to including perspectives from rural America in discussions on the national economy, and I am here to share with you this morning recent developments in the U.S. farm sector. My comments will largely focus on the current environment in agricultural credit markets and farm finances. Before I begin, let me emphasize that my statement represents my view only and is not necessarily that of the Federal Reserve System or any of its representatives.

The outlook for the U.S. farm economy remains subdued and financial stress has increased modestly for many producers over the past year. Following several years of historically high farm income prior to 2014, which was primarily driven by strong demand for agricultural products and high commodity prices, farm income has dropped significantly and is expected to remain low in the near future. The low price of major agricultural commodities has remained a primary driver of the weakness in U.S. farm income despite some reduction in farm production expenses.

Put simply, the downturn in the agricultural economy appears to be continuing into a fourth consecutive year. According to our Bank's quarterly survey, farm income has declined from previous year levels in every quarter since mid-2013. Surveys conducted by other regional Federal Reserve Banks have shown a similar trend of declining farm income, reduced cash flow, and weakening agricultural credit conditions.

The prolonged downturn in the U.S. agricultural economy has led to gradual but steady increases in financial stress among agricultural borrowers. Our data show that working capital has decreased modestly each of the past three years, and the rate at which farm loans are repaid has declined in every quarter since mid-2013.

Alongside reduced cash flow and depletion of working capital, demand for farm loans has increased, particularly for short-term operating loans. The Federal Reserve's Agricultural Finance Databook, included with my written testimony, shows that nearly 60 percent of new farm loans originated at commercial banks are used to finance operating expenses. Moreover, data from commercial banks and the Farm Credit System both show steady increases in outstanding farm debt in each of the past four years, which, to reiterate, has been a period of declining farm income. Recent data from commercial banks suggests the pace of debt accumulation may be slowing. However, the debt-to-asset ratio in the farm sector, which is a key measure of the financial health of farm borrowers, has increased modestly in each of the past four years according to USDA and is projected to increase further in 2017.

A steady decline in farmland values has also contributed to a gradual increase in financial stress and a higher debt-to-asset ratio. Regional Federal Reserve surveys show that the average value of high quality cropland has declined by 10 to 20 percent since 2013 in states with a high concentration of crop production.

Although the downturn in the farm economy has persisted, some indicators are more positive. Strong crop yields in 2016 led to stronger cash flow last year than what was initially anticipated, and cash income is projected to remain steady in 2017. Moreover, the debt-to asset ratio of the farm sector, while rising, is still historically low and the persistent decline in farmland values has, in fact, been quite modest thus far.

The relative strength in farmland values has likely shielded the farm economy from potentially more severe financial stress, since farmland accounts for more than 80 percent of the value of farm sector assets and is an important source of collateral for other farm loans. The strength in land values has given agricultural lenders some opportunities to work with borrowers by restructuring loans and requesting additional collateral in response to heightened risk in their loan portfolios.

To briefly summarize, agricultural credit conditions have weakened somewhat over the past year and financial stress in the U.S. farm sector appears to have increased modestly as commodity prices and farm income have remained low. However, a farm crisis on the scale of the 1980s still does not appear imminent, as farm loan delinquency rates remain low, and credit availability has generally remained strong. But, if farm income remains persistently low, if farmland values continue to decline, and if debt continues to rise, it is possible that key indicators of financial stress, such as debt-to-asset ratios, could rise to levels similar to the 1980s over a longer time horizon.

<u>**Federal Reserve Bank of Kansas City: Agricultural Finance Databook (January 2017)**</u>

"Volume of New Ag Loans Drops"

By Nathan Kauffman, Assistant Vice President and Omaha Branch Executive
and Matt Clark, Assistant Economist

Summary

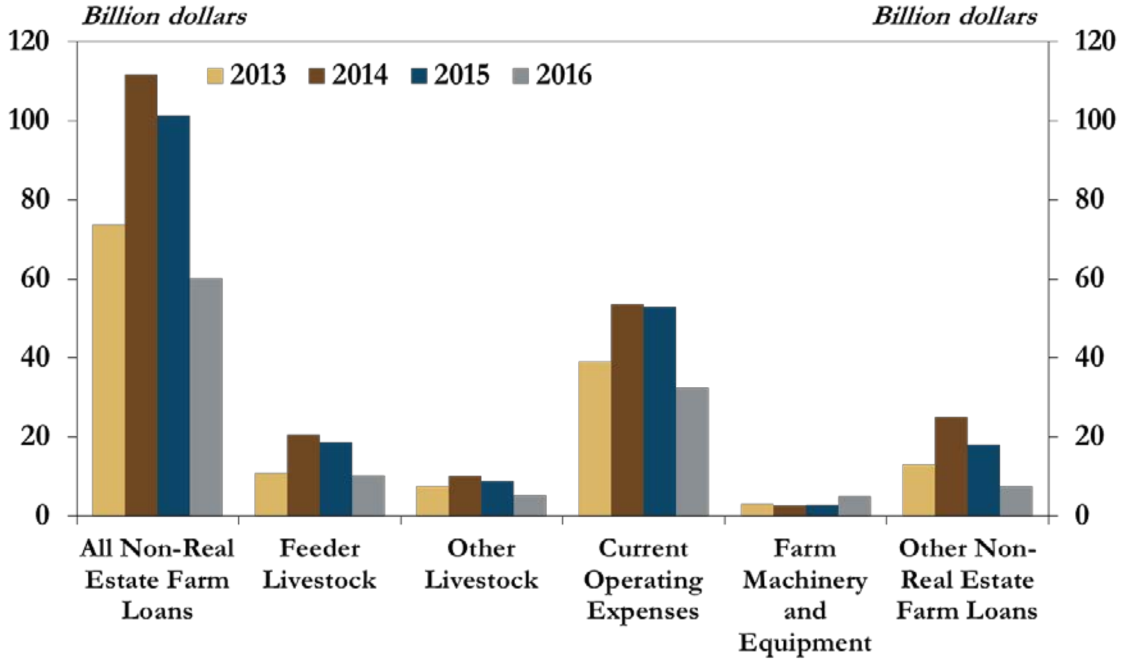
Farm lending activity at commercial banks slowed significantly in the fourth quarter as lenders and borrowers assessed economic prospects for 2017. Despite persistent increases in the level of outstanding farm debt and ongoing demand for loan renewals, new loan originations dropped sharply. Some of the reduced loan volume likely stemmed from lower costs of farm inputs. However, as the outlook for farm income generally has remained weak and farmland values have continued to decline, both lenders and borrowers may have been more apprehensive about adding new debt heading into 2017.

Section A – Fourth Quarter Survey of Terms of Bank Lending to Farmers

The volume of new farm loans dropped sharply in the fourth quarter of 2016, according to respondents to the Survey of Terms of Bank Lending to Farmers. The survey, which asks bankers about new loans to farmers, indicated the volume of non-real estate loans in the farm sector dropped 40 percent from a year ago. The 40-percent drop was the largest year-over-year decline in nearly 20 years (Chart 1).

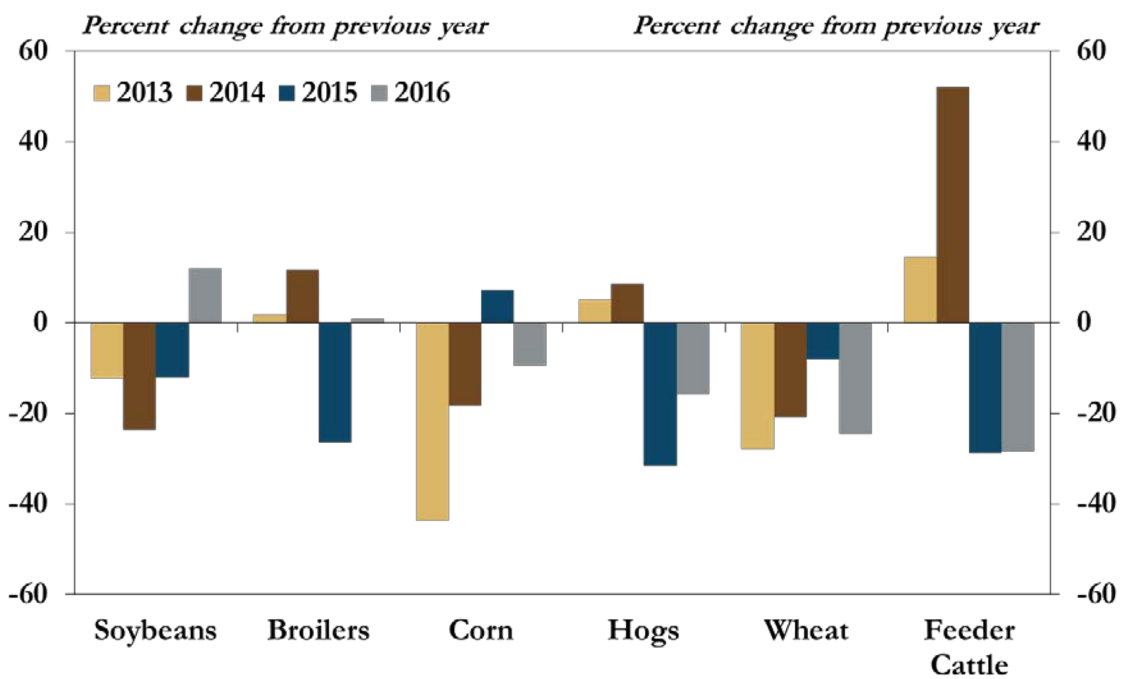
The sharp reduction in the volume of new farm loans at commercial banks occurred during a prolonged decline in farm revenue. In 2016, prices for most agricultural commodities continued to fall, building on the declines of previous years, with soybeans being a notable exception (Chart 2). A 30-percent year-over-year drop in the price of feeder cattle helped reduce the cost of purchasing the animals and likely contributed to the sharp reduction in loan volumes in the livestock sector. More generally, lower prices appeared to temper demand for new agricultural financing as producers tried to curtail expenditures. Some banks, recognizing greater risk in the farm sector, may have been more selective in financing new loan requests, and some financing decisions may have been delayed in the environment of heightened risk.

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



Source: Agricultural Finance Databook, Table A.3.

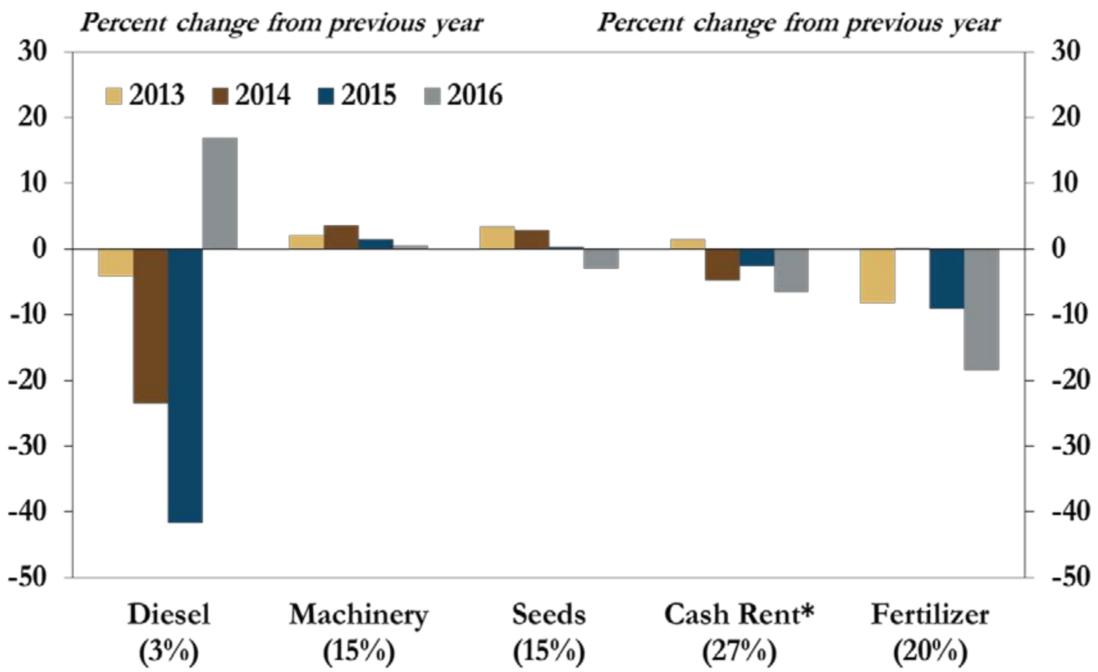
Chart 2: Agricultural Commodity Prices, Fourth Quarter



Source: Haver Analytics, *The Wall Street Journal*

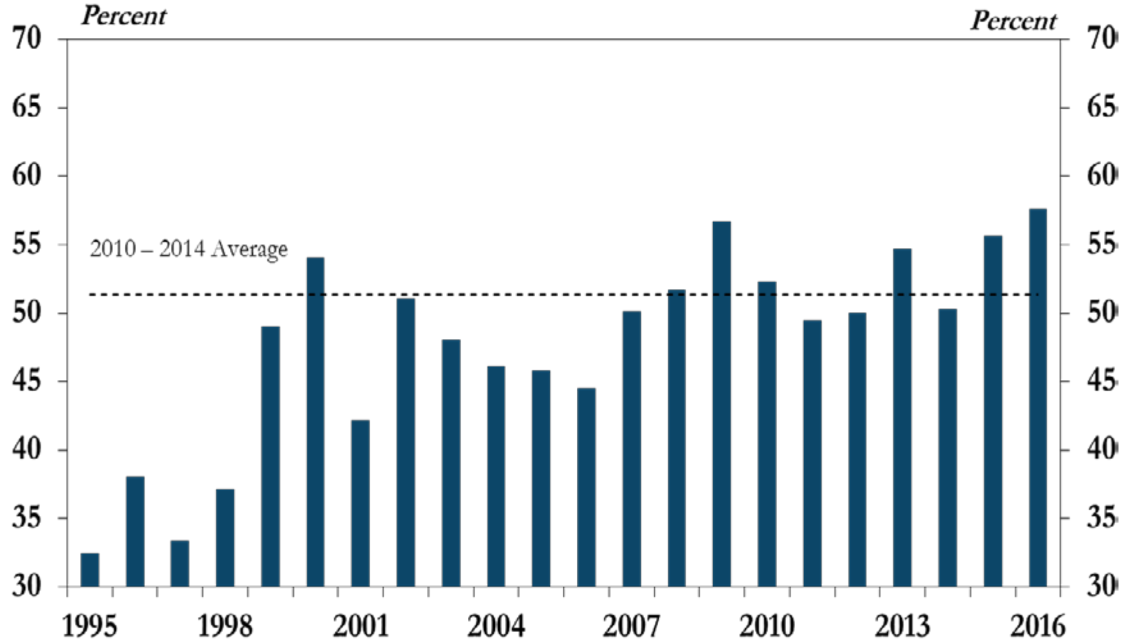
In addition to lower commodity prices, lower prices for agricultural inputs may have contributed to the drop in loan volume for items other than real estate. The cost of seeds, fertilizer and cash rents all were down from a year ago (Chart 3). The decline in input costs likely was a significant factor in reducing the volume of loans used, specifically, to finance operating expenses. For example, the U.S. Department of Agriculture (USDA) estimates that the cost of cash rent, fertilizer and seed accounted for more than 60 percent of the total cost of corn production in 2016.[i] Because loans used for operating expenses comprise about 60 percent of non-real estate loan volume, the decline in input expenses likely curbed the volume of new farm loans originated in the fourth quarter as farmers prepared for the 2017 planting season (Chart 4).

Chart 3: Farm Production Costs, Fourth Quarter



* Author’s estimate using data collected from Federal Reserve Banks’ Agricultural Credit Survey
Note: The percentages below the horizontal axis represent each input’s share of production costs.
Sources: USDA, Haver Analytics, EIA, Federal Reserve Bank of Kansas City, Minneapolis and St. Louis.

Chart 4: Operating Expenses as a Share of Total Non-Real Estate Loan Volume

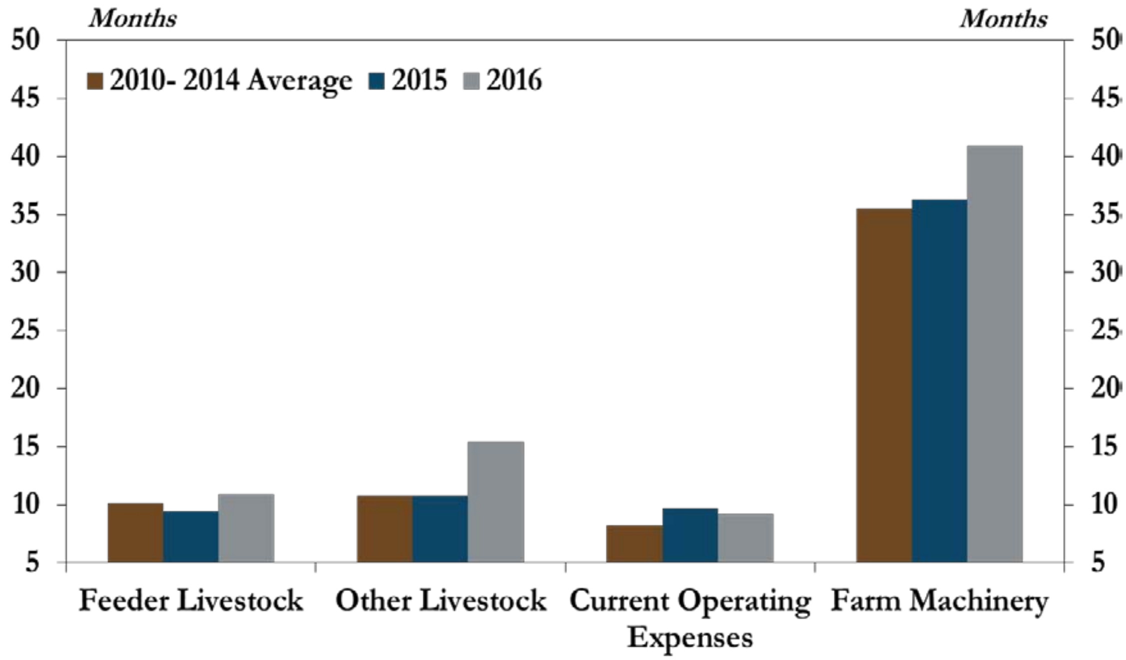


Source: Agricultural Finance Databook, Table A.3.

Although expenses declined, profit margins remained tight and bankers responded with further adjustments to loan terms. Bankers extended the maturities for feeder livestock, other livestock and farm machinery loans by 16, 42 and 13 percent, respectively (Chart 5). Longer maturities on intermediate assets may help some producers facing short-term cash flow shortages and also may help banks avoid past-due payments.

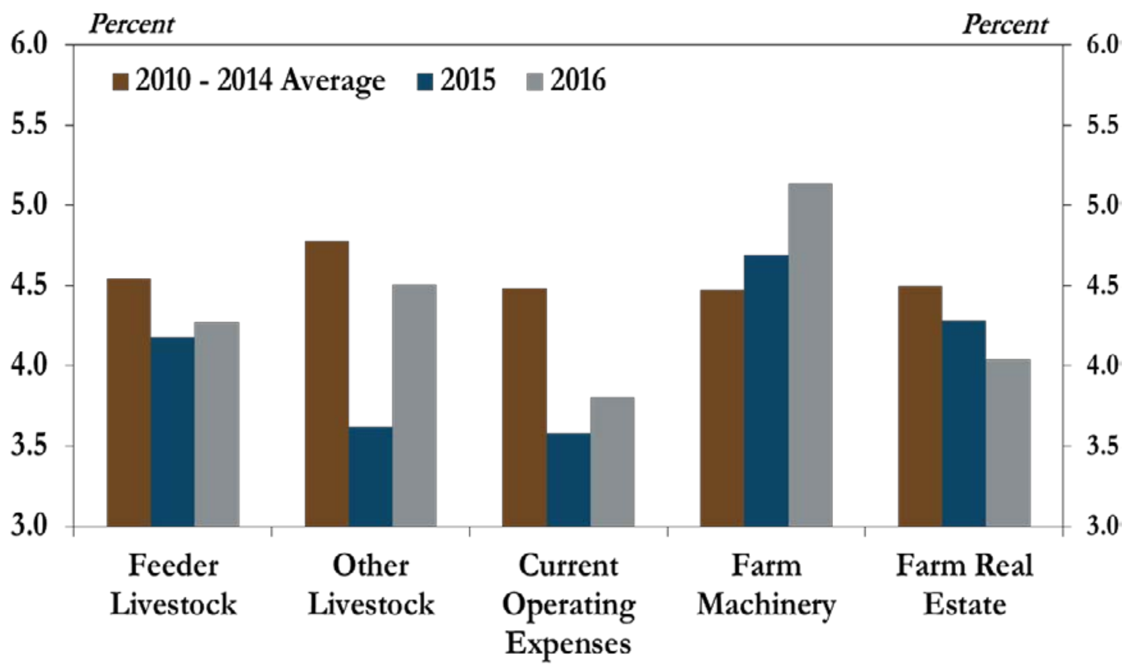
Bankers also raised interest rates in the fourth quarter on all types of non-real estate farm loans. Most notably, interest rates for other livestock and farm machinery increased 0.89 and 0.45 percentage point, respectively (Chart 6). Farm machinery and other livestock carry longer maturity periods and a rate increase may represent a risk-compensation measure when profit margins are tight. Because more than 85 percent of non-real estate loans carried a floating interest rate in the fourth quarter, slight increases in market interest rates may have led to slightly higher interest rates for short-term operating loans in the farm sector. Conversely, interest rates for farm real estate loans edged lower to 4.0 percent in the fourth quarter.

Chart 5: Maturities on Non-Real Estate Farm Loans, Fourth Quarter



Source: Agricultural Finance Databook, Table A.4.

Chart 6: Interest Rates on Farm Loans, Fourth Quarter

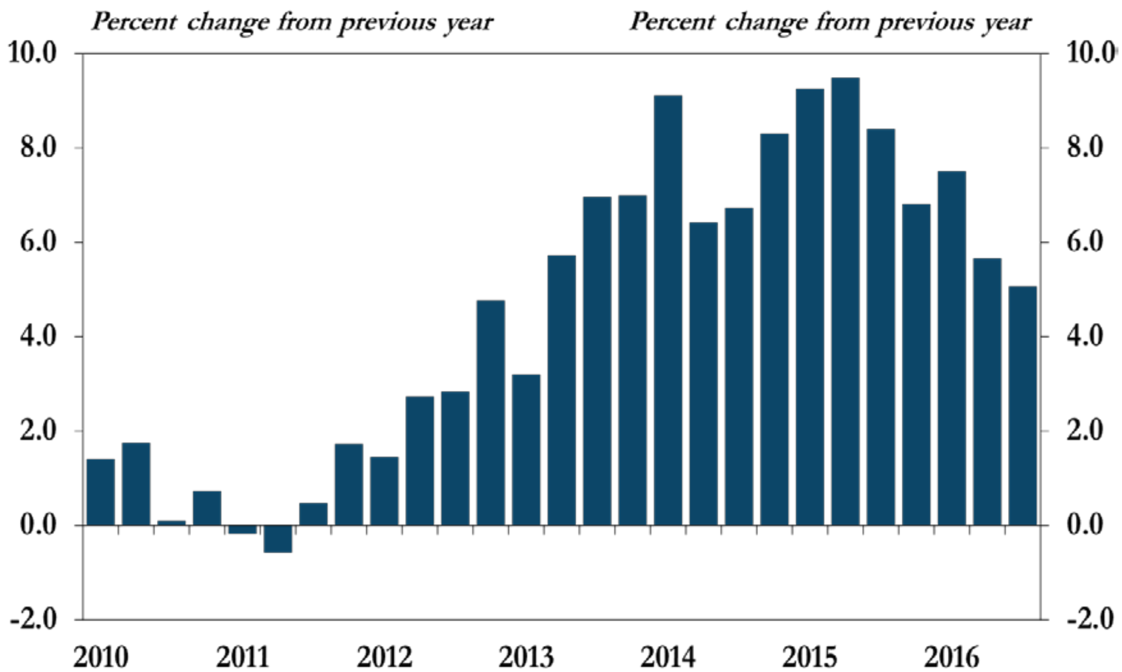


Note: Interest rates are weighted by loan volume.
Source: Agricultural Finance Databook, Table A.8.

Section B – Third Quarter Call Report

Despite the sharp reduction in new loan originations, outstanding farm-sector debt at commercial banks continued to rise, but at a slower pace. Call Report data indicated outstanding debt increased 5 percent from a year ago (Chart 7). Although the volume of new loans has dropped recently, a slower rate of loan repayments likely has contributed to further increases in the amount of total farm debt outstanding at commercial banks. Nevertheless, the 5-percent increase in outstanding debt was the smallest in more than three years.

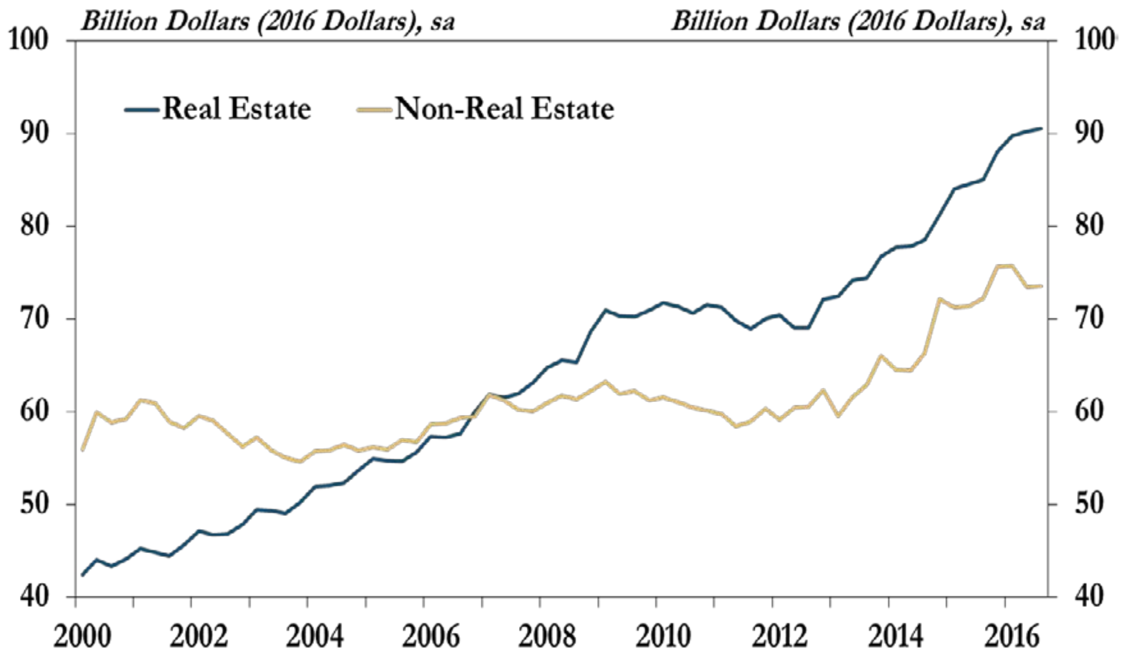
Chart 7: Farm Debt Outstanding at Commercial Banks



Source: Agricultural Finance Databook, Table B.1.

Slower growth in the level of non-real estate farm debt has reduced the overall pace of debt accumulation in the sector. For example, from the third quarter of 2012 to the third quarter of 2015, outstanding debt used to finance non-real estate farm loans grew at an average annual rate of 6 percent following 12 years of growth that averaged less than 0.5 percent (Chart 8). In the third quarter of 2016, however, non-real estate debt grew less than 2 percent from the previous year. Growth in farm real estate debt also slowed slightly in 2016, but has remained relatively steady since 2000.

Chart 8: Farm Debt Outstanding at Commercial Banks

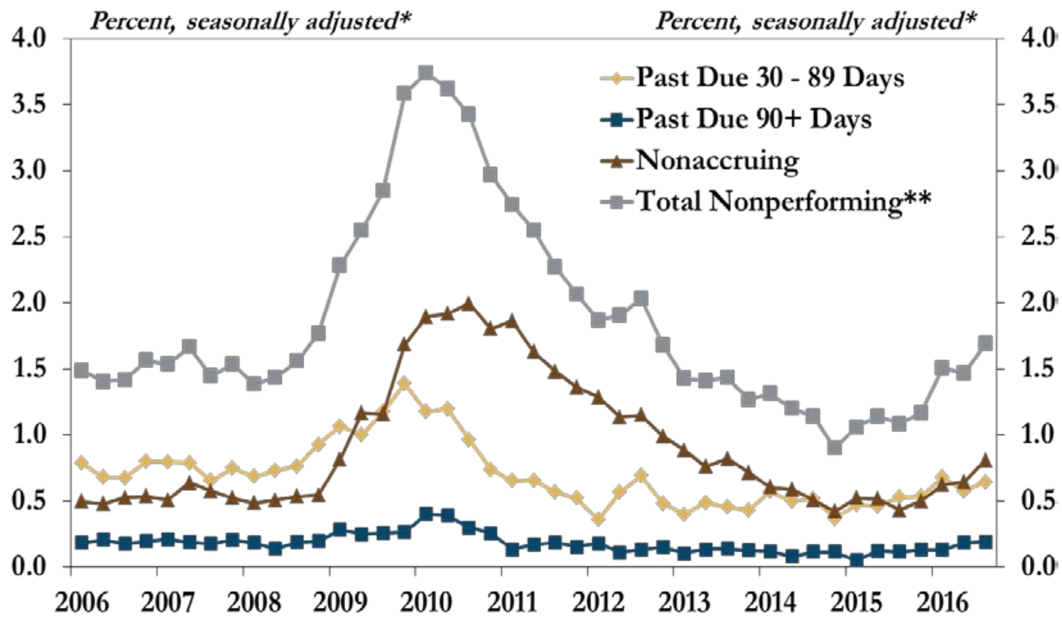


Source: Agricultural Finance Databook, Table B.1.

An increase in nonperforming loans may also explain a portion of the slowdown in debt accumulation. In the third quarter, the share of nonperforming loans increased to 1.7 percent from 1.1 percent a year earlier. Although still modest historically, the share of total nonperforming loans in the third quarter was the highest since 2012, and may have caused some lenders and borrowers to moderate their use of debt to prevent further financial stress (Chart 9).

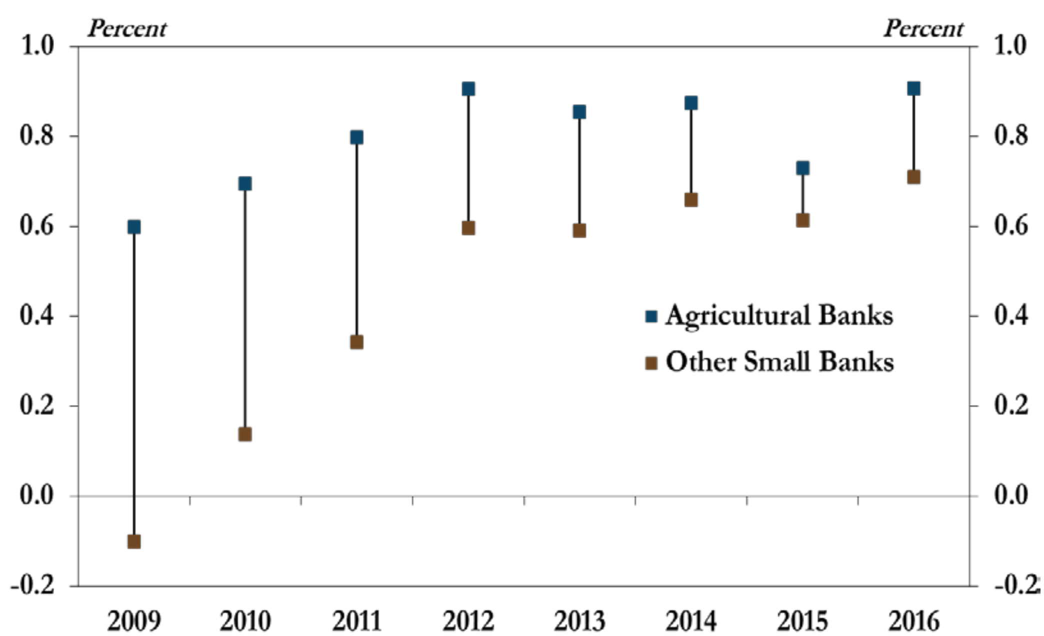
Despite slight increases in nonperforming loans, performance of agricultural banks remained strong. Returns on assets, a typical measure of bank performance, increased to 0.91 percent, the highest third quarter rate of return since 1998 (Chart 10). The loan-to-deposit ratio at agricultural banks also increased to 0.81 percent, the highest since the third quarter of 2009.

Chart 9: Past Due and Non-Accruing Farm Loans



* Percent of all outstanding non-real estate farm production loans at commercial banks.
** Total nonperforming loans includes the share of all past due, nonaccruing and net charge-off loans.
Source: Agricultural Finance Databook, Table B.2.

Chart 10: Rate of Return on Assets, Third Quarter

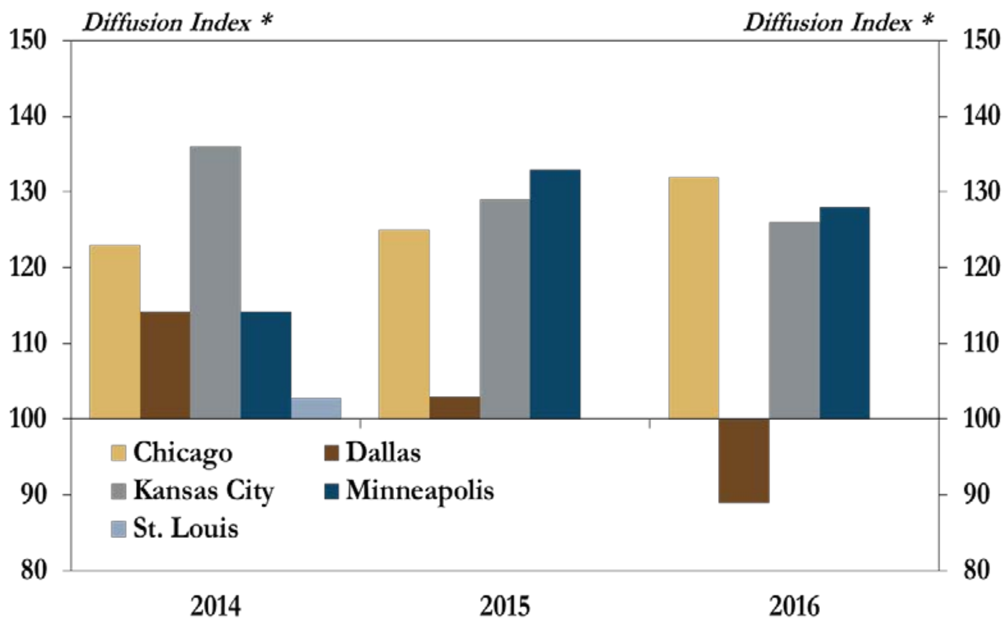


Source: Agricultural Finance Databook, Table B.7.

Section C – Third Quarter Regional Agricultural Data

Regional Federal Reserve surveys also showed that demand for non-real estate financing in the farm sector increased, but not as strongly as in recent years. According to the surveys, demand for non-real estate loans increased in the Chicago, Kansas City and Minneapolis districts in the third quarter. However, growth was slower in Kansas City and Minneapolis than in 2015 (Chart 11). Additionally, demand for non-real estate financing in the third quarter declined in the Dallas district for the first time since 2013 and was unchanged in the St. Louis district for the second consecutive year.

Chart 11: Demand for Non-Real Estate Farm Loans, Third Quarter



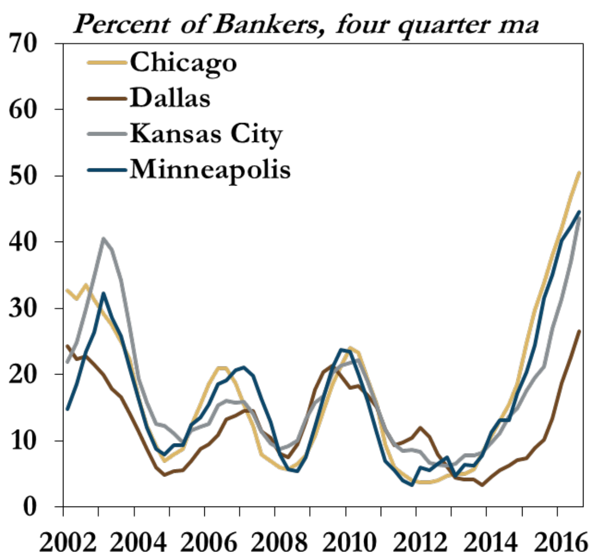
* Diffusion Index is calculated by subtracting the percentage of respondents who indicated "lower" from the percentage of respondents who indicated "higher" and adding 100.
Source: Agricultural Finance Databook, Table C.1.

In addition to loan demand, demand for loan renewals and extensions also has continued to rise. The share of bankers that reported an increase in loan renewals and extensions was the highest in survey history for the Chicago, Kansas City, Minneapolis and St. Louis districts and the highest since 2001 in the Dallas district (Chart 12). Conversely, the share of bankers that reported higher repayment rates was at, or near, historical lows for the Chicago, Dallas, Minneapolis and St. Louis districts and the lowest since 1999 in the Kansas City District.

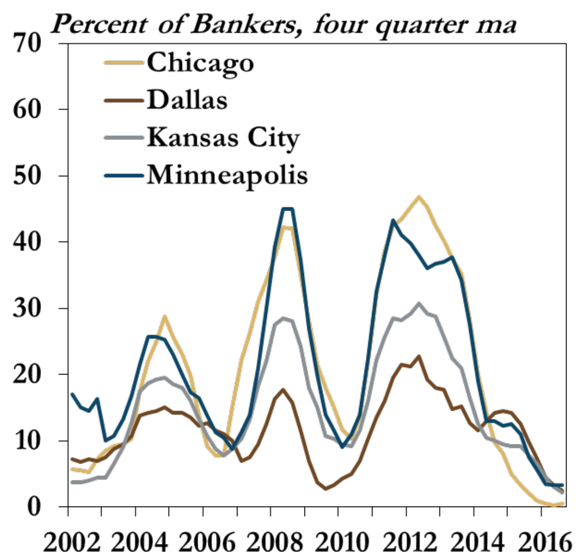
Elevated demand for loan renewals and extensions and weaker repayment rates underscored a growing sense of financial stress in the farm sector.

Chart 12: Selected Agricultural Credit Conditions

Higher Renewals and Extension Rate



Higher Repayment Rates



Source: Agricultural Finance Databook, Table C.1.

Prolonged financial stress in the farm sector also has continued to curb farm real estate values. In fact, farmland values in all states in the Chicago, Kansas City and Minneapolis districts have declined from their recent peaks (Table). Most notably, nonirrigated cropland values have dropped by 20 percent, on average, in Kansas and 19 percent in Iowa since 2013. Although, this represents an annualized rate of only 5-8 percent, persistent and gradual declines could lead to further financial stress in the farm sector in the coming years.

Table: Change in the Value of Nonirrigated Cropland (Peak to 2016:Q3)

State	Peak Quarter	Percent Change from Peak
Kansas	2013:Q4	-20
Iowa	2013:Q2	-19
Minnesota	2013:Q1	-16
South Dakota	2014:Q3	-16
Mountain States*	2016:Q2	-14
Nebraska	2013:Q3	-11
Northern Illinois	2014:Q2	-11
North Dakota	2015:Q3	-9
Northern Indiana	2013:Q4	-9
Oklahoma	2015:Q4	-4
Missouri	2013:Q3	-2
Southern Wisconsin	2015:Q1	-1
Texas	2016:Q3	No Decline

* Mountain States include Colorado, northern New Mexico and Wyoming.
Sources: Federal Reserve Banks of Chicago, Dallas, Kansas City, Minneapolis and St. Louis.

Conclusion

A gradual increase in the level of financial stress in the farm sector has caused agricultural lenders and borrowers to become increasingly cautious. Although declines in the cost of some key inputs have provided modest relief, profit margins have remained low and new farm loan originations dropped sharply in the fourth quarter. If profit margins remain low through 2017, the pace of new debt will be a key indicator to monitor in assessing the severity of financial stress through the year.