



## Economic Report

Office of Regulatory Policy Agricultural and Economic Policy Team

December 18, 2015

### Summary

The USDA's latest forecasts call for a two year 31 percent plunge in net cash farm income to be coupled with a \$22 billion rise in farm debt for 2015. In inflation-adjusted dollars the new \$367 billion debt total is nearing the record set back in 1980/81. The rise in debt coupled with the fall in income would reduce the ratio of net cash farm income-to-total debt to its lowest level since the 1980s Farm Financial Crisis thus signaling a likely decrease in loan performance is ahead.

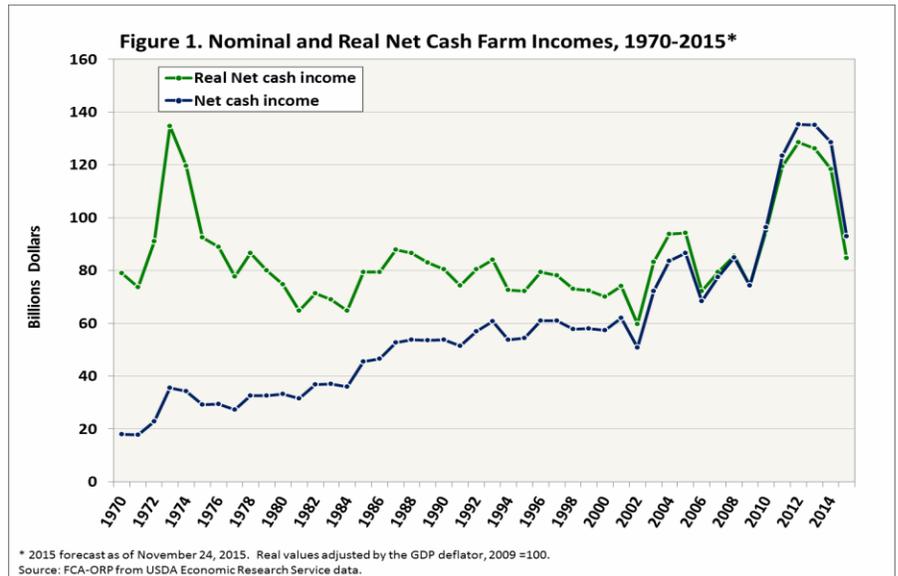
Future loan performance will hinge on relatively few U.S. farms because farm debt is concentrated, with only 37 percent of U.S. farms paying farm interest expense in 2012. The majority (54 percent) of total farm interest expense in 2012 was paid by just 6 percent of all farms. Farm debt is also concentrated by commodity enterprise, with over one-third of total interest being paid by oilseed and grain farms.

Farm debt is also concentrated by lender type, with the System and banks now accounting for about 4 out of every 5 dollars lent to U.S. farmers. Since the mid-2000s the System's farm loan portfolio growth has outpaced that of banks, nearly doubling in volume.

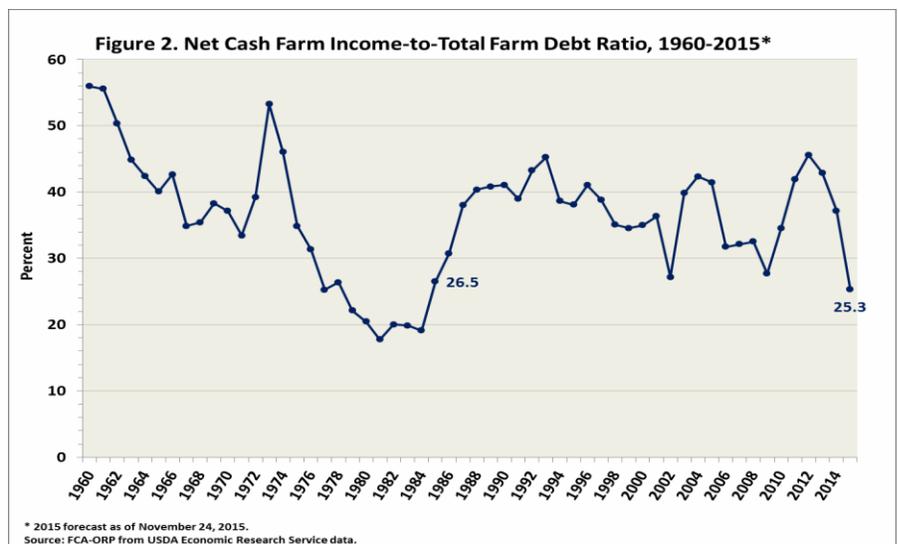
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# Farm Debt Grows as Incomes Fall

In November USDA cut its latest forecast for 2015 net cash farm income to \$93 billion, the lowest level since 2009. If the forecast proves correct, net cash farm income will have dropped 31 percent from its \$135 billion peak in 2012 and 2013. In nominal and real dollars this would be the largest 2-year drop in net cash farm income since the mid-1970s (figure 1).

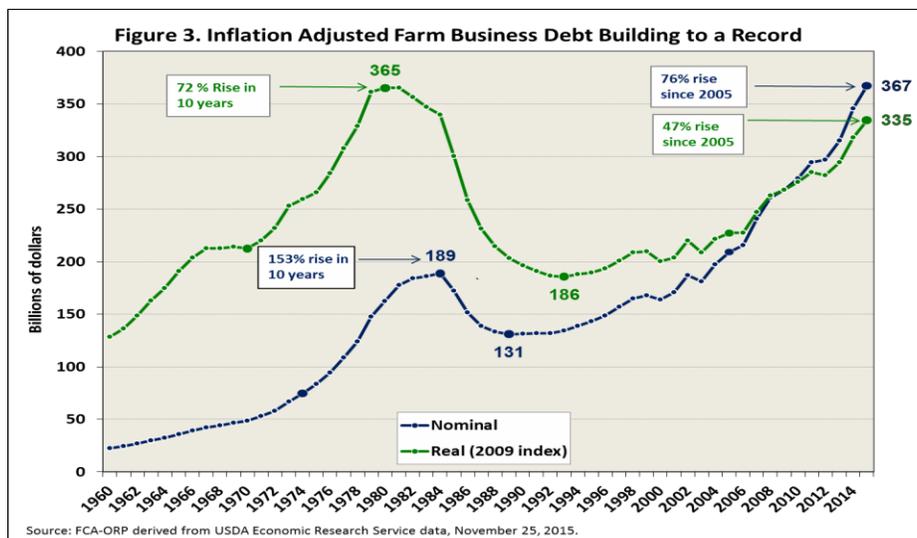


While many observers have been comforted by the modest leverage on the farm sector balance sheet (debt-to-asset ratio of 12.8 percent for 2015), USDA is forecasting that total farm debt will rise by another \$22 billion in 2015 to \$367 billion. The steady rise in farm debt coupled with the sharp fall in farm income would reduce the ratio of net cash farm income to total debt to 25.3 percent for 2015, its lowest level since the 1980s Farm Financial Crisis (figure 2). A ratio at this level is an indicator that income available for debt servicing could be lacking for a substantial segment of farmers and that some weakening in loan portfolios is likely to occur.



## Farm Sector Debt Continues to Build

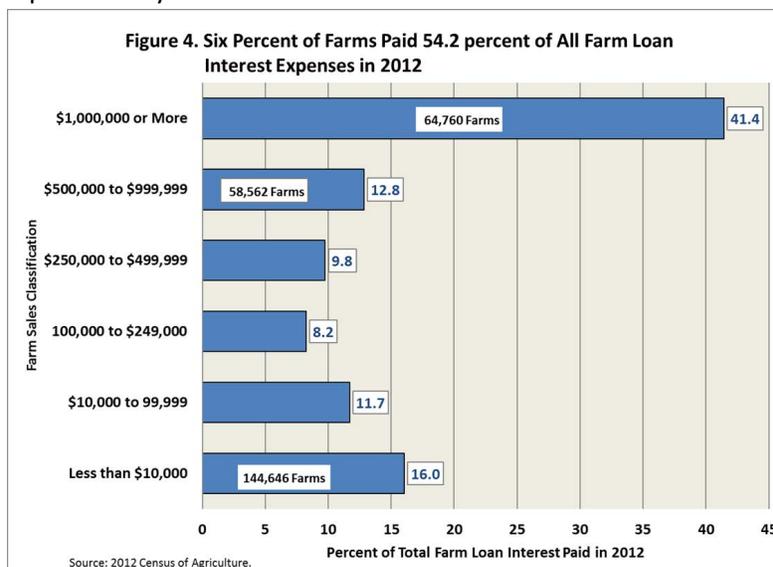
While the farm economy has cooled considerably and farmland markets have softened, the data shows that farmers continue to add debt to their balance sheets. This is occurring despite a pullback in capital investments. Figure 3 shows the trends in total U.S. farm business debt in nominal and inflation-adjusted dollars since 1960. The figure shows over the last 10 years inflation-adjusted farm debt is forecast to have risen 47 percent to \$335 billion. This amount would be just \$30 billion shy of the peak of farm debt recorded in 1980-81.



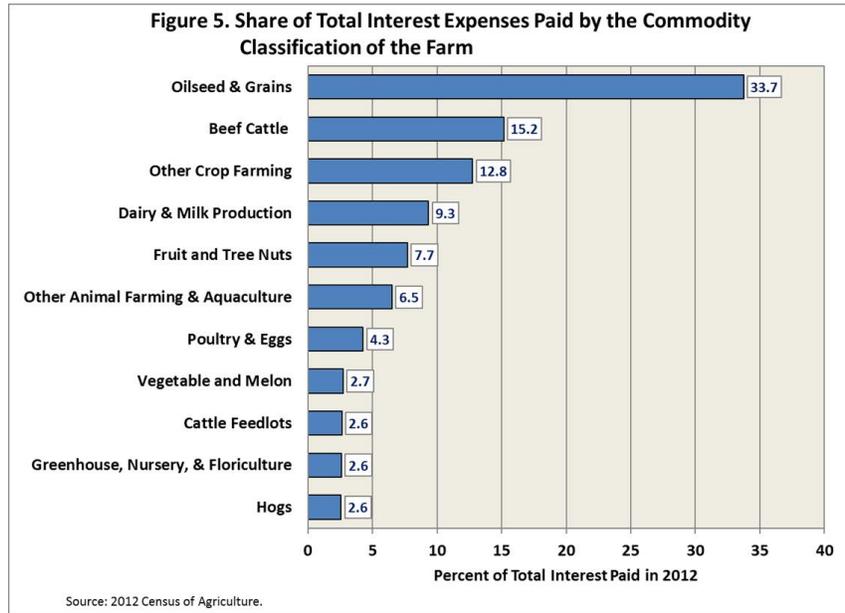
## Farm Debt is Concentrated

While the amount of aggregate debt bears watching, how this debt is distributed is a bigger concern. The 2012 Census of Agriculture provides us with some insights here. While the Ag Census does not report on farm debt directly, it does report on the amount of interest expense each farm operation paid that year. In 2012, only 37 percent (784,000) of all U.S. farms reported having any interest expense. Therefore, the repayment of the farm sector's debt will be borne by a relatively small segment of U.S. farms using debt.

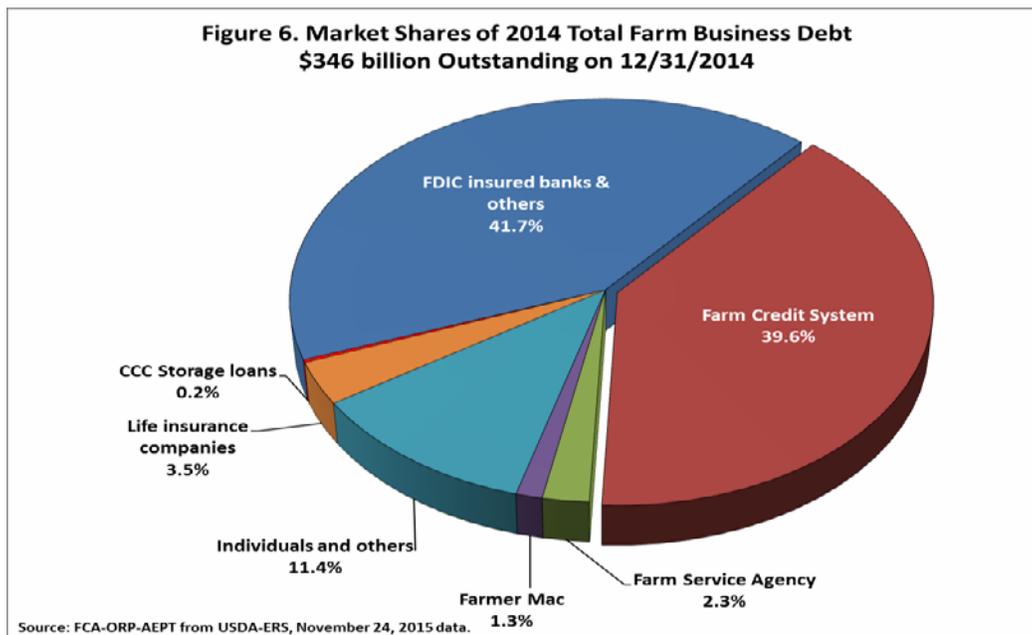
As one might expect, large farms are much more likely to use debt capital and borrow in greater amounts than smaller farms. The Ag Census also shows that the majority of the total interest expense paid in 2012 was done so by a relatively few large farms (figure 4). Just 6 percent of all farms (122,812 farms with interest expenses and at least \$500,000 in farm sales) accounted for 54.2 percent of a total of \$12.1 billion in interest expenses paid by U.S. farms in 2012. Therefore, a relatively small subset of indebted U.S. farms owes the majority of U.S farm debt, the payment of which is tied closely to farm profitability.



The Ag Census data also shows farm debt is concentrated by commodity type. Oilseed and grain farms (often referred to as “cash grains”) accounted for over one-third of the total interest paid by U.S. farms in 2012 (figure 5). The next highest category is beef cattle farms, which are primarily cow-calf operations. The percentages of total interest paid by the commodity specialization in the Census data are similar to the percentages of total Farm Credit System (System) farm loan volume as reported by the FCS Funding Corporation. For example, the percentages of total System farm loan volume at 2012 yearend to cash grain, cattle, dairy, poultry & egg, and hog farms were 30.6 percent, 15.6 percent, 13.1 percent, 4.8 percent, and 3.9 percent, respectively. The financial condition of cash grain farms has the biggest impact on the farm sector’s loan performance, as well as that of the System’s portfolio.



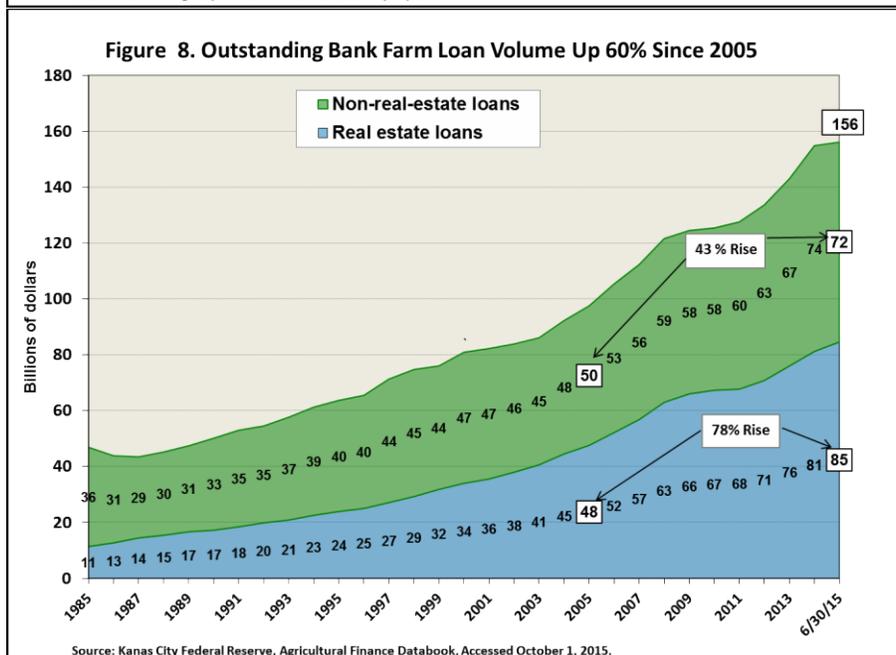
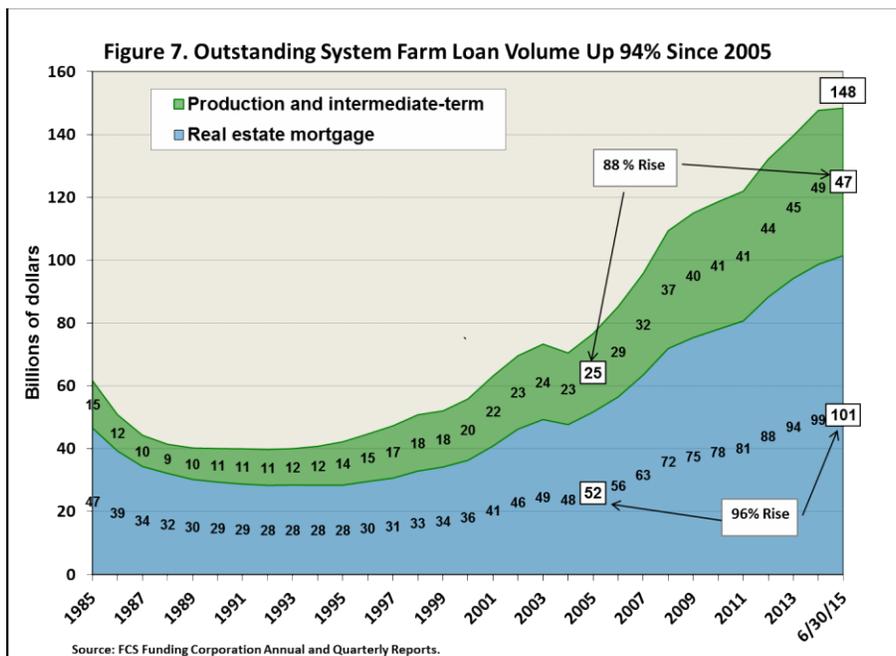
Farm debt is also concentrated among lender types – the System and commercial banks. USDA’s farm debt forecast for 2015 does not include lender market shares, but its estimates for 2014 debt do. Figure 6 shows that FDIC insured lenders (primarily commercial banks) and the System accounted for about 4 out of every 5 dollars in farm business debt owed in 2014. Despite some variation in market shares overtime, banks and the System have been the primary lenders to U.S. agriculture over the past few decades. The System has been gaining market share relative to banks since agricultural debt began rising in the mid-2000s.



## The System's Outstanding Farm Loan Volume Grows at a Faster Pace than at Commercial Banks

In recent years the System has experienced significantly greater growth in the amount of farm loans on its balance sheet than that of commercial banks. From the end of 2005 to mid-2015, the System's farm loan portfolio (real estate mortgages and production and intermediate loans reported by the FCS Funding Corporation) grew by 94 percent, whereas commercial banks' loan portfolio (farm real estate and non-real estate loans reported on FDIC Call Reports) grew by just 60 percent (figure 7 and figure 8).

From 2005 to 2015 the total value of farm real estate on the farm sector's balance sheet is estimated to have risen by 71 percent. In contrast, the System's outstanding farm real estate mortgage volume rose by 96 percent and bank farm real estate volume rose by 78 percent from the end of 2005 to the middle of 2015. The System saw its production and intermediate loan volume rise 88 percent, whereas similar commercial bank debt rose much slower at 43 percent. Notice that the System has a significantly larger farm real estate loan portfolio; whereas banks still dominate non-real estate farm lending.



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## Conclusions

While many observers are comforted by the relatively modest leverage on the farm sector balance sheet, the farm sector is entering into 2016 following another year of falling incomes and rising debt burdens. The latest USDA estimates show the farm sector has added a considerable amount of debt during the last upswing in the farm economy, with farmers adding an estimated \$158 billion in new debts since 2005, a 76 percent increase. Over the past 2 years the relationship between net cash incomes and farm debt for the farm sector has quickly deteriorated to a level not seen since the Farm Financial Crisis of the 1980s. It is an indicator that some weakening in farm loan portfolios is likely to occur going forward, especially if farm incomes do not recover in 2016. During the past 7 years, the ability to service debt has been aided by historically low interest rates. But beginning this month, monetary policy changes have begun the process of increasing interest rates and thus adding additional costs for those farms with debt.

The majority of farms do not report owing farm debt. Indeed, farm debt is now primarily owed by farms that are very large in size. Also, a large concentration of debt (nearly 34 percent) is held by “cash grain” farmers. Farm debt is also concentrated in the hands of commercial banks and the Farm Credit System, with 4 out of every 5 dollars being owed to these two primary groups of lenders. System farm loan growth has outpaced that of commercial banks during this latest upswing in agriculture and thus it has gained market share.