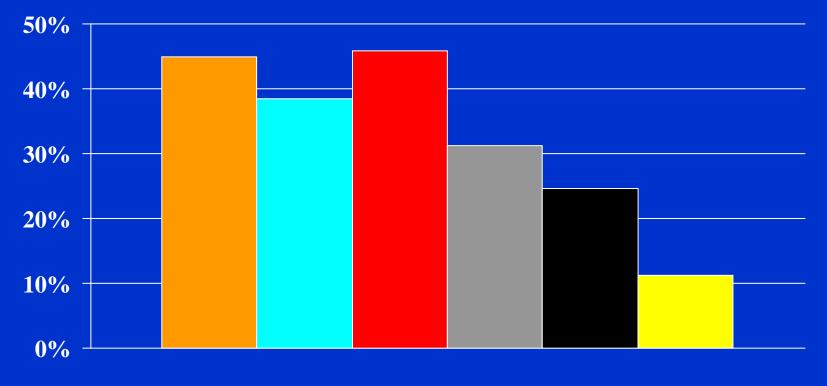
An Update on the Agricultural Economy

February 20, 2018 Federal Reserve Bank of Chicago David Oppedahl Senior Business Economist 312-322-6122 david.oppedahl@chi.frb.org

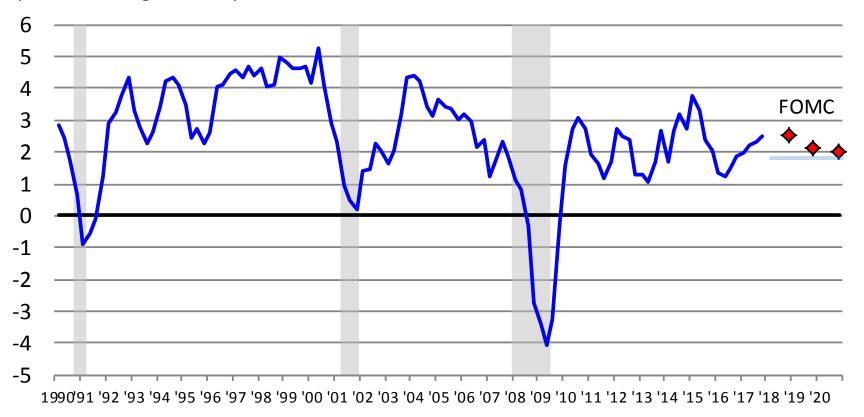
7th District Agriculture Products (as % of U.S. total, 2017)



■ Grain Corn ■ Soybeans ■ Hogs ■ Eggs ■ Milk Production ■ Cattle

The FOMC consensus outlook has output growth rising above trend this year before easing

Real gross domestic product



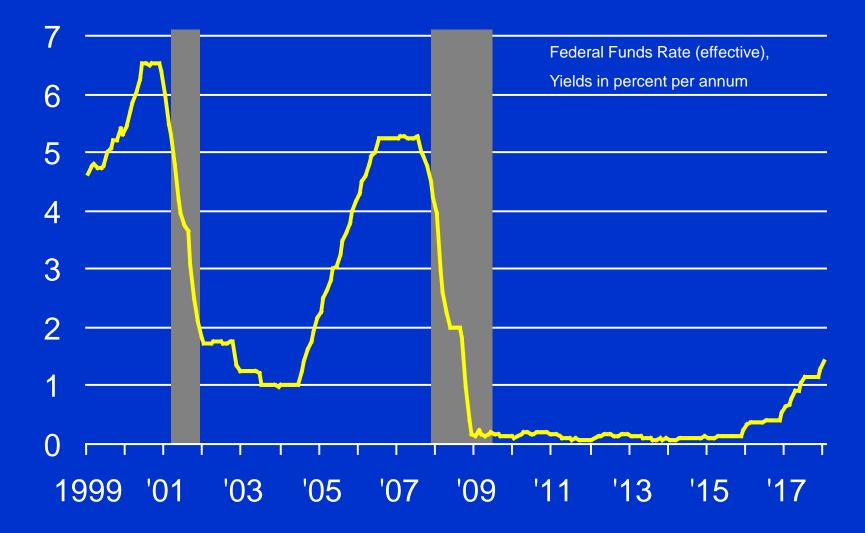
percent change from a year earlier

Sources: Bureau of Economic Analysis and Federal Open Market Committee

Recent Monetary Policy Actions

- No additional asset purchases after November 2014, while continuing to reinvest assets as they mature.
- In October 2017 began to reinvest less than 100% of matured assets to gradually reduce balance sheet.
- In December of 2015 & 2016 and March, June & December of 2017, raised the targeted range of the Fed Funds Rate by 0.25% points each time
- The FOMC will monitor economic conditions to tailor future actions to meet objectives of maximum employment and 2% inflation

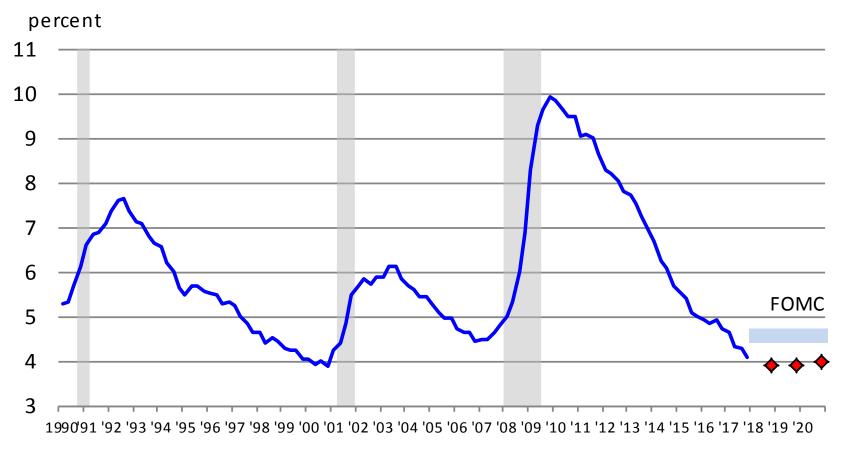
In December 2017, the FOMC raised the Fed Funds rate target to a range from 1.25% to 1.50%



Source: Board of Governors of the Federal Reserve System

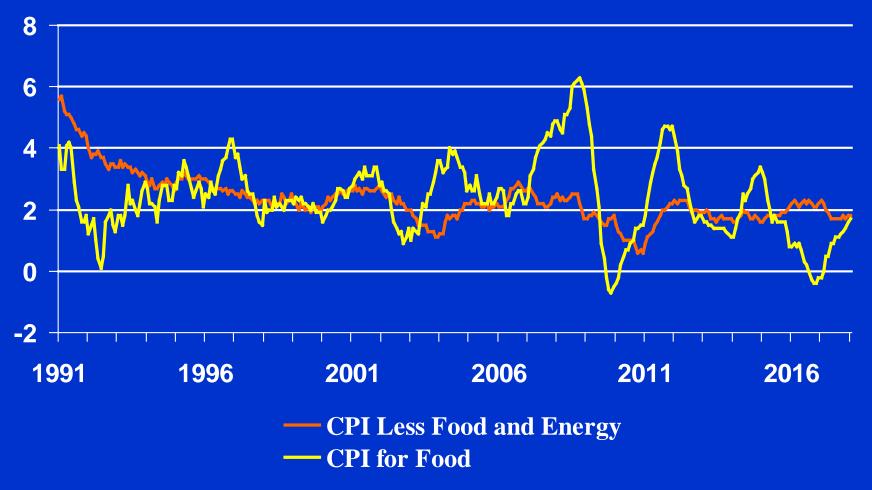
The FOMC forecasts that the unemployment rate will be below the natural rate through 2020

Unemployment rate



Food price changes still below core inflation (less food and energy)

(Consumer Price Index, percent change from year ago)



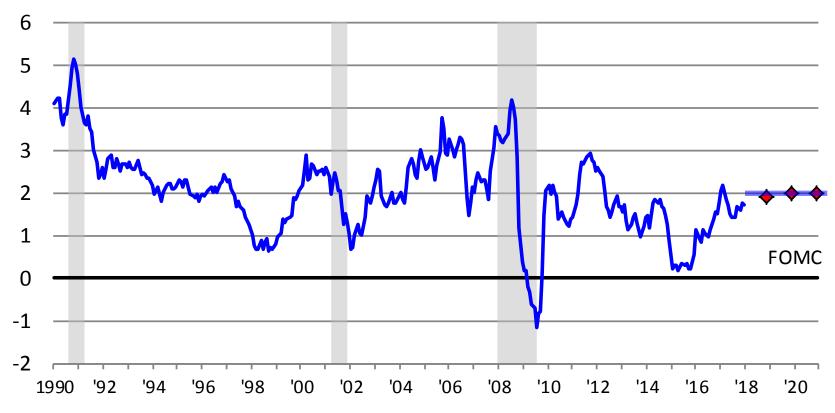
Oil prices plummeted and lower gas prices boosted consumer saving/spending (2010 \$/barrel)





The FOMC anticipates that PCE inflation will be near the two percent target from 2018 forward

Personal consumption expenditure - chain price index



percent change from a year earlier

Sources: Bureau of Economic Analysis and Federal Open Market Committee

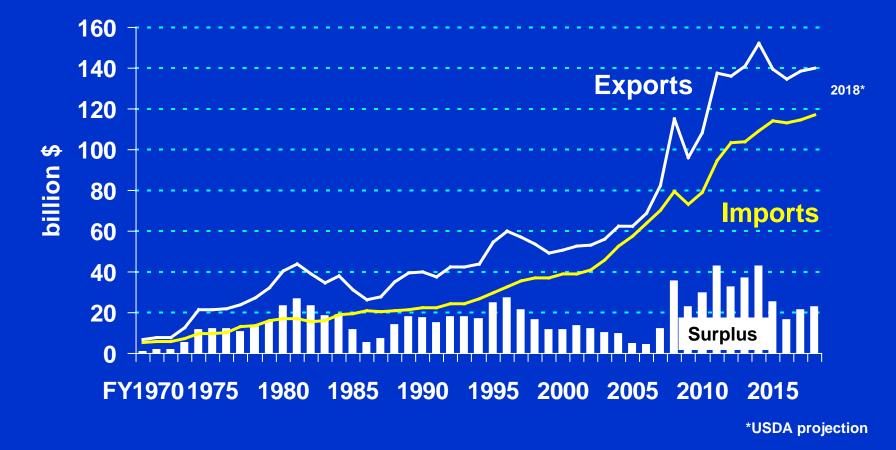
The dollar's exchange value has dipped since the start of 2017, boosting exports

(Real Broad Trade-Weighted Exchange Value of the US\$) {March 1973=100}

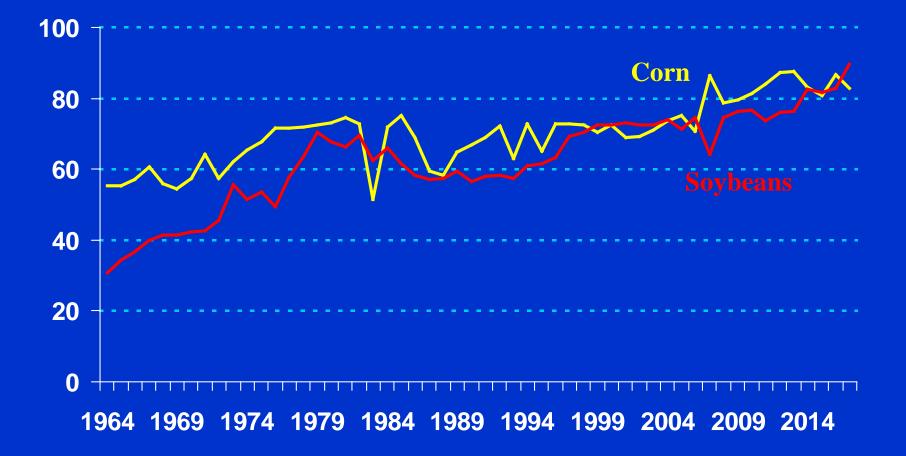


Source: Board of Governors of the Federal Reserve System

Value of agricultural exports rose in 2017, but expected to be about the same in 2018

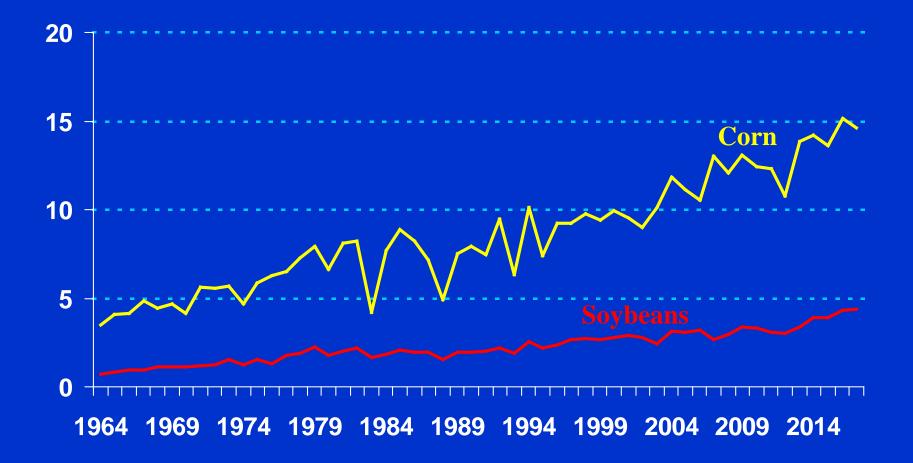


More soybean acres harvested than corn in 2017 (million acres)



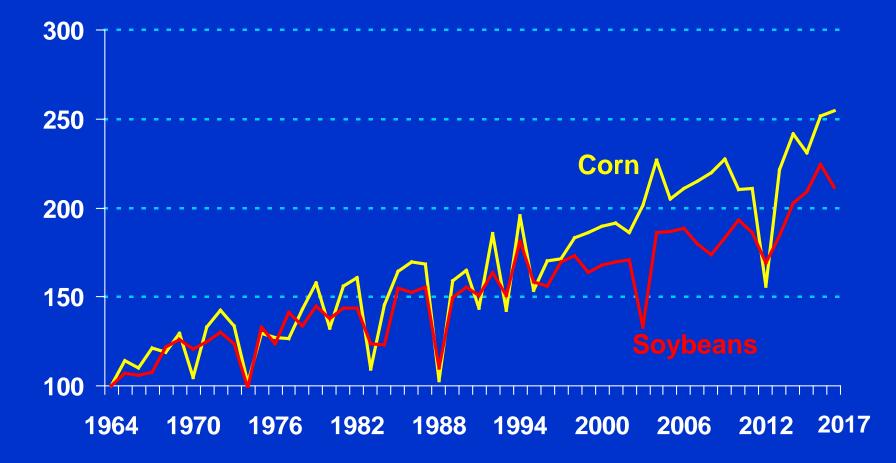
Source: USDA, National Agricultural Statistics Service

U.S. Corn and Soybean Production (billion bushels)



Source: USDA, National Agricultural Statistics Service

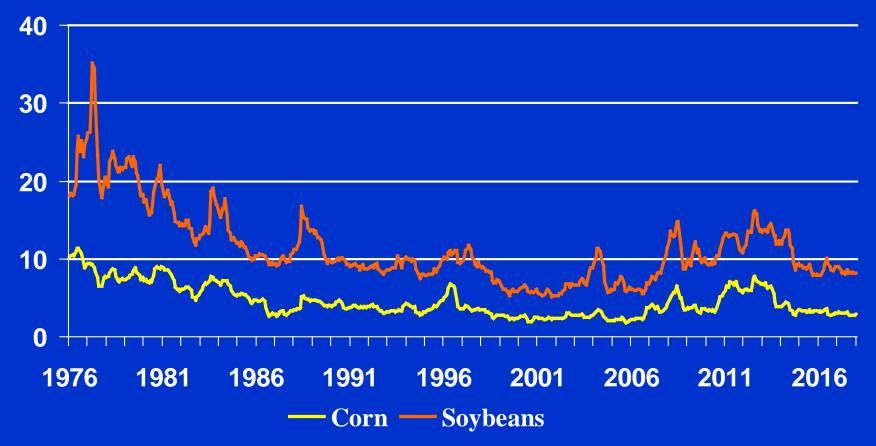
7th District Crop Yield Indexes (1964=100)



Source: USDA, National Agricultural Statistics Service

Real Cash Crop Prices

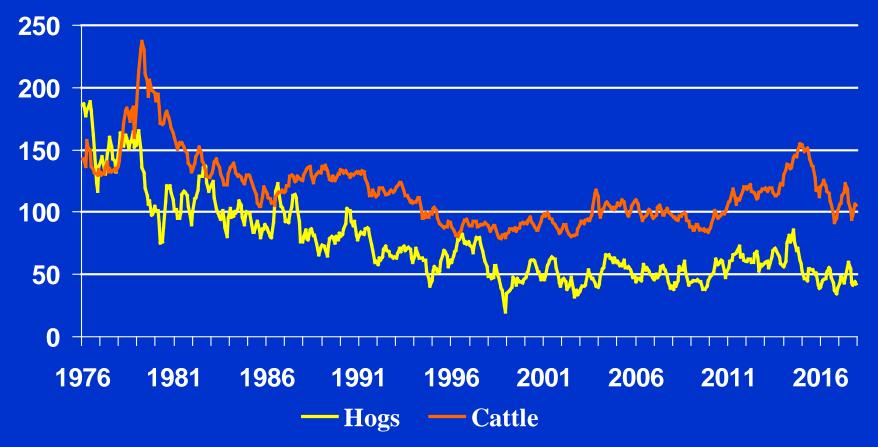
(\$/bushel for Central IL, adjusted by CPI-U for January 2010)



Sources: The Wall Street Journal and U.S. Bureau of Labor Statistics

Real USDA Livestock Prices

(\$/hundredweight, adjusted by CPI-U for January 2010)



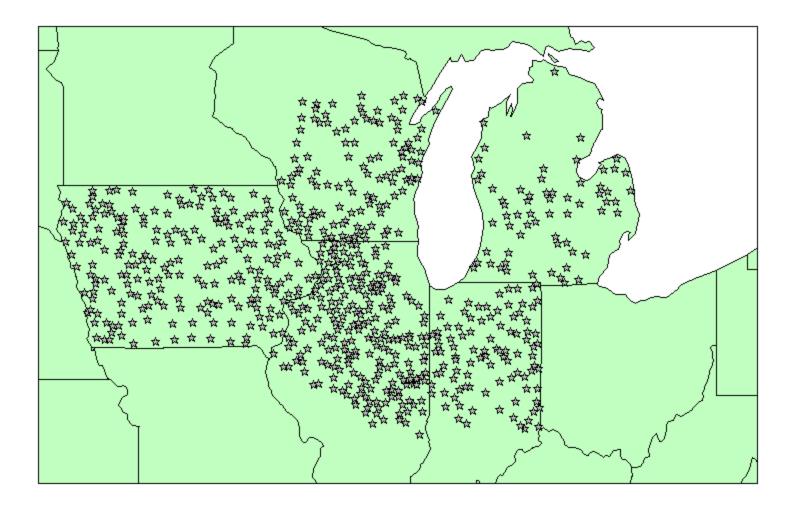
Sources: USDA, National Agricultural Statistics Service and U.S. Bureau of Labor Statistics

Dairy exports and milk prices

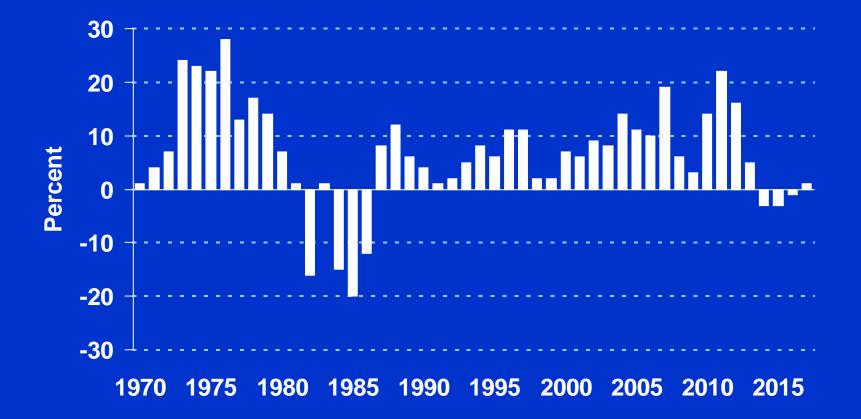


Source: USDA, World Agricultural Outlook Board

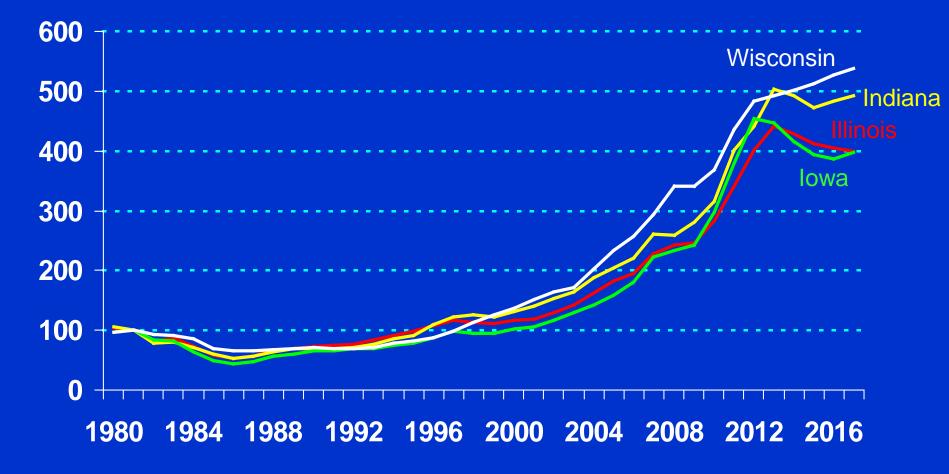
Banks in 7th District Land Values and Credit Conditions Survey



Annual change in farmland values in 7th Federal Reserve District

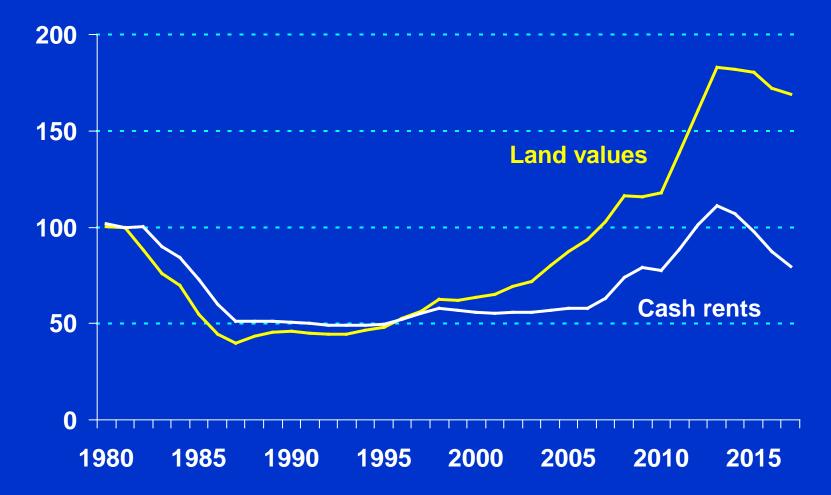


Farmland Value Indexes for 7th District States (1981=100)



Indexes of 7th District Farmland Values vs. Cash Rents

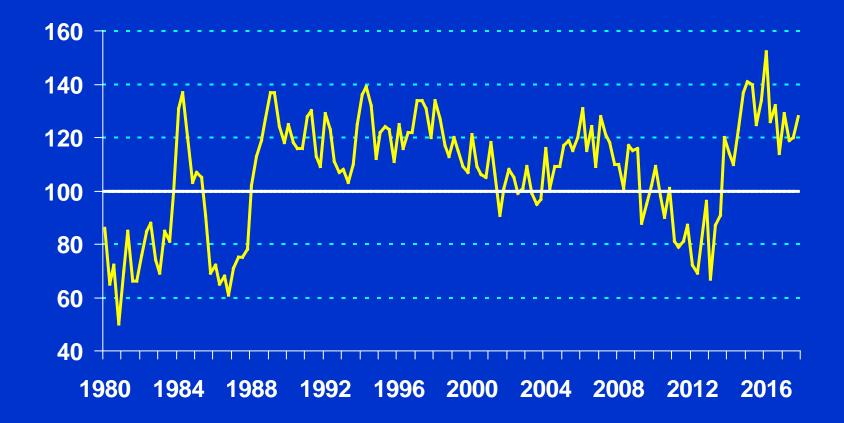
(Inflation Adjusted, 1981=100)



Source: Federal Reserve Bank of Chicago

Index of agricultural loan demand for the 7th Federal Reserve District

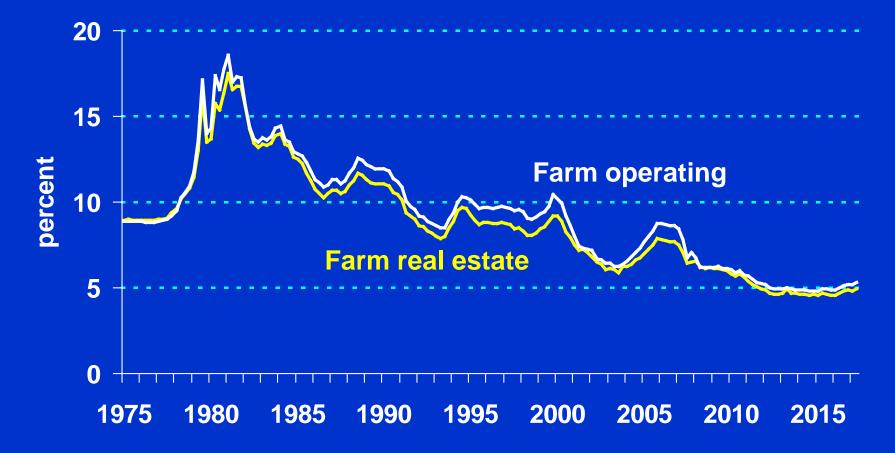
(excluding real estate)



Farm loan volume with "major" or "severe" repayment problems in 7th Federal Reserve District (fourth quarter of year)

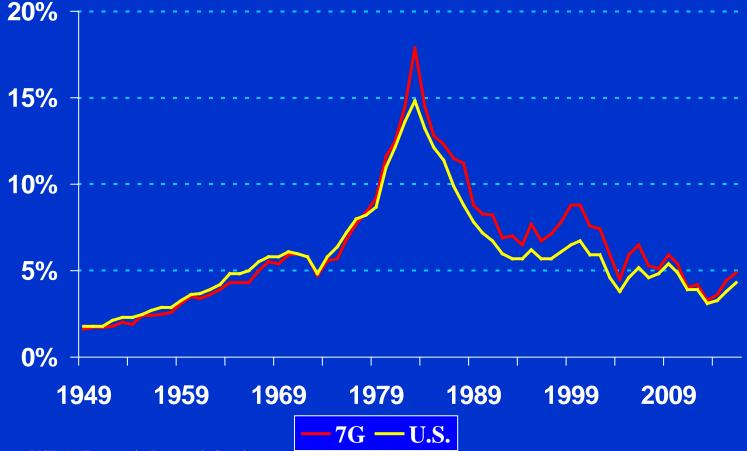


Interest rates charged on new farm loans in the 7th Federal Reserve District



Source: Federal Reserve Bank of Chicago

Interest expenses as share of agricultural value of production (% of total)

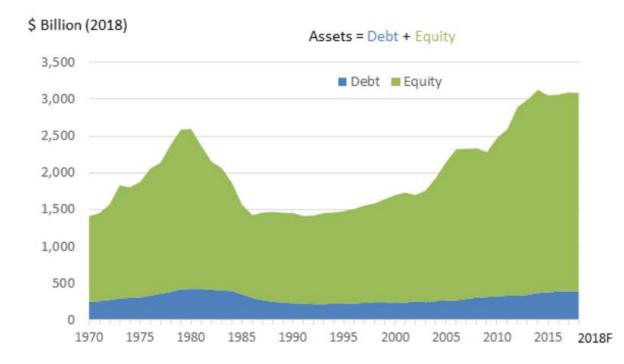


Source: USDA, Economic Research Service

Real net farm income edged up in 2017, but is expected to be down in 2018



2018 balance sheet forecast relatively unchanged from 2017



Overall debt forecast to fall 0.8% (inflation adjusted), with decreases in both real estate and non-real estate debt.

Value of farm sector assets forecast to decline by 0.2% (inflation adjusted), following a 8.2% decrease in farm sector inventories.

Farm equity to fall 0.1%.

F= Forecast. Values are adjusted using the chain-type GDP deflator, 2018=100 Source: USDA, Economic Research Service, Farm Income and Wealth Statistics Data as of February 7, 2018.

www.chicagofed.org

