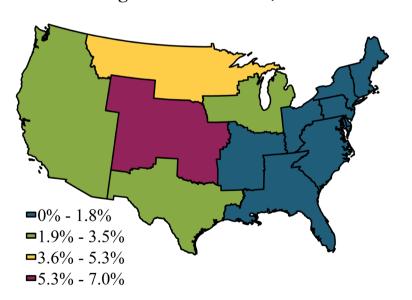


Outlook Themes

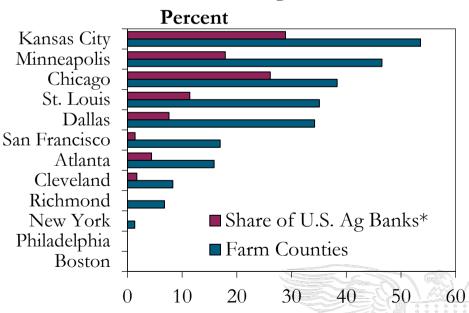
- The U.S. agricultural economy is in the midst of a prolonged downturn.
- Financial stress continues to rise, but at a modest and gradual pace.
- Macroeconomic developments are a primary concern, particularly trade.
 - Trade has captured a lot of immediate attention, but should be an even greater long-term concern.

The Kansas City Fed has a high concentration of agriculture and monitors conditions closely.

Farm Income, Share of Personal Income Average Across Counties, 2015-2017



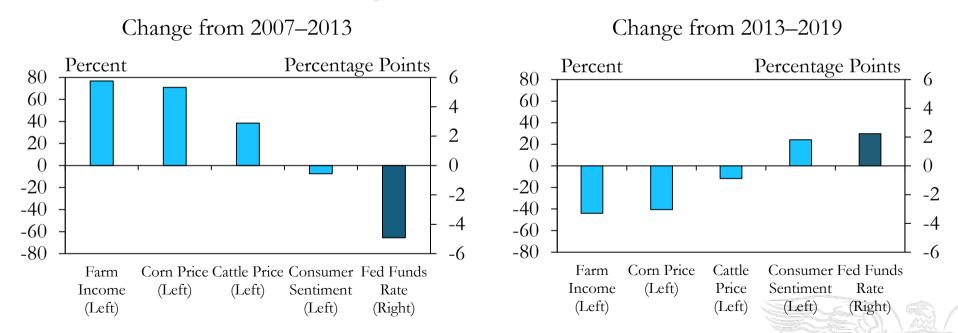
Proportion of "Farm Dependent" Counties and Agricultural Banks



^{*}Agricultural banks are defined as banks with farm production and farm real estate loans equaling approximately 18 percent or more of total loans. **Sources**: BEA, USDA, Kansas City Fed and staff calculations.

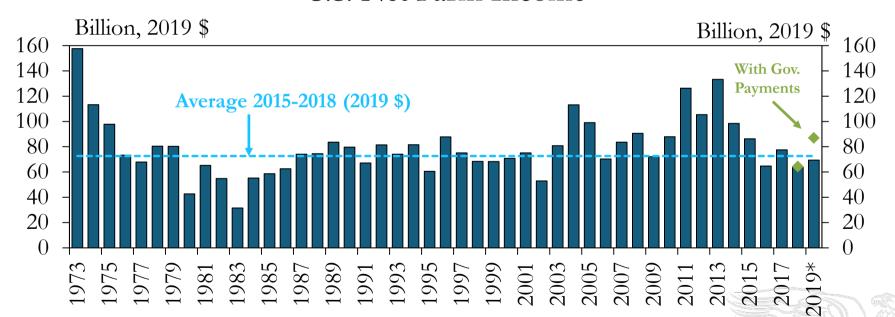
The outlooks for agriculture and the U.S. economy began to reverse in 2013.

Indicators for Ag Economy and Broader U.S. Economy



Farm income is expected to remain low in 2019, but supported by government payments.

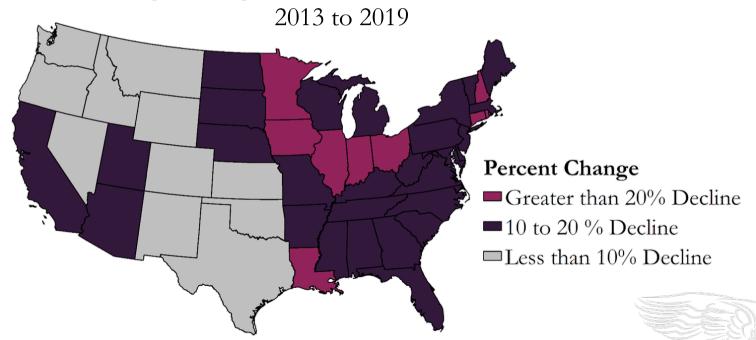
U.S. Net Farm Income



* 2019 Forecast **Source**: USDA.

Agricultural commodity prices have declined since 2013, most significantly in the Midwest.

Change in Agricultural Commodity Prices

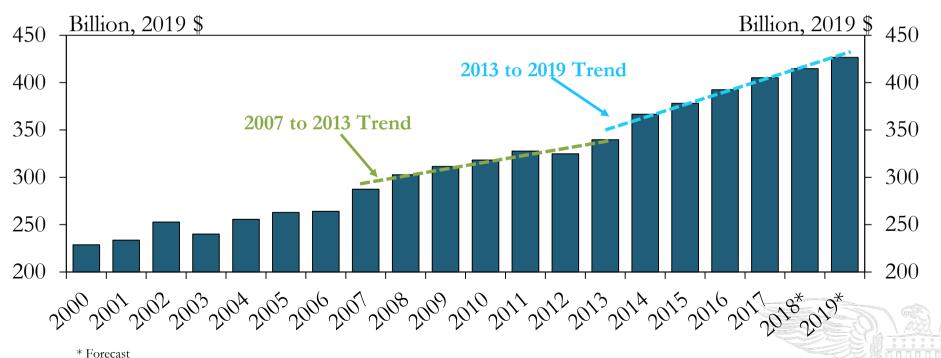


Note: 2013 Average includes January to December and 2019 Average includes January to June. **Sources**: USDA and staff calculations.

Reduced incomes have led to increased demand for farm financing.

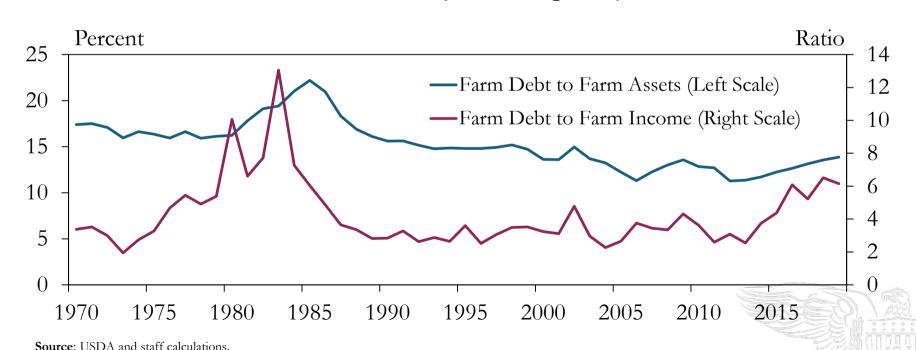
Source: USDA.





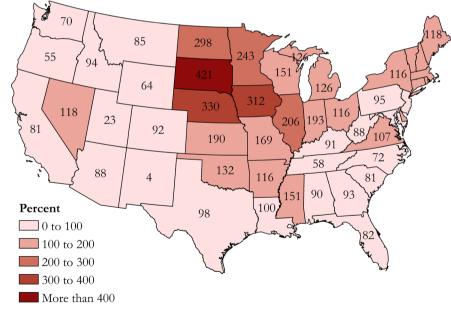
Leverage in the farm sector still remains low, but liquidity has become a more significant concern.

U.S. Farm Sector Solvency and Liquidity Measures

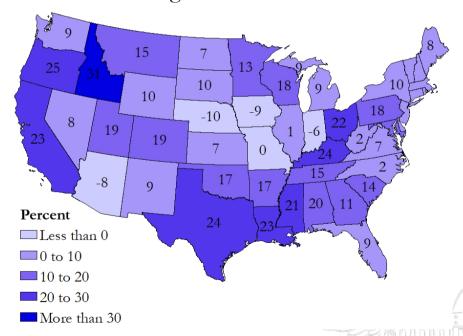


Although farmland values have declined in some states, the decreases have been quite modest.





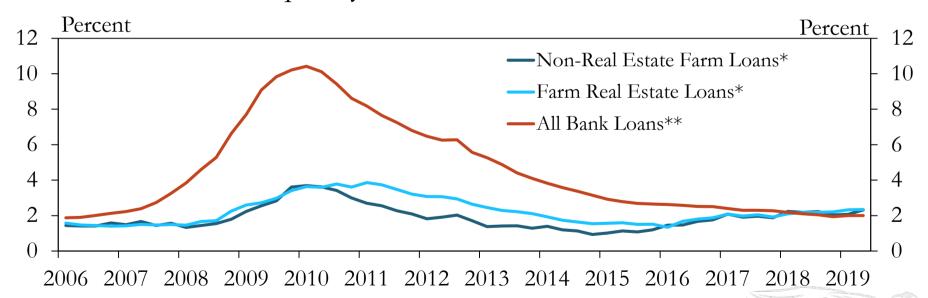
U.S. Farmland Values Change from 2013 to 2019



Source: USDA.

And although repayment challenges have increased over the past few years, delinquencies remain low.

Delinquency Rates at Commercial Banks

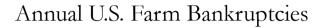


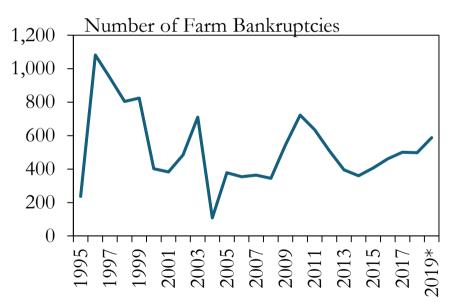
^{*} Includes the share of all past due, nonaccruing and net charge-off loans

Source: Federal Reserve Board of Governors.

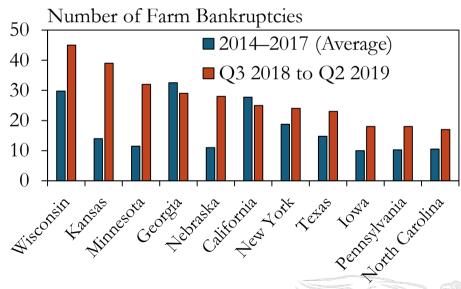
^{**} All bank loans include all loans made at commercial banks. Q2 not yet available/reported as Q1 figure.

Farm bankruptcies have trended higher, but also at a modest pace.





States with the Most Farm Bankruptcies in Past 4 Quarters**



Note: Includes all chapter 12 filings which are defined as "family farmers" and "family fishermen" with "regular annual income". Annual bankruptcies are reported as the number of filings in the 12-month period ending December 31st of each year.

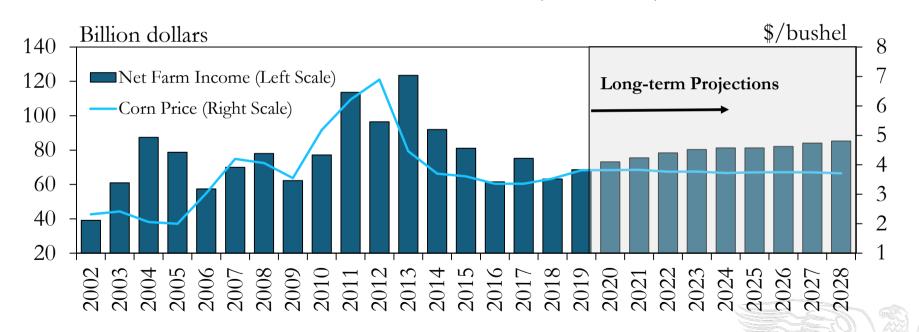
Source: United States Courts.

^{*}Annualized based on Q1 and Q2 2019

^{**}Number of filings in 12-month period ending June 30th.

In the long-term, however, agricultural commodity prices and farm income are expected to remain low.

U.S. Farm Income and Commodity Price Projections

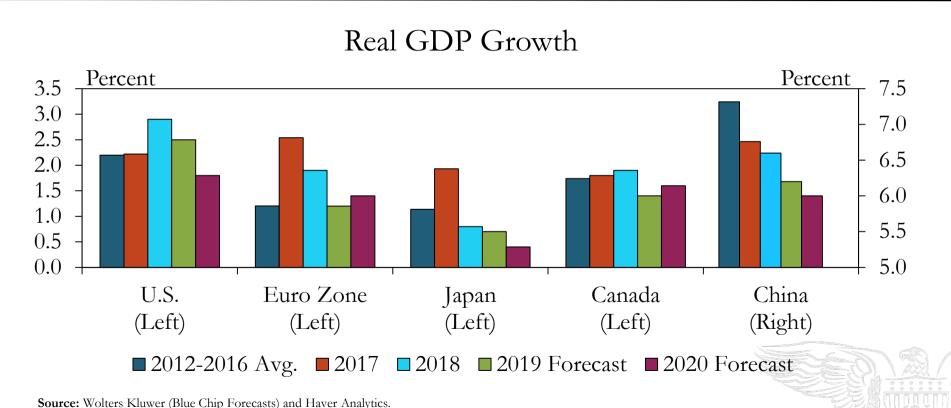


Source: The Food and Agricultural Policy Research Institute (FAPRI) at the University of Missouri.

Macroeconomic Developments are Key to Future Ag Prospects

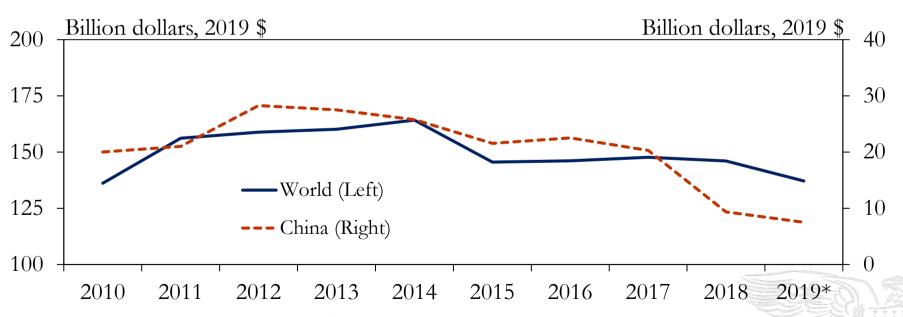


After relatively solid growth in 2017 and early 2018, economic growth appears to be slowing.



U.S. ag exports have also weakened due, in part, to a sharp decline in exports to China.

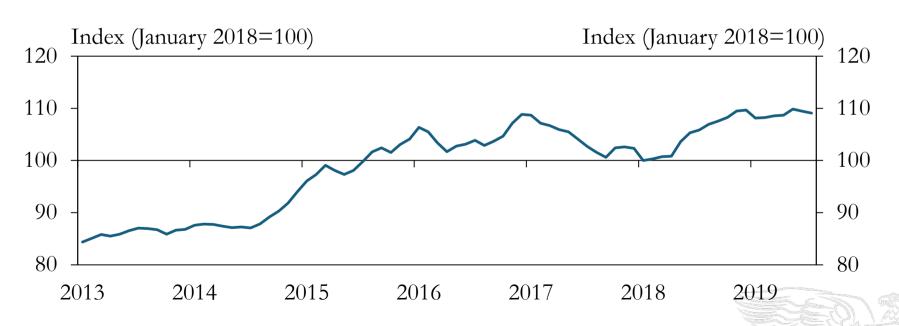
U.S. Food and Ag Exports



^{*}Exports from January 2019 to June 2019 annualized based on percent change from same period in 2018. **Source:** USDA.

An increase in the value of the dollar through 2018 has also been an additional headwind for exports.

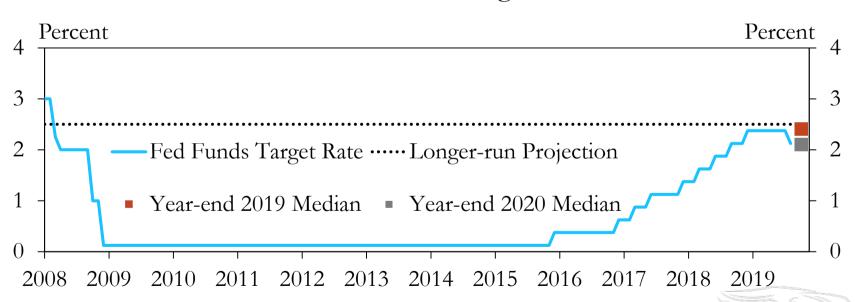
Exchange Value of U.S. Dollar



Note: Nominal, broad, trade-weighted exchange value of the U.S. Dollar **Source:** Federal Reserve Board and Haver Analytics.

Benchmark interest rates increased modestly in 2018, but have recently edged lower.

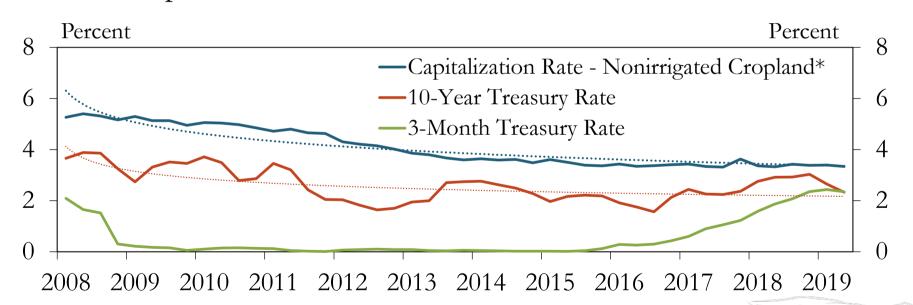
Federal Funds Target Rate



Source: Federal Reserve Board of Governors and Haver Analytics.

Spreads between short-term and long-term assets have narrowed considerably.

Capitalization Rates and Benchmark Interest Rates



^{*}KC Fed District

Note: The capitalization rate is the ratio of cash rents for nonirrigated cropland divided by values for nonirrigated cropland.

Sources: Federal Reserve Bank of Kansas City and Board of Governors of the Federal Reserve System (Federal Reserve Bank of St. Louis FRED Economic Data).

Long-term Risks (or Opportunities)

- Global Economic Growth
- Trade, Supply Chains & Global Competition
- Debt (Leverage)
- Changes in Demand for Agricultural Products



Concluding Remarks

- The U.S. agricultural economy appears likely to remain relatively weak in the foreseeable future.
 - Slower global growth
 - Ongoing trade disputes
 - Low ag commodity prices
- The sector will likely need to adapt to reduced incomes and changing global demand:
 - Cutting costs and improving efficiencies (large operations)
 - Adding value and diversifying (smaller operations)
 - Disciplined approach to financial management (all operations)