

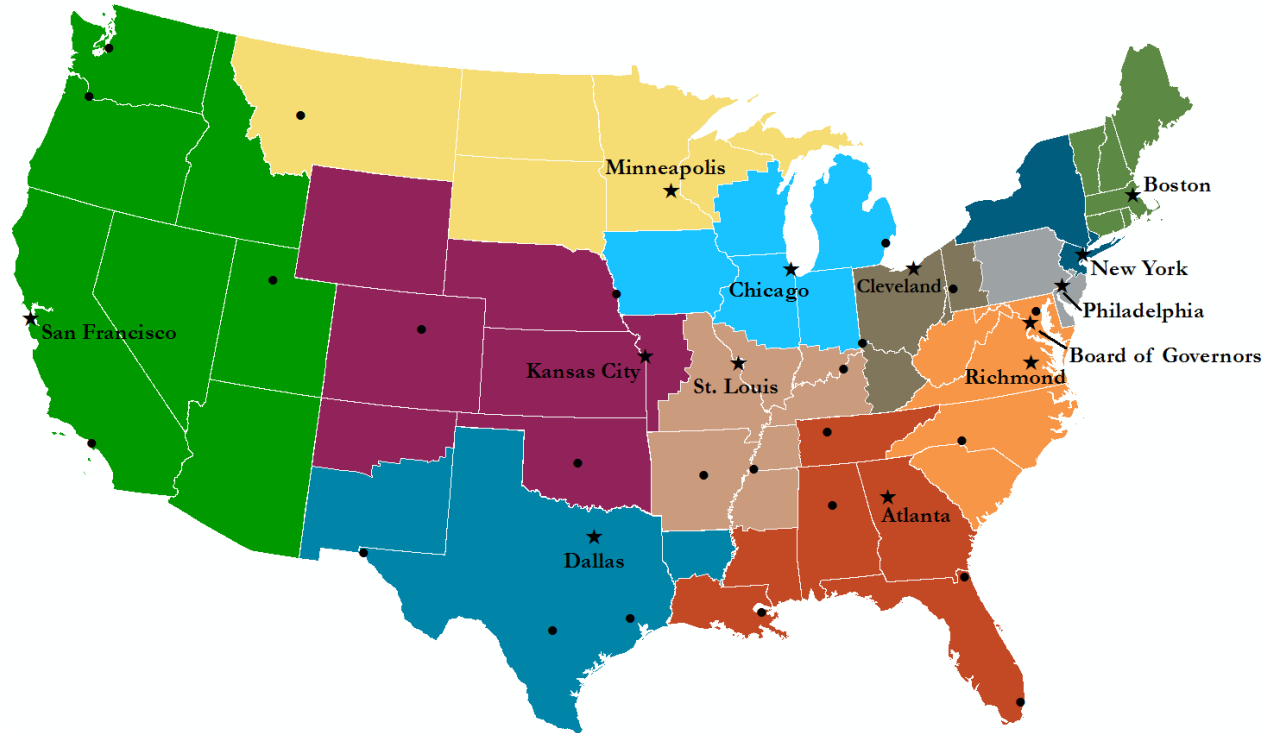
Central U.S. Economic Outlook

Nate Kauffman, Federal Reserve Bank of Kansas City

August 26, 2019



Regional Federal Reserve Banks are important to the structure of U.S. monetary policy.



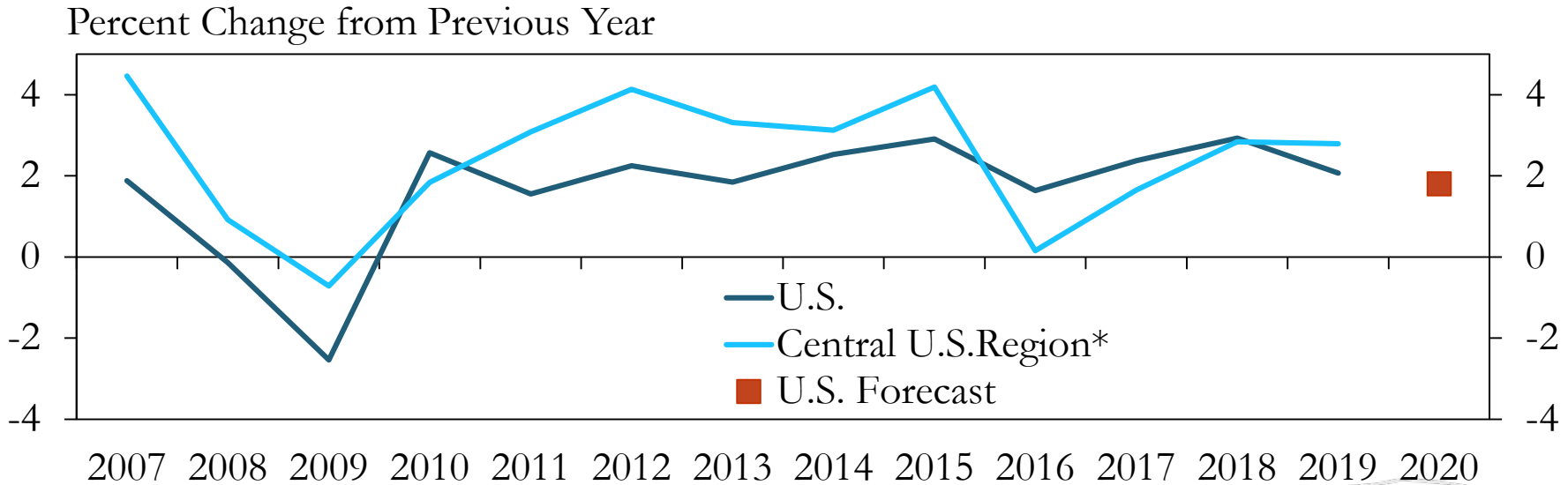
Outlook Themes

- Economic growth has remained positive despite some signs of slowing.
- The agricultural sector, however, has remained weak and appears likely to face ongoing challenges.
 - Financial stress continues to rise, but at a modest and gradual pace.
 - Macroeconomic developments will be key in both ag and energy markets.
- Trade is a primary concern, but may also be a long-term source of uncertainty and/or weakness.



The U.S. economy is in the midst of its longest economic expansion on record.

Real Gross Domestic Product (GDP) Growth



* Includes Colorado, Kansas, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas and Wyoming.

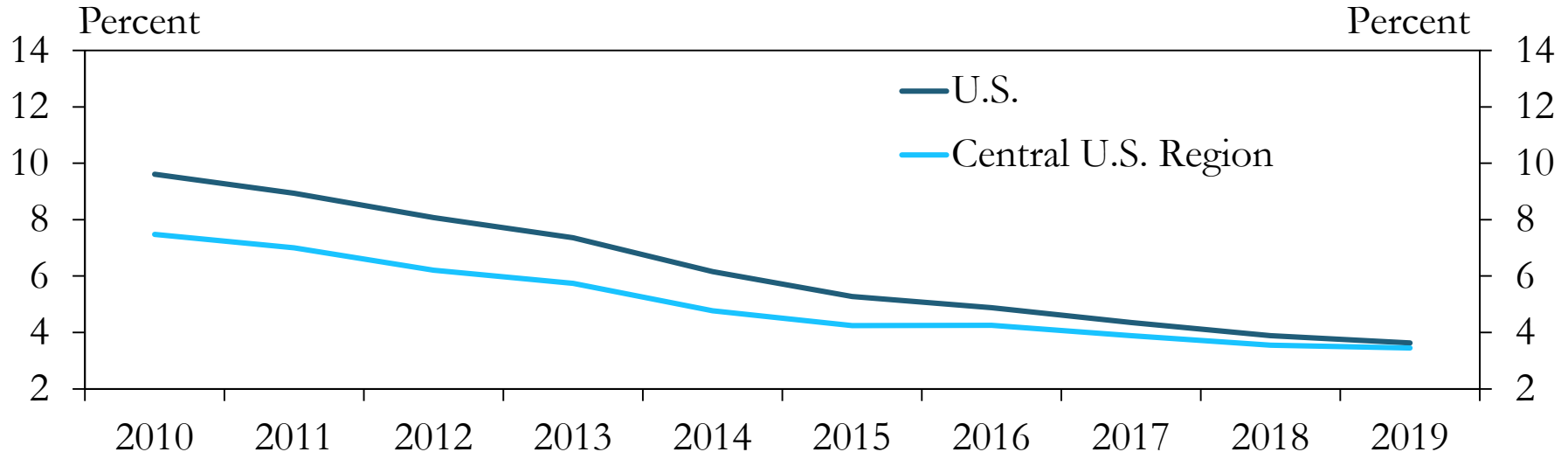
Note: 2019 figure for U.S. based on Q2 2019 GDP, 2019 figure for Central U.S. based on Q1 2019 GDP.

Sources: U.S. Bureau of Economic Analysis, Wolters Kluwer (Blue Chip Forecasts), and Haver Analytics.



Unemployment rates are at historically low levels across the country.

Unemployment Rate



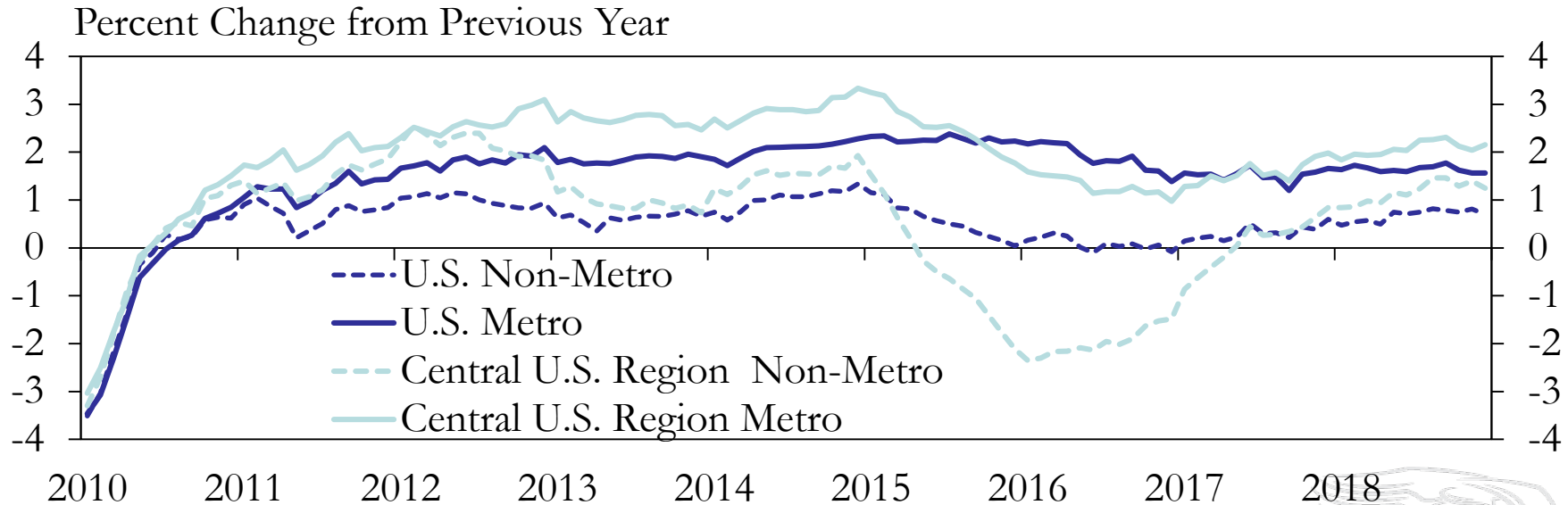
Note: 2019 based on unemployment rate in Q2 2019.

Sources: U.S. Bureau of Economic Analysis and Haver Analytics.



Job growth has remained positive, but driven mostly by gains in urban areas.

Employment Growth

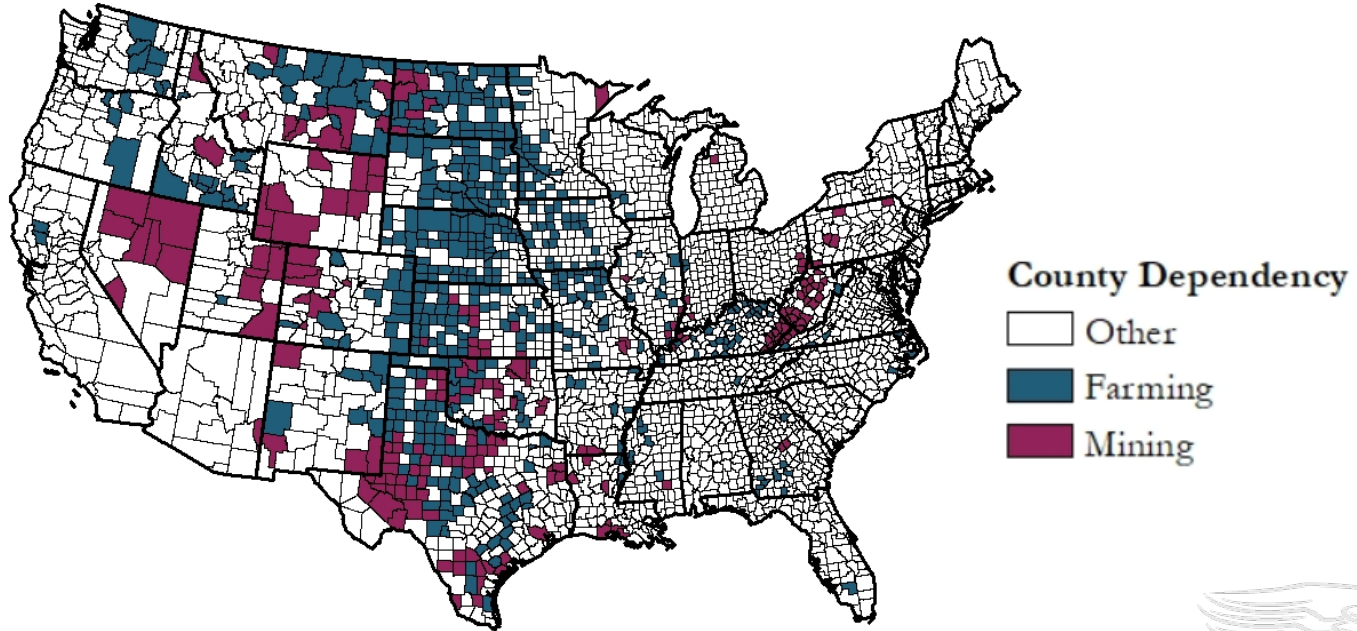


Sources: U.S. Bureau of Labor Statistics and Haver Analytics.



The central U.S., particularly in rural areas, is heavily concentrated in agriculture and energy.

U.S. Economic Dependence by County



Note: Mining includes establishments that extract naturally occurring mineral solids, such as coal and ores; liquid minerals, such as crude petroleum; and gases, such as natural gas.

Source: USDA.

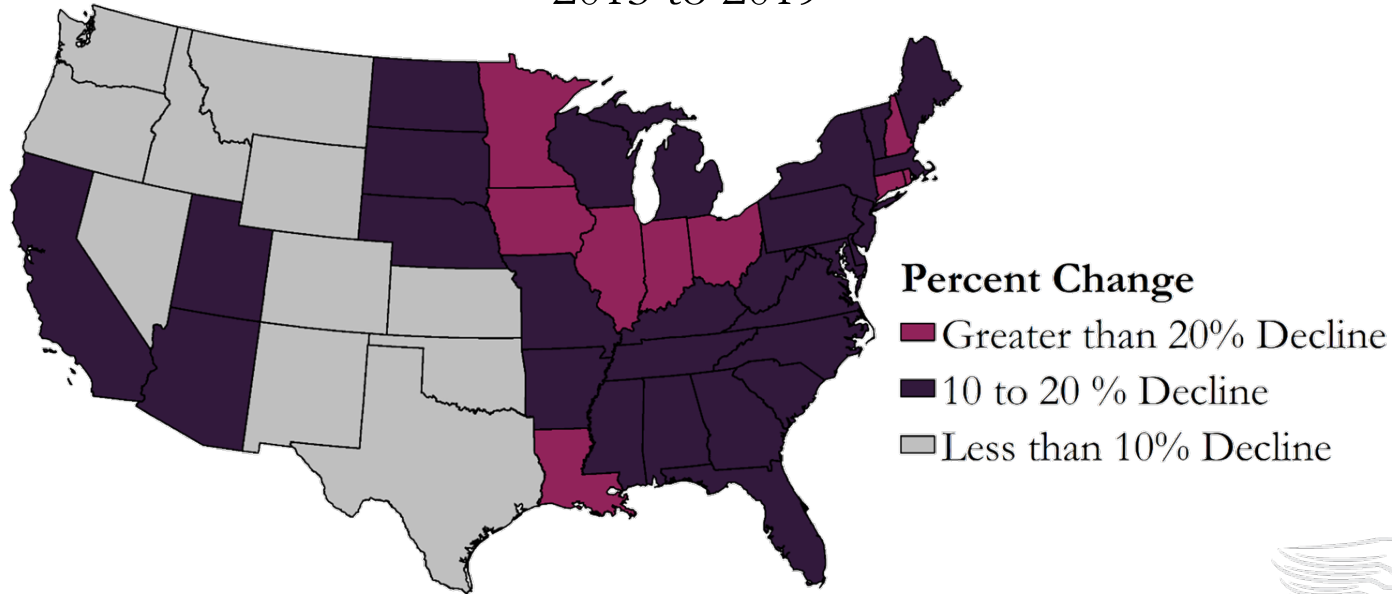


Agricultural Market Developments



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

Change in Agricultural Commodity Prices 2013 to 2019



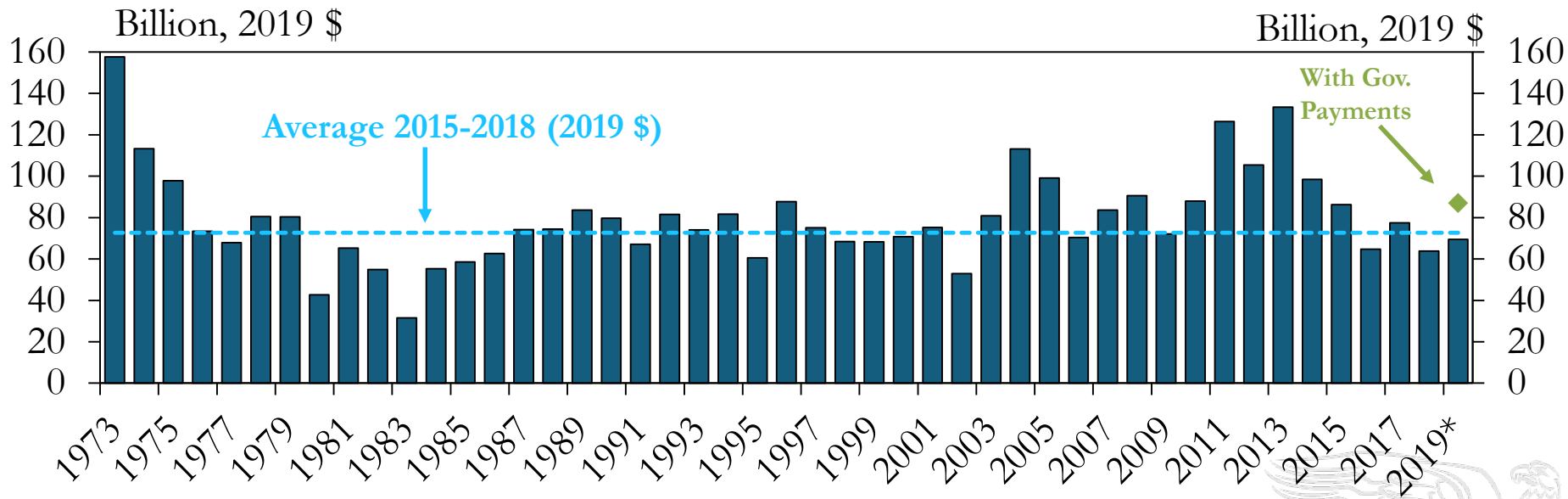
Note: 2013 Average includes January to December and 2019 Average includes January to June.

Sources: USDA and staff calculations.



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

U.S. Net Farm Income



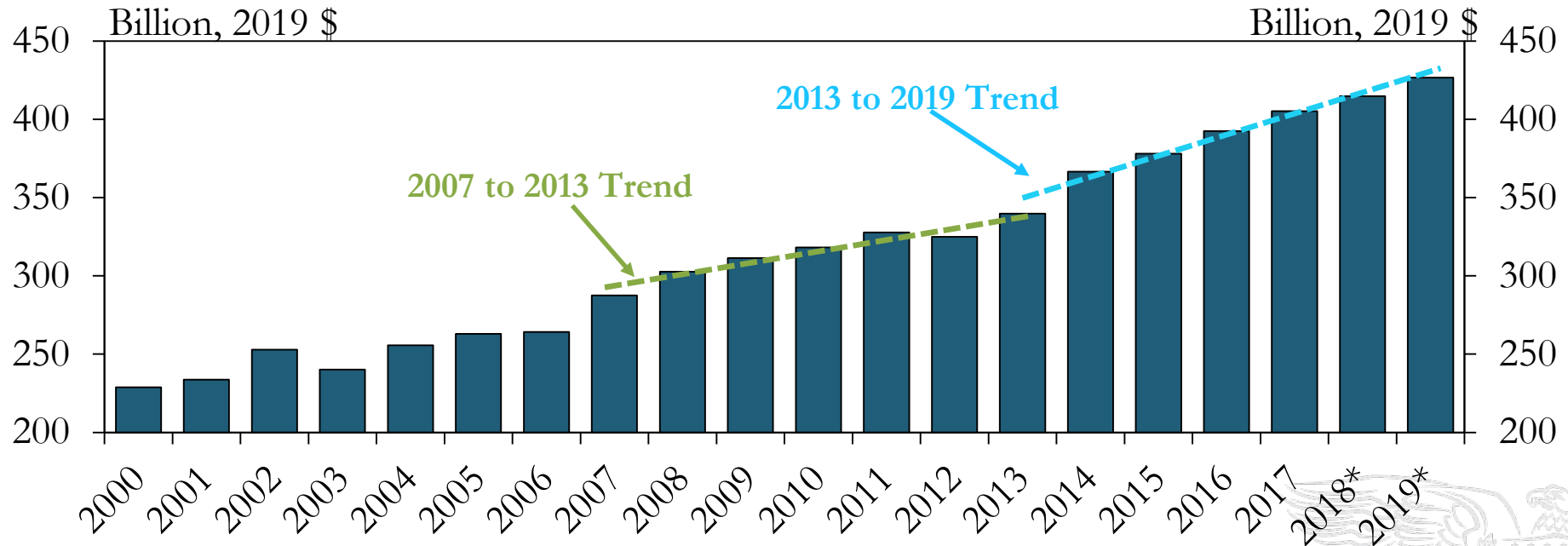
* 2019 Forecast

Source: USDA.



Reduced incomes have led to increased demand for farm financing.

Total U.S. Farm Sector Debt



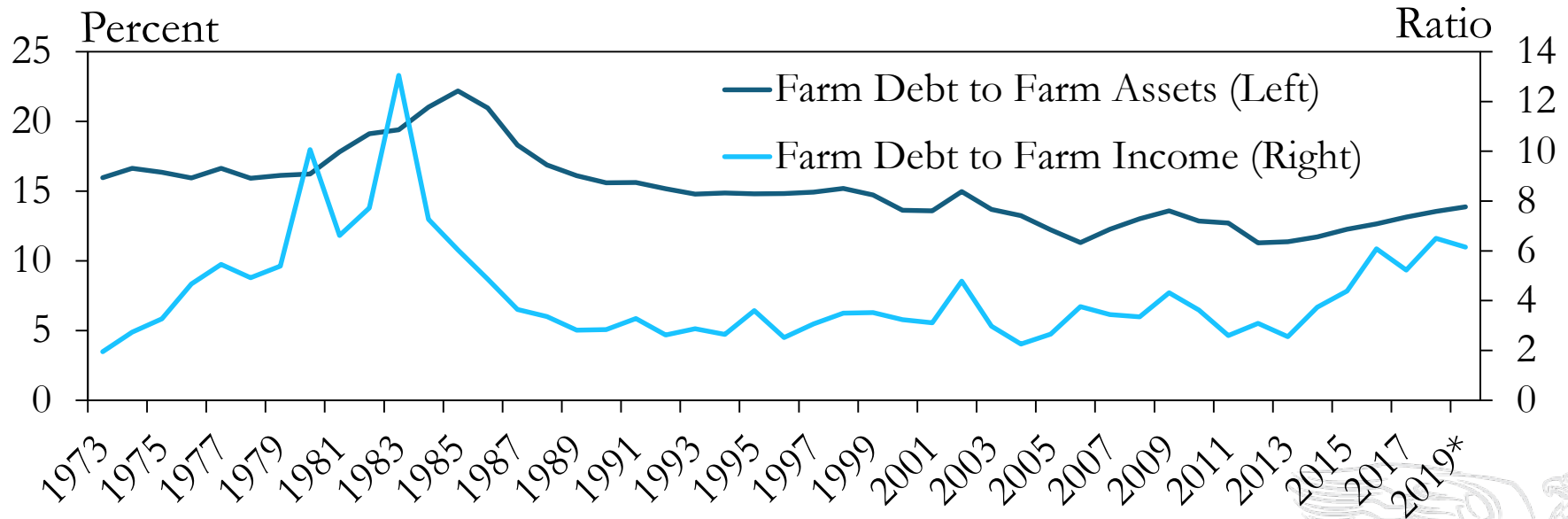
* Forecast

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



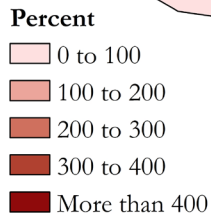
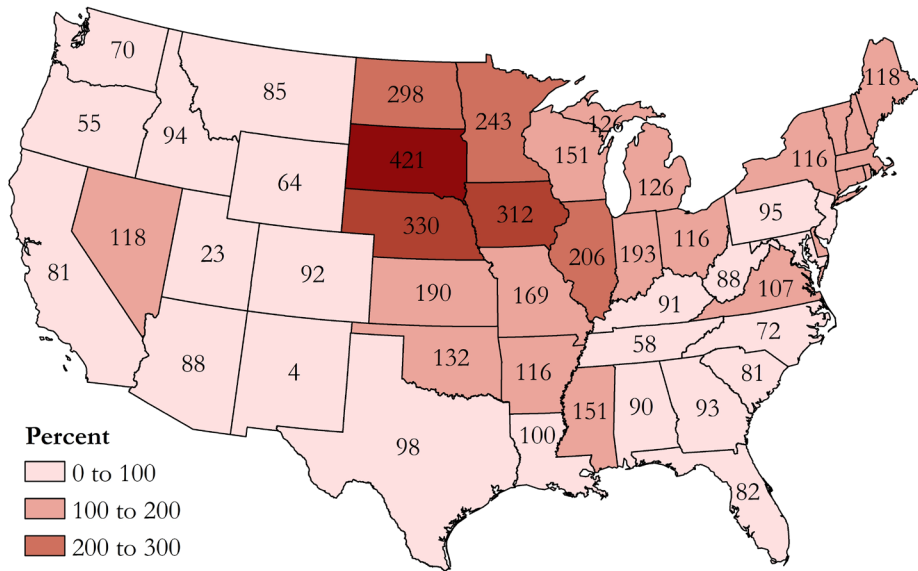
* Forecast

Source: USDA.

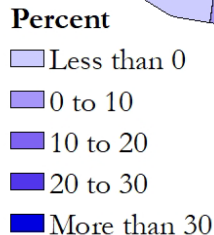
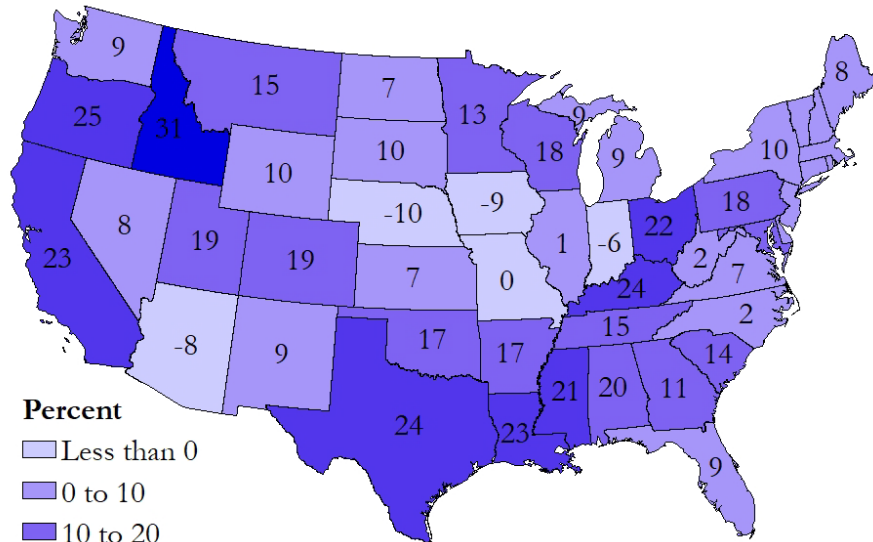


Although farmland values have declined in some states, the decreases have been quite modest.

U.S. Farmland Values
Change from 2000 to 2013



U.S. Farmland Values
Change from 2013 to 2019

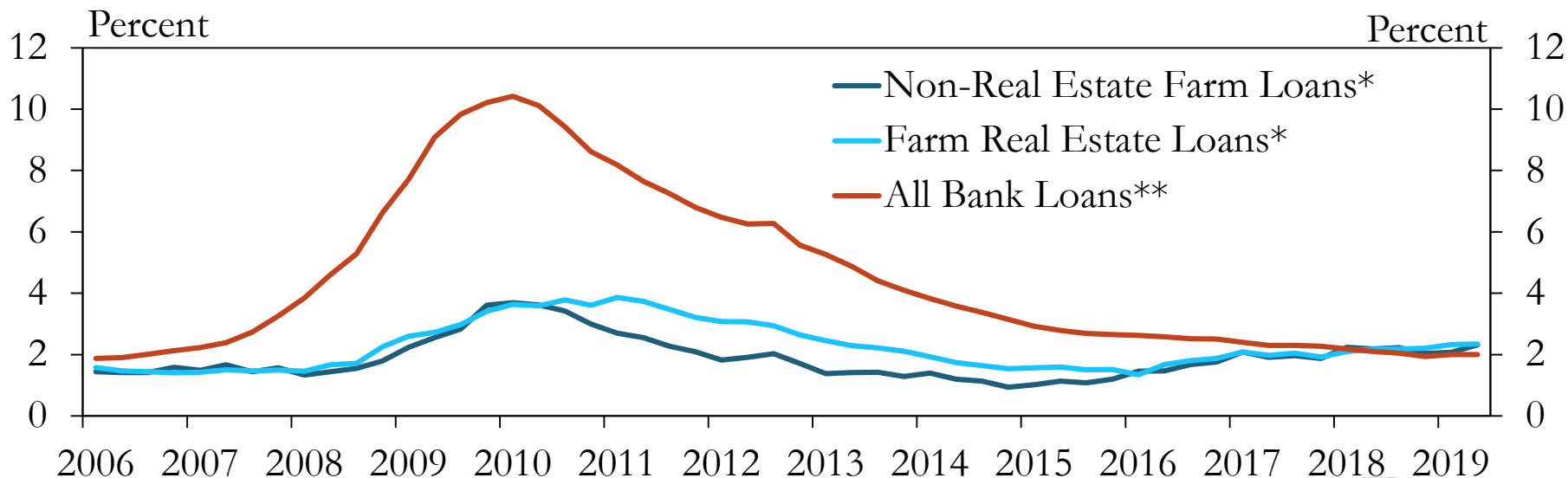


Source: USDA.



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

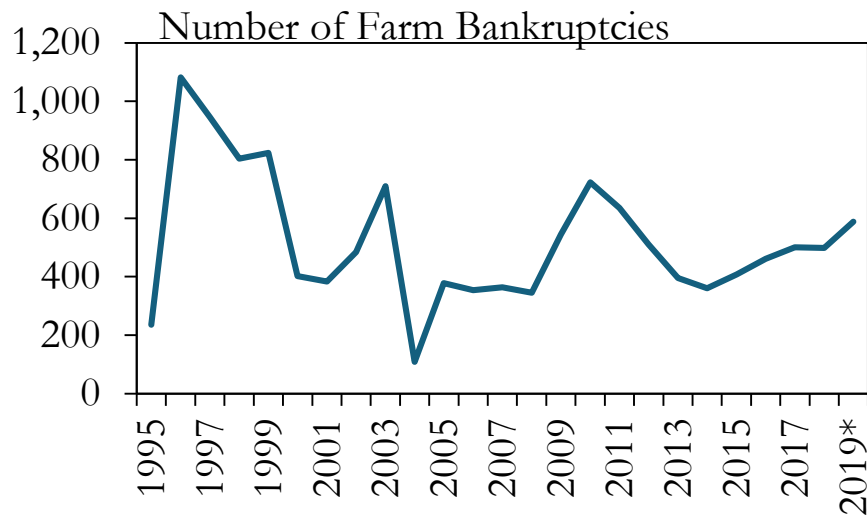
** All bank loans include all loans made at commercial banks. Q2 not yet available/reported as Q1 figure.

Source: Federal Reserve Board of Governors.

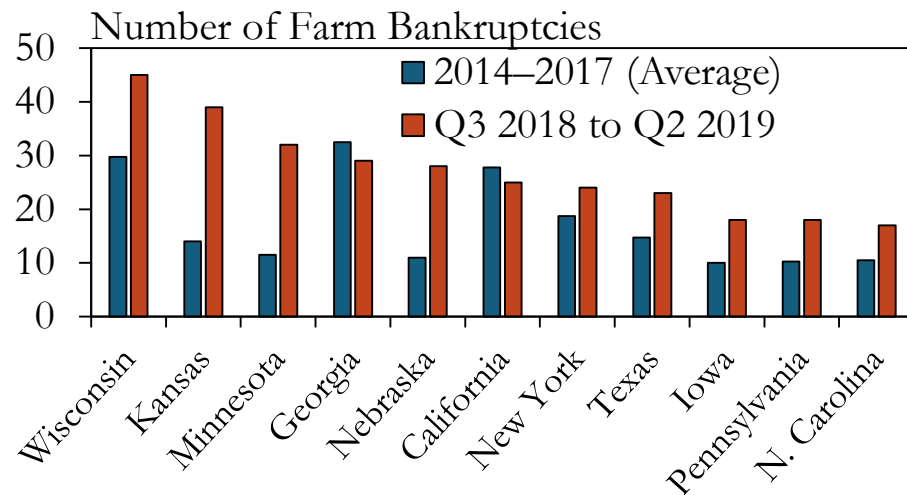


Farm bankruptcies have trended higher, but also at a modest pace.

Annual U.S. Farm Bankruptcies



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.

*Annualized based on Q1 and Q2 2019

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

Source: United States Courts.

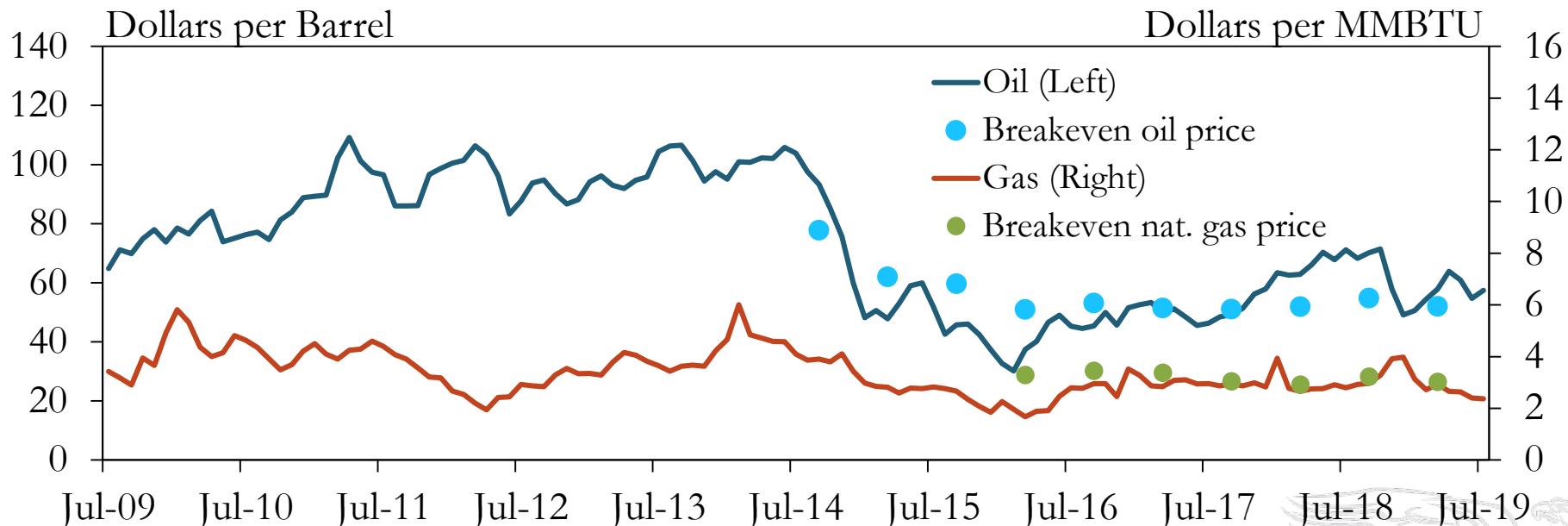


Energy Market Developments



Energy prices have also edged lower over the past year.

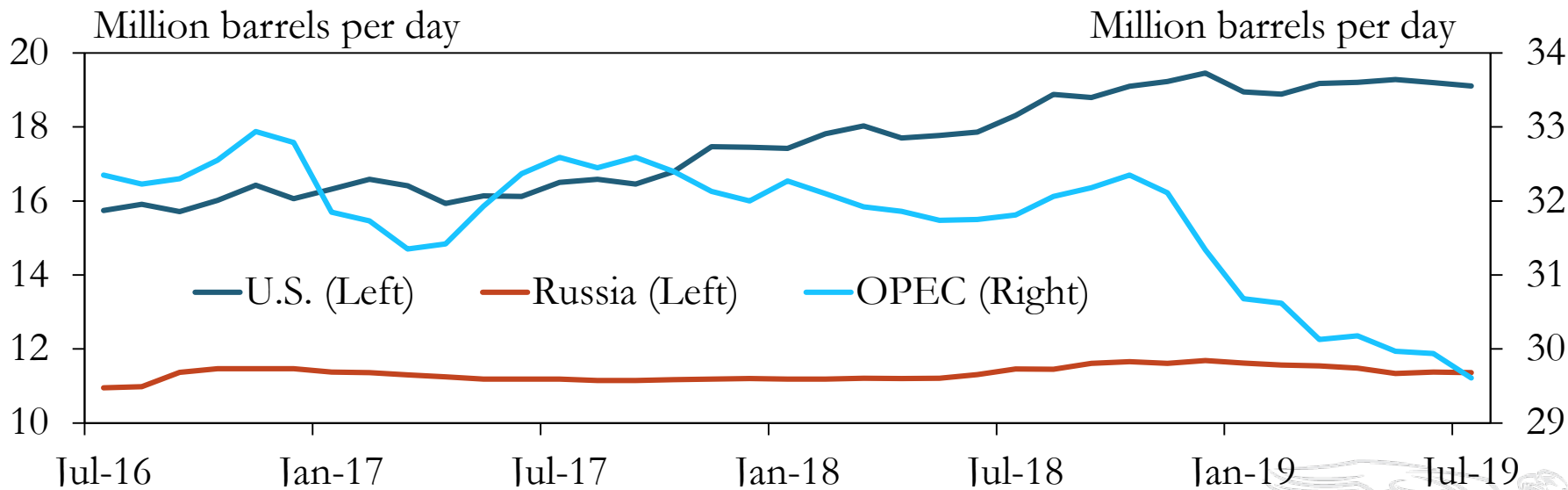
U.S. Energy Prices



Sources: EIA, *Wall Street Journal*, National Bureau of Economic Research, Federal Reserve Bank of Kansas City Energy Survey and Haver Analytics.

OPEC has extended production cuts to provide price support, but U.S. production remains elevated.

OPEC & Non-OPEC Petroleum Production

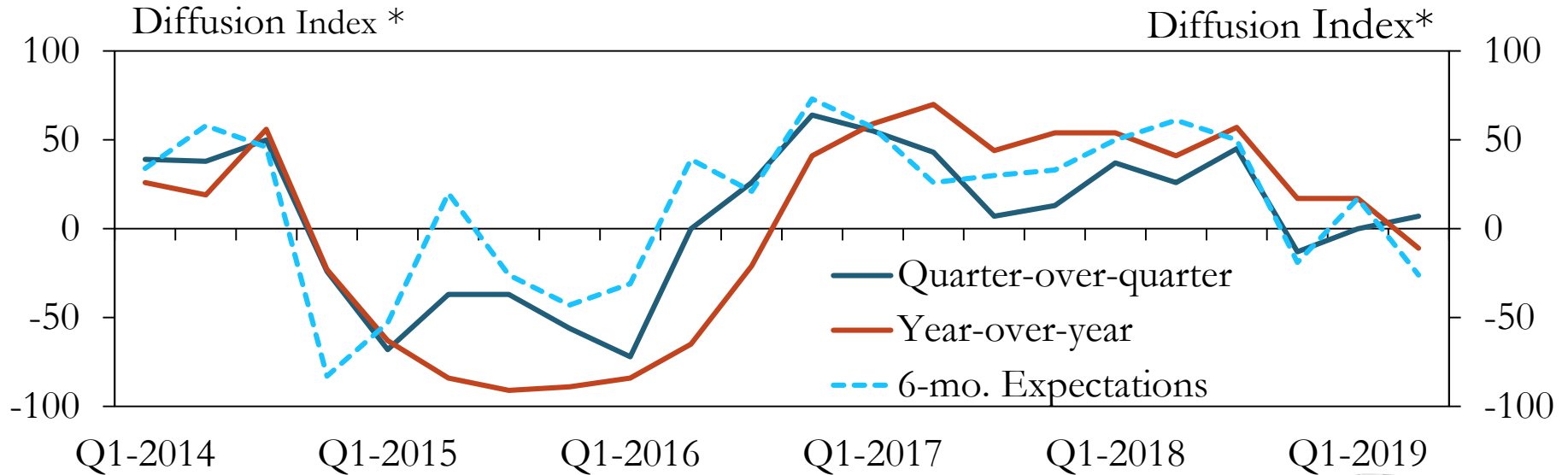


Sources: U.S. Energy Information Administration and Haver Analytics.



However, energy activity in the KC Fed District has also slowed in recent months.

Tenth District Energy Activity



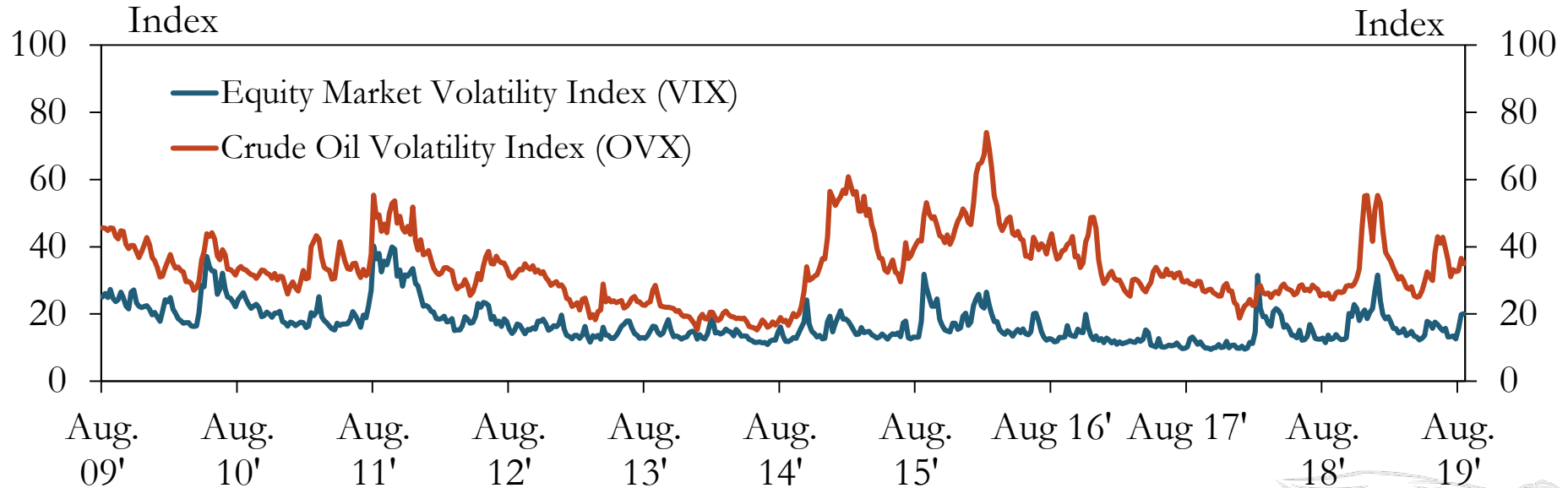
*Diffusion Index calculated as percentage of total respondents reporting increases minus the percentage reporting declines.

Source: Federal Reserve Bank of Kansas City Energy Survey.



Volatility in energy markets has picked up due to global economic and geopolitical concerns.

Market Volatility



Sources: *Wall Street Journal* and Haver Analytics.

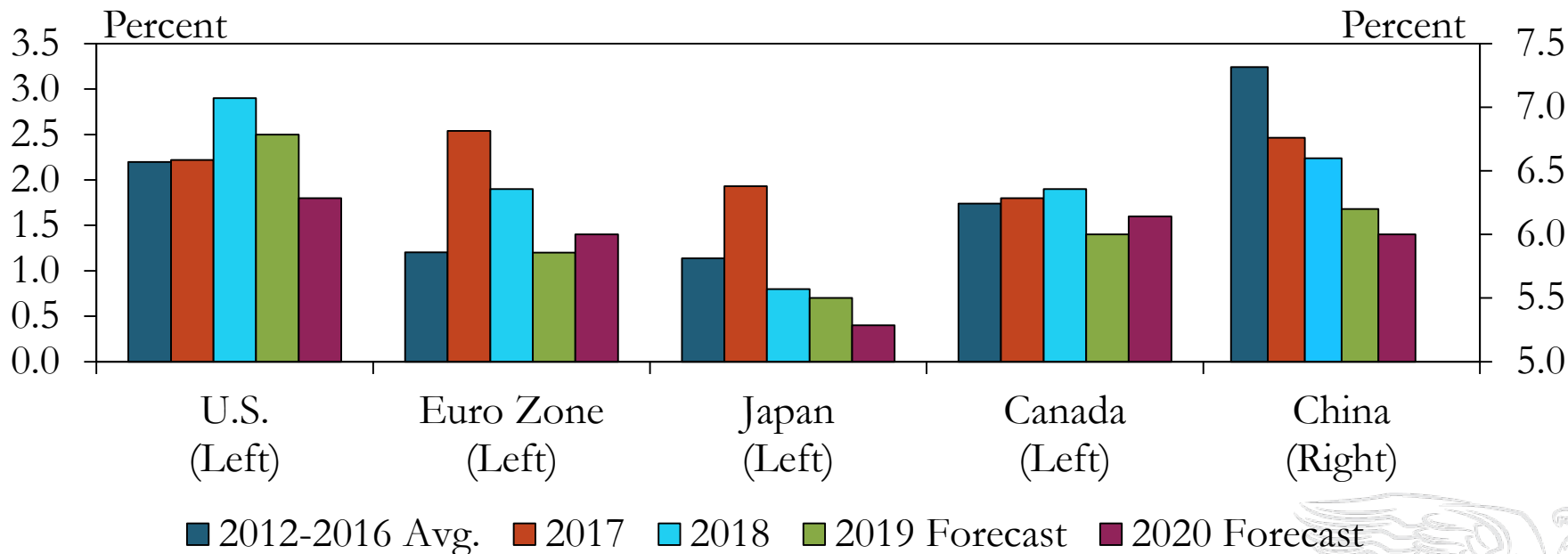


**Macroeconomic
Developments are Key to
Future Commodity Market
Prospects**



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

Real GDP Growth

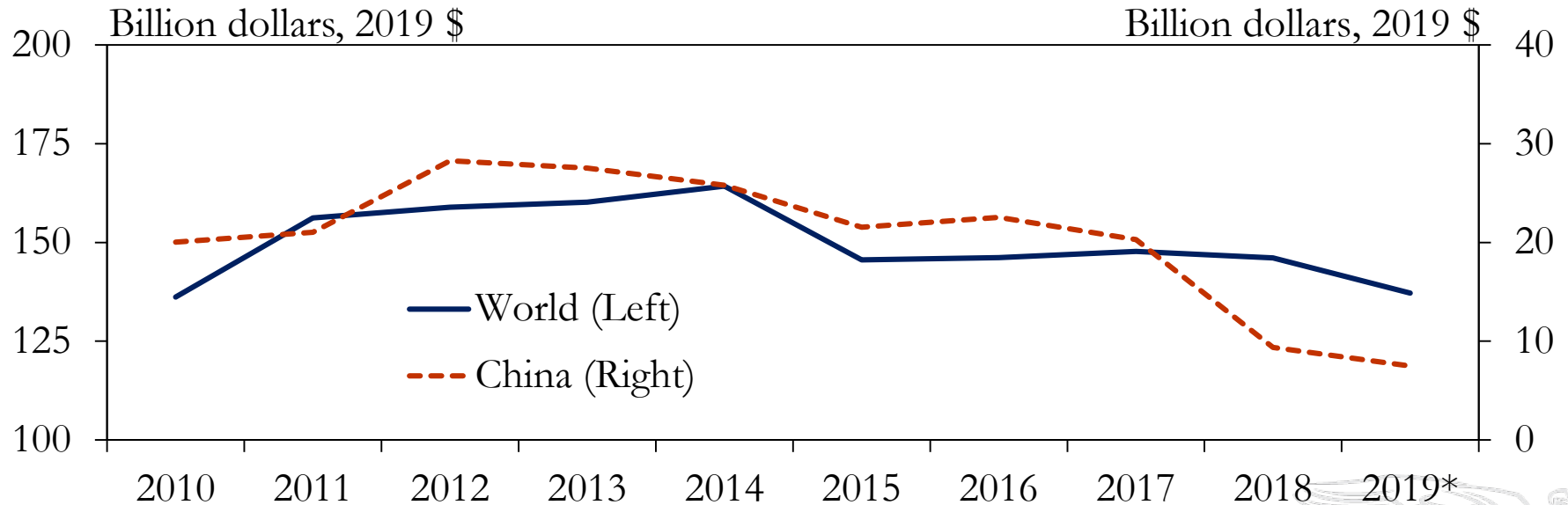


Source: Wolters Kluwer (Blue Chip Forecasts) and Haver Analytics.



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

U.S. Food and Ag Exports



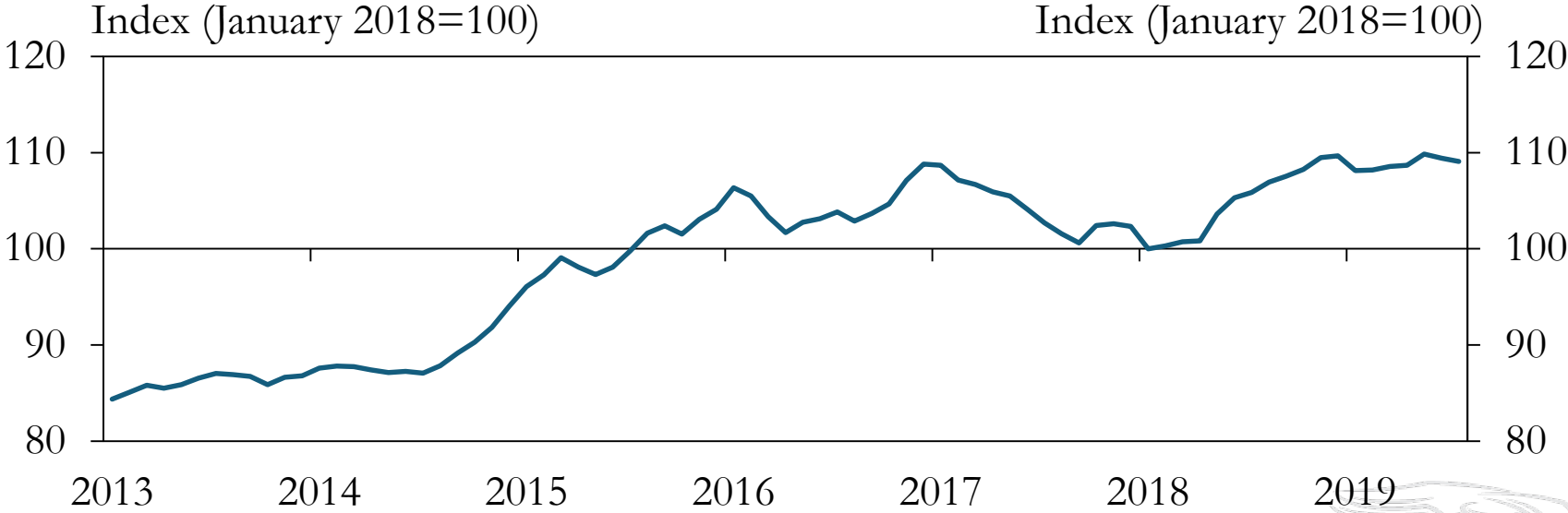
*Exports from January 2019 to June 2019 annualized based on percent change from same period in 2018.

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



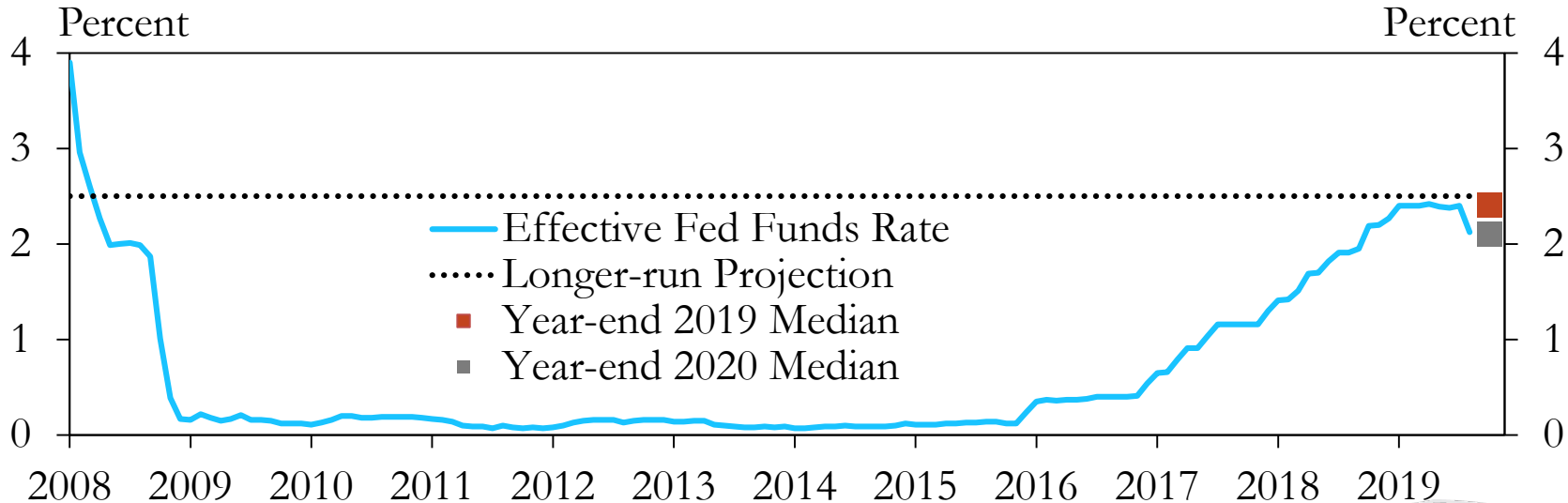
Note: Nominal, broad, trade-weighted exchange value of the U.S. Dollar

Source: Federal Reserve Board and Haver Analytics.



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

Effective Federal Funds Rate

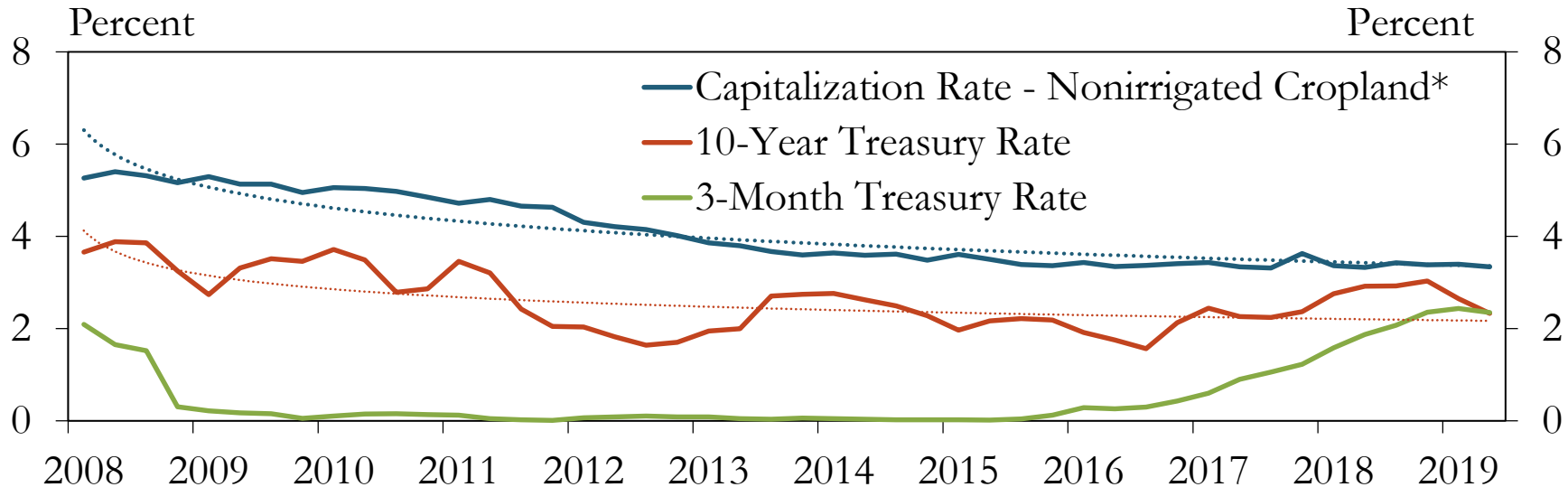


Source: Federal Reserve Board of Governors and Haver Analytics.



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).



Concluding Remarks

- The U.S. economy appears likely to continue in its expansion, but has faced increased prospects of a global slowdown.
- The U.S. ag economy, however, is likely to remain weak in the foreseeable future.
 - Slower global growth (but still elevated supplies)
 - Ongoing trade disputes
 - Low ag commodity prices
 - Potential for further increase in financial stress.

