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October 3, 2013

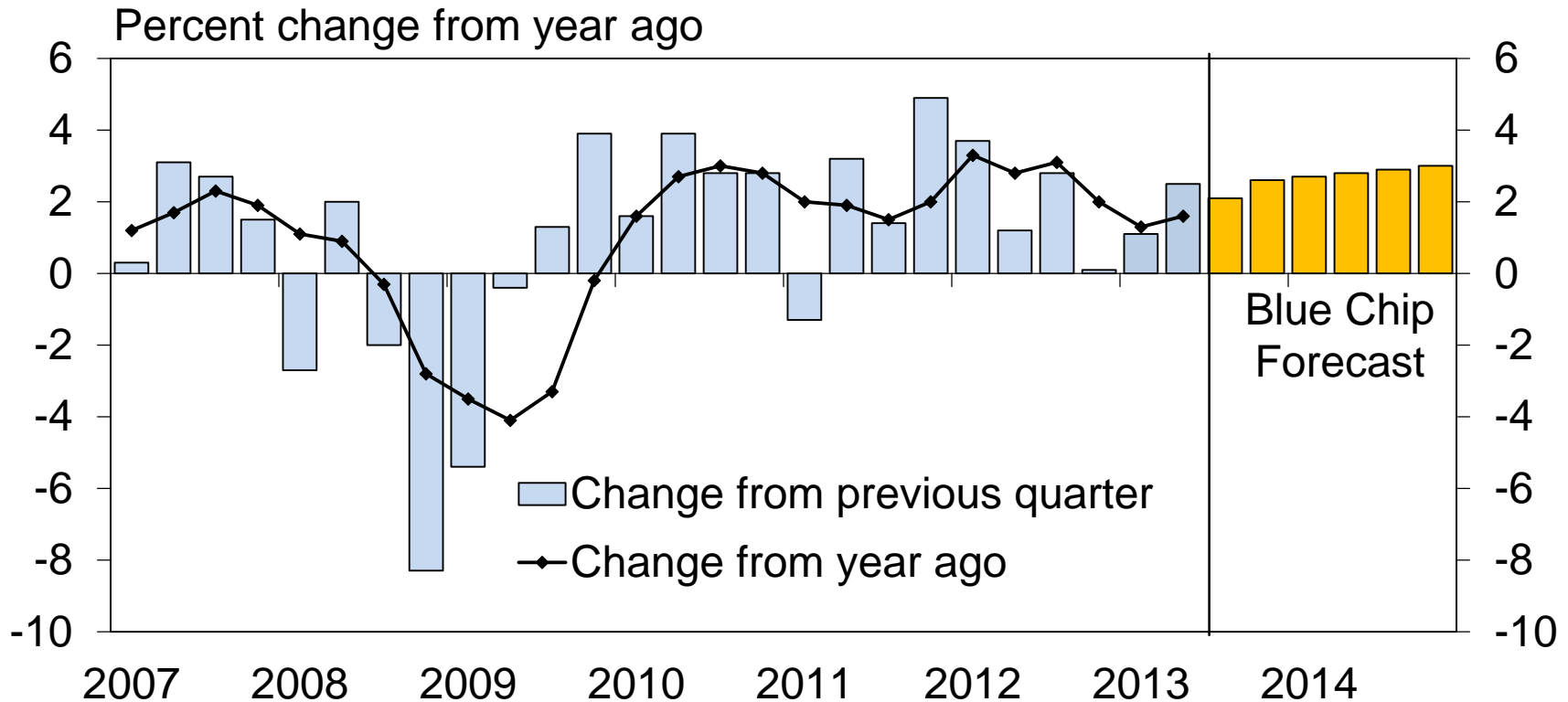
Agriculture Outlook



The views expressed are those of the author and do not necessarily reflect the opinions of the Federal Reserve Bank of Kansas City or the Federal Reserve System.

Setting the stage: The U.S. economy continues to advance slowly.

U.S. Real GDP Growth



Calculations based on BEA and Blue Chip Forecast September 2013



Underlying the modest growth is a shift in market performance.

Booming sectors plateau in 2012



Commodities



Exports



Manufacturing

The Wildcards



Investment



Government

A Rebound in Household Spending



Housing

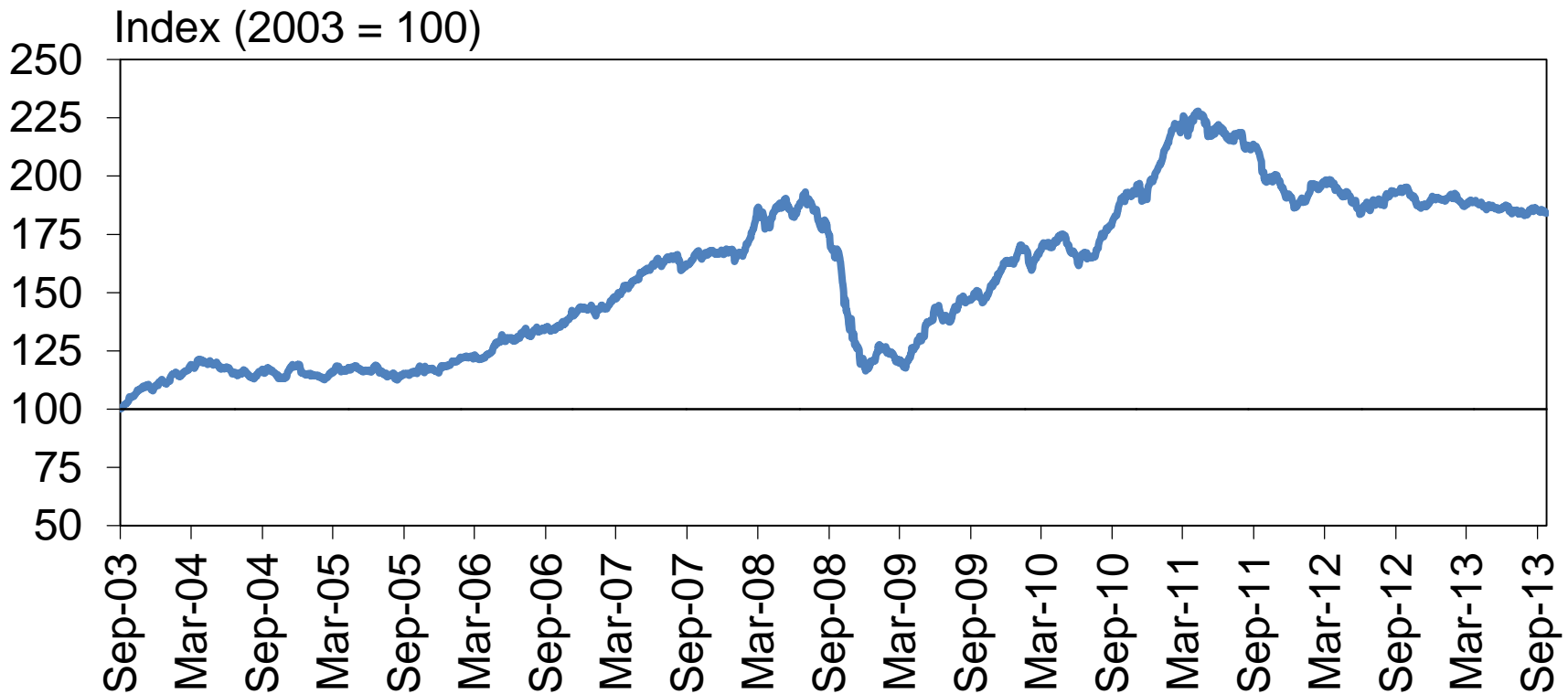


Consumer Spending



In general, commodity prices have been falling.

Commodity Price Index

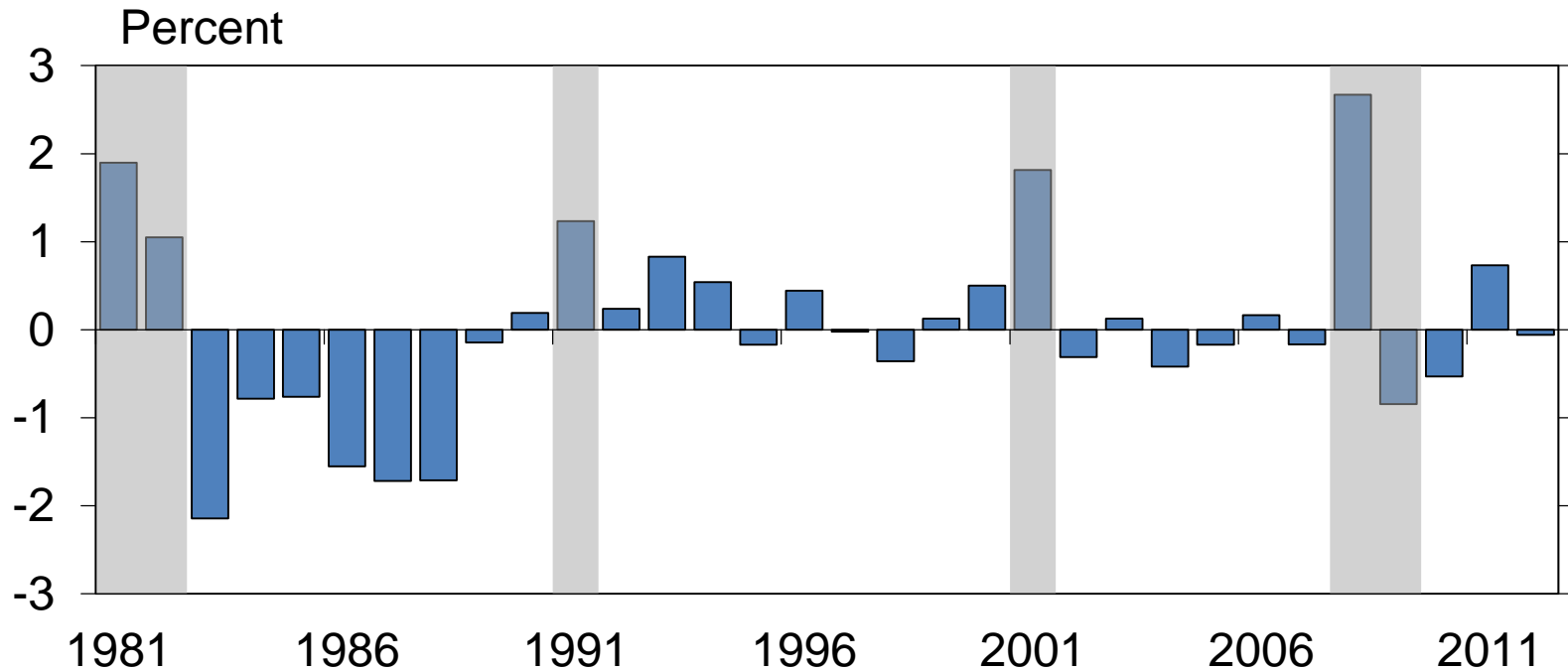


Source: Commodity Research Bureau



Income growth in the Central Plains is heavily reliant on commodity markets.

Difference between Per Capita Income Growth in Tenth Federal Reserve District and U.S.



Calculations based on BEA data

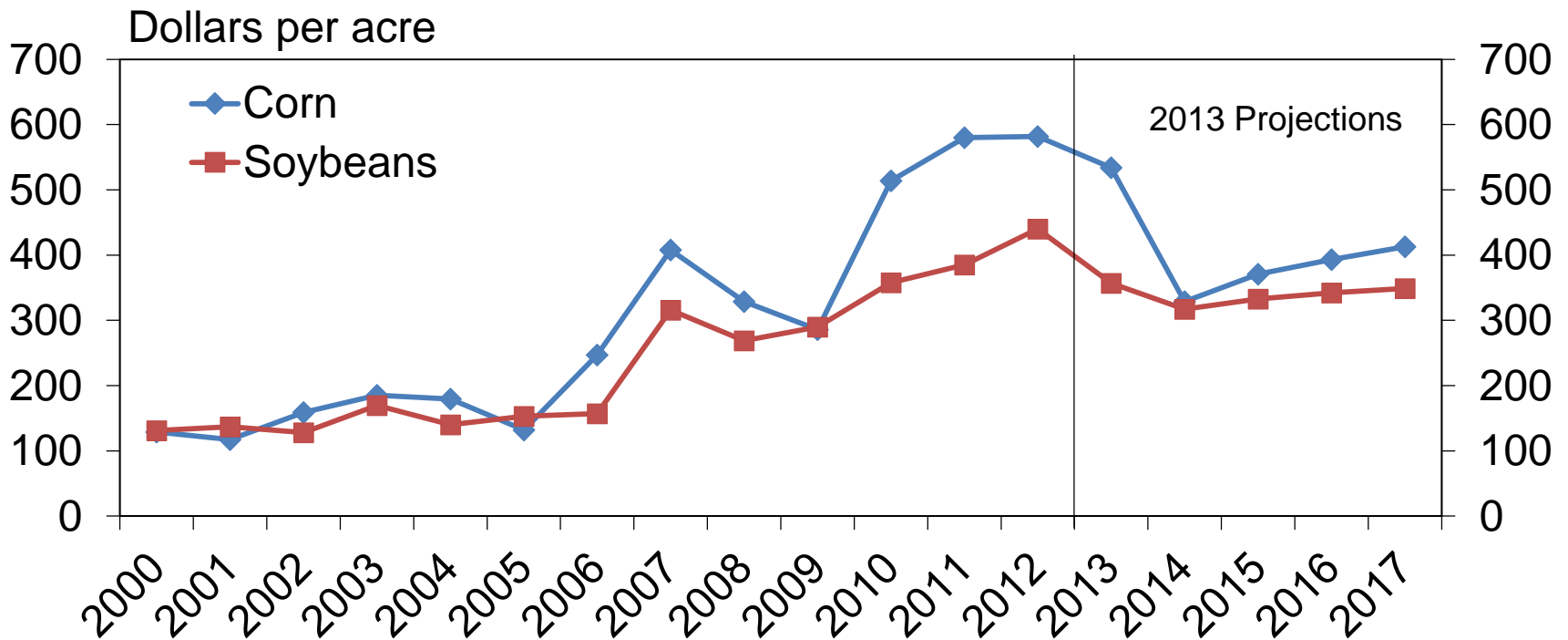


Are commodities driving a transition in U.S. agriculture?



Crop sector profits are projected to fall in 2014.

Net Returns (Returns less variable costs)

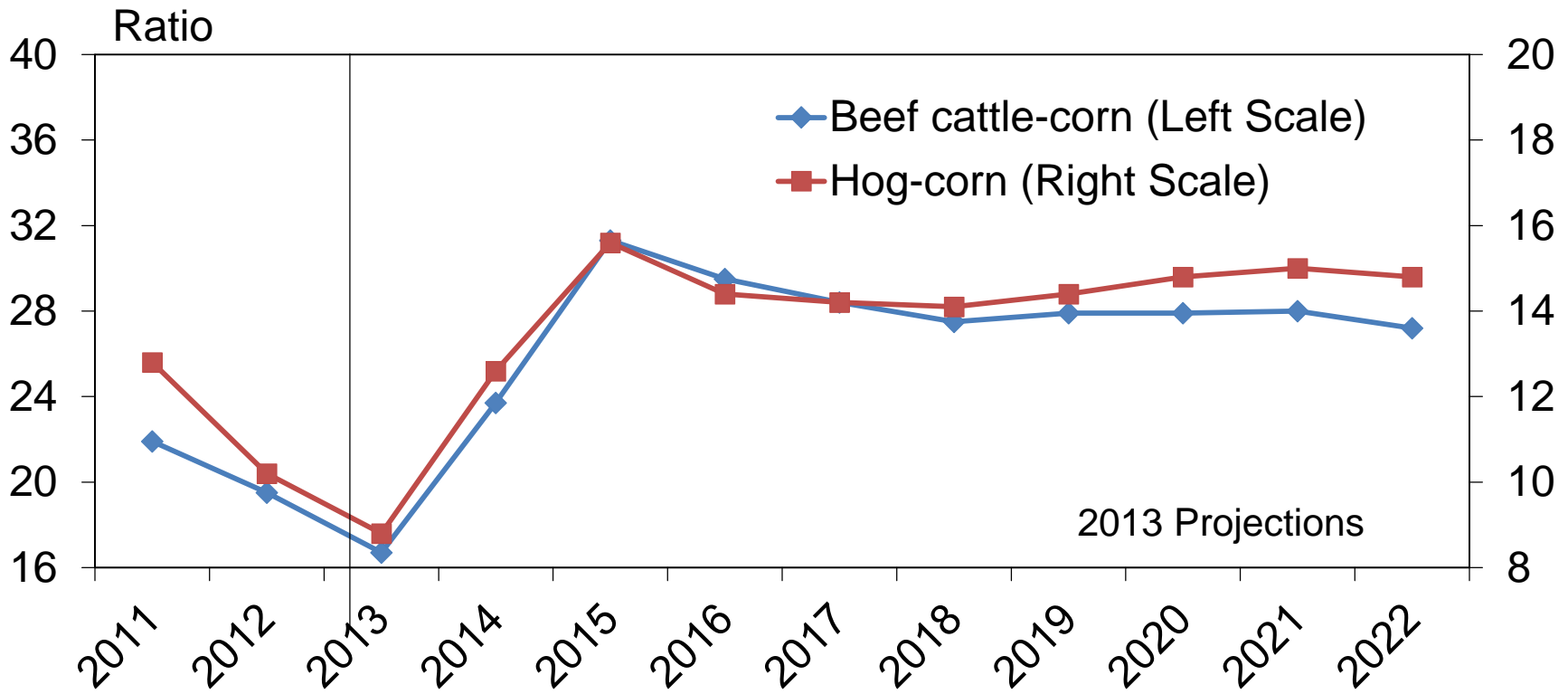


Source: USDA Agricultural Baseline Projections, various years



Livestock profits are projected to rise.

Feed Price Ratios

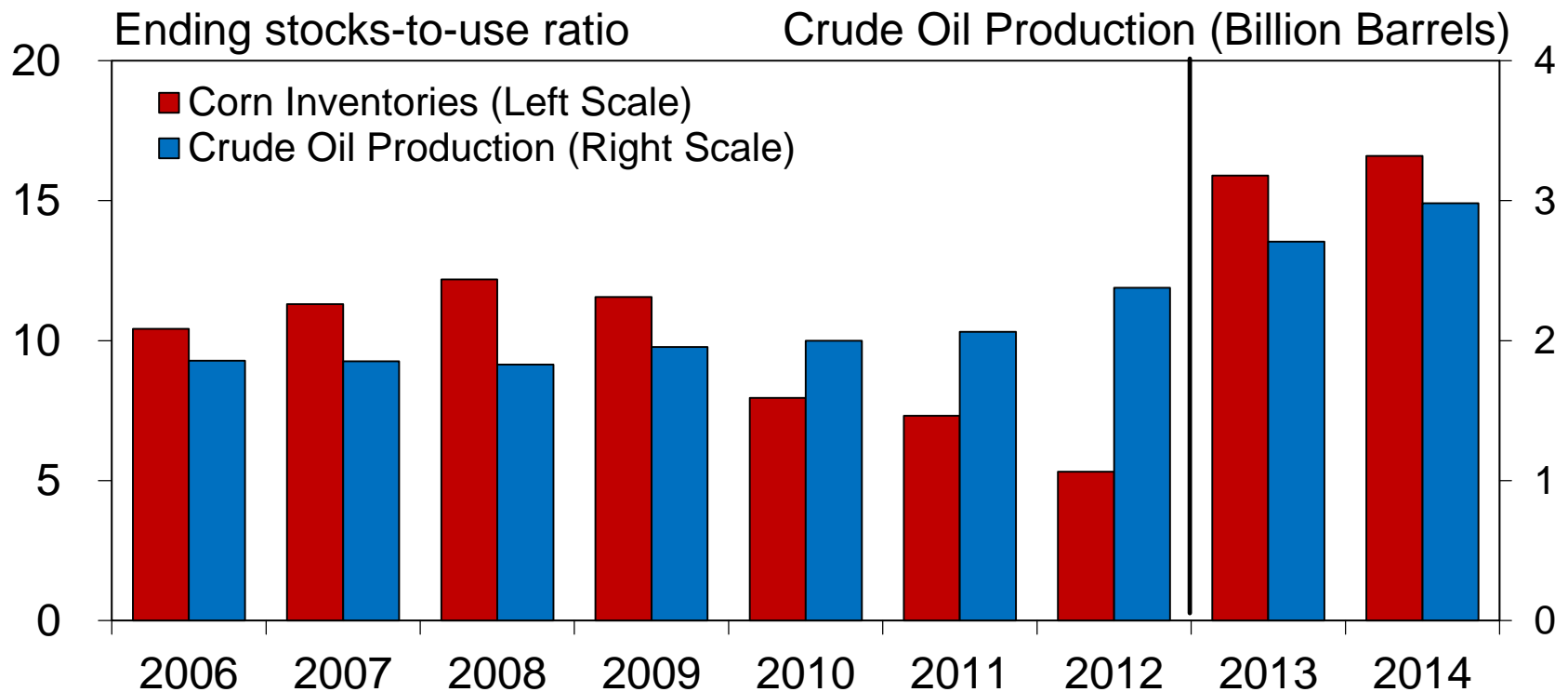


Source: USDA Agricultural Baseline Projections



Corn and crude oil production is ramping up.

U.S. Corn Inventories and Crude Oil Production

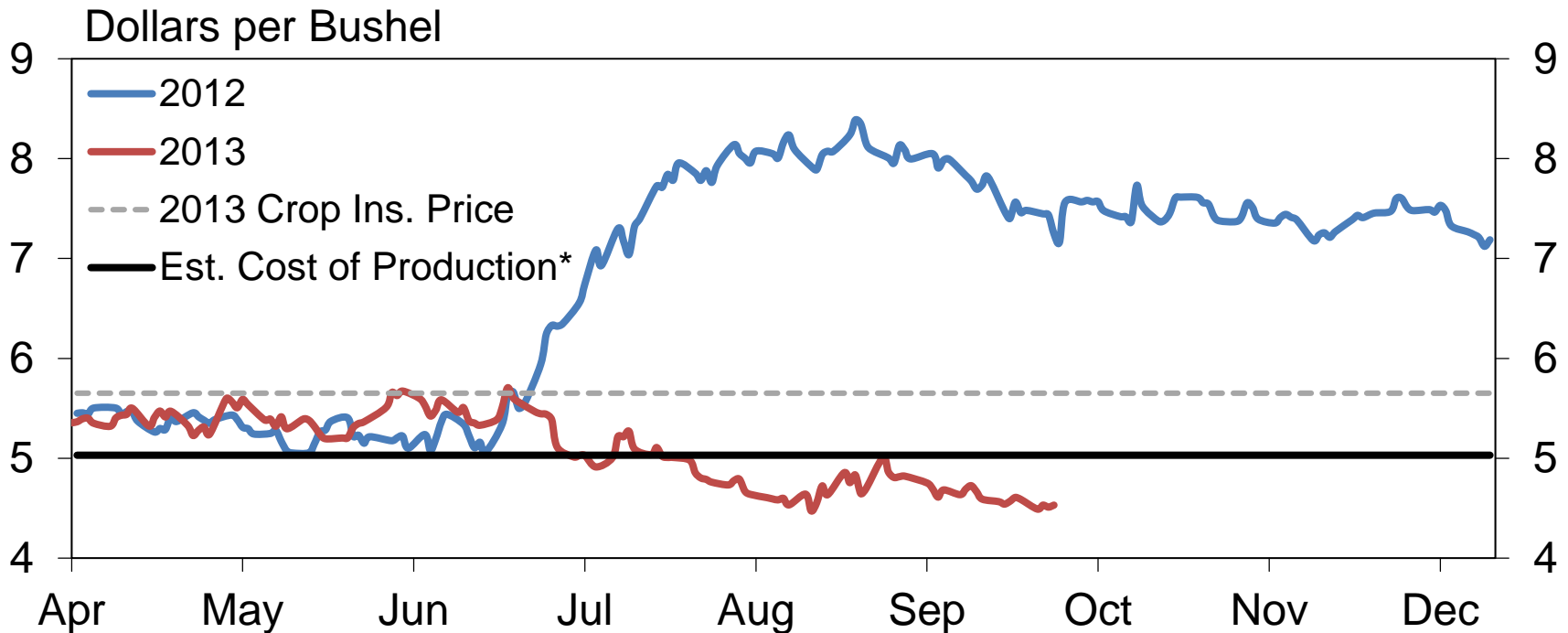


Source: USDA and EIA Short-Term Energy Outlook



Initially similar to 2012, expected corn prices have drifted lower.

December Corn Futures Price



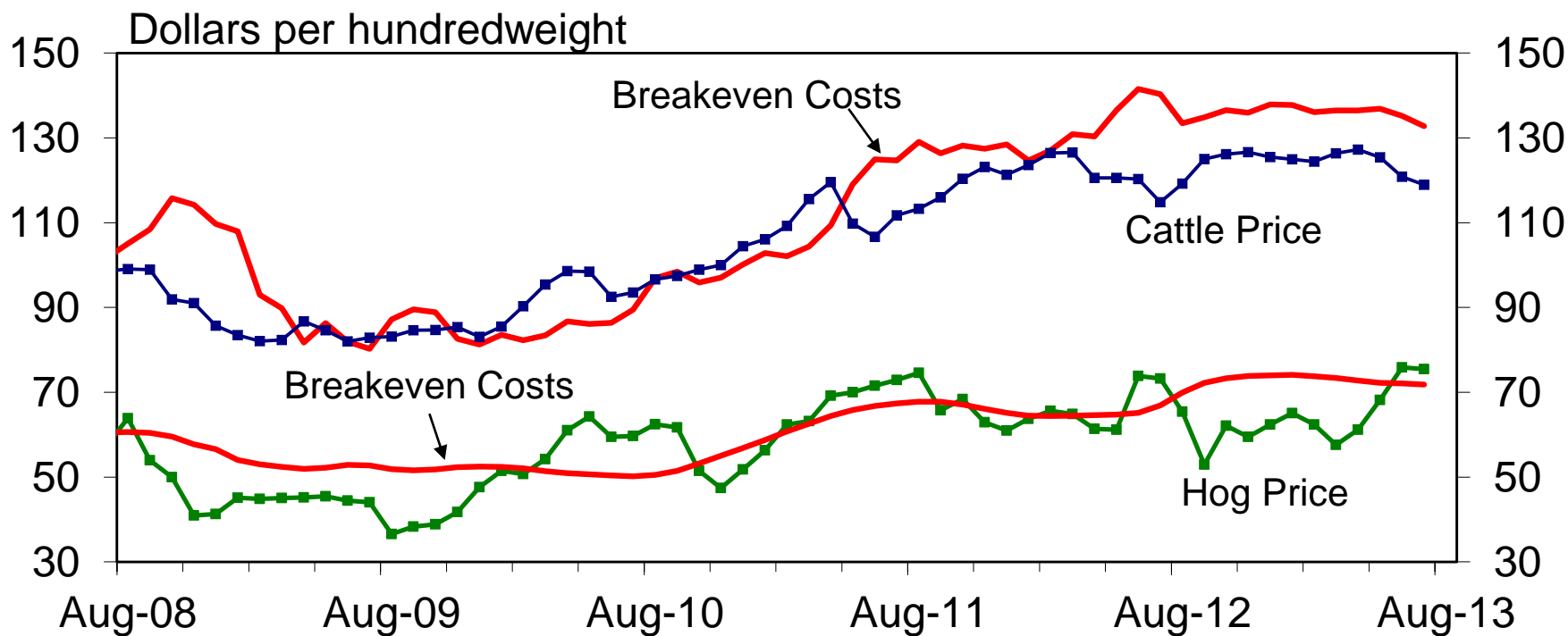
Source: barchart.com, Iowa State University

* Assumes yield of 165 bu/acre, corn following corn



Livestock profitability has been poor, particularly in the cattle sector.

U.S. Livestock Prices and Breakeven Costs

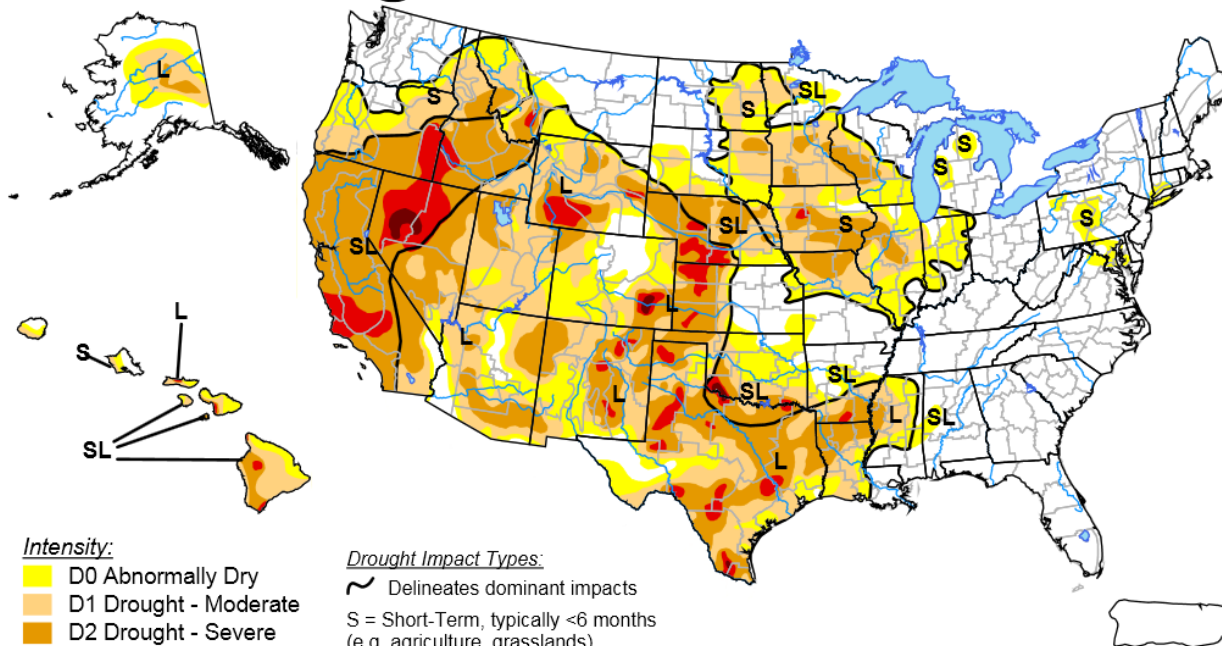


Source: USDA and Iowa State University



Drought has remained a concern in the Western Plains.

U.S. Drought Monitor September 24, 2013 Valid 7 a.m. EDT



Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

Drought Impact Types:

- Delineates dominant impacts
- S = Short-Term, typically <6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically >6 months (e.g. hydrology, ecology)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://droughtmonitor.unl.edu/>

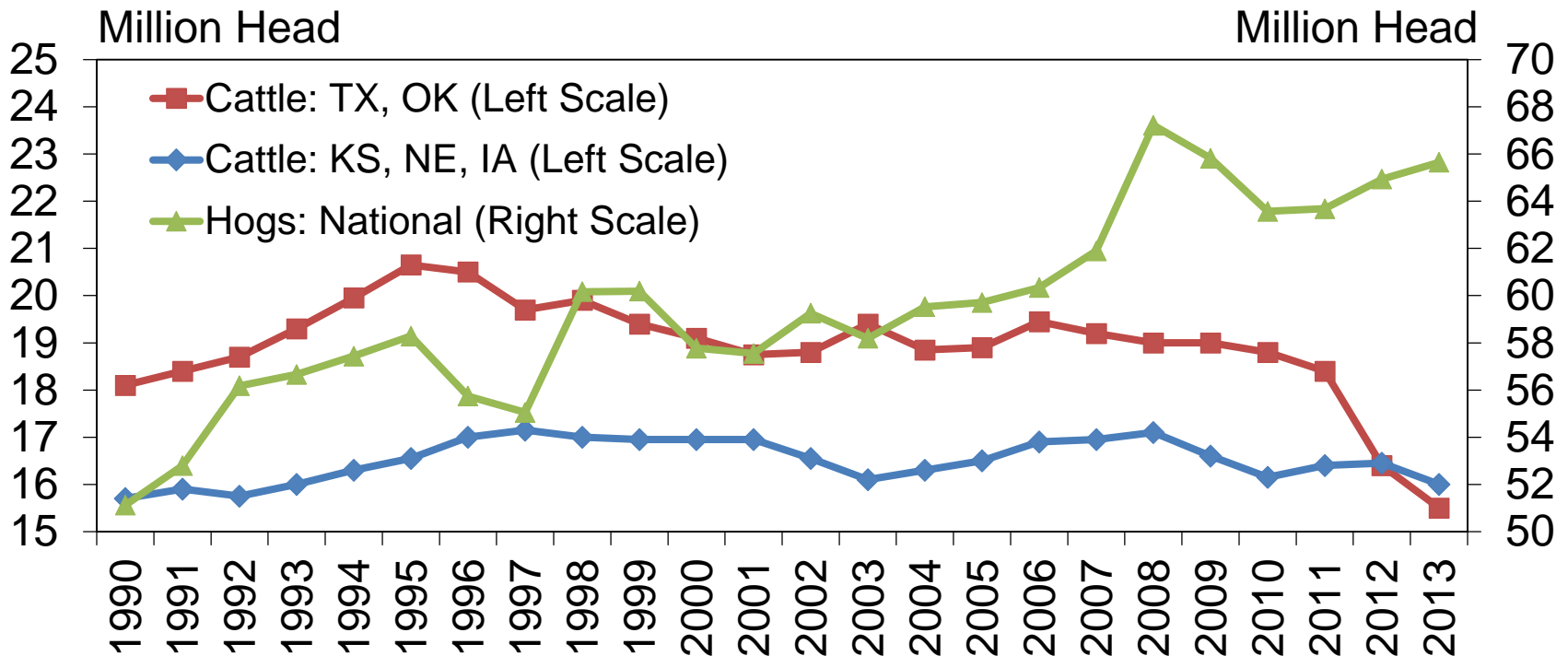


Released Thursday, September 26, 2013
Author: Brad Rippey, U.S. Department of Agriculture



Cattle herds have been shrinking, especially in drought-stricken areas.

Cattle and Hog Inventories

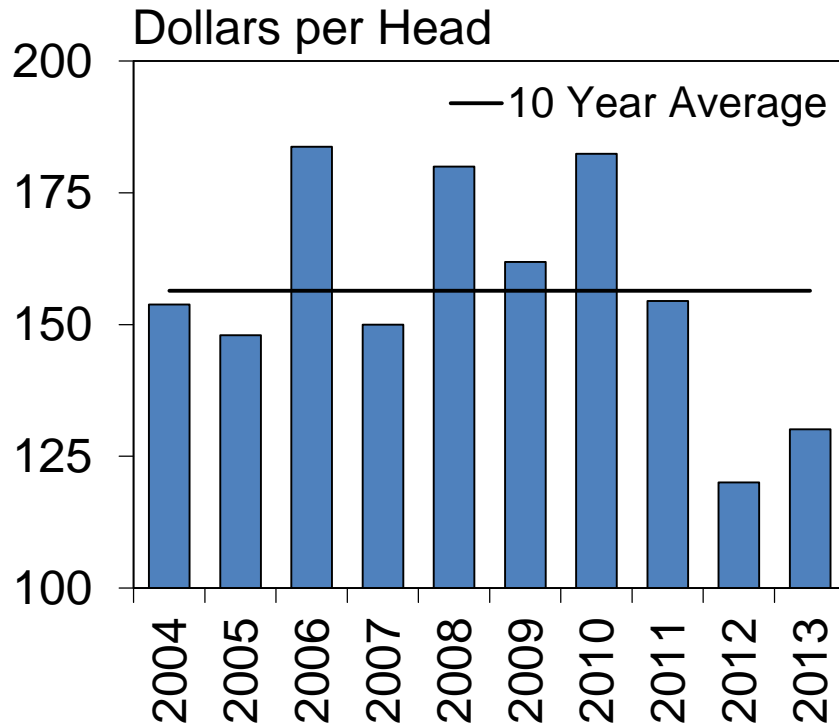


Source: USDA



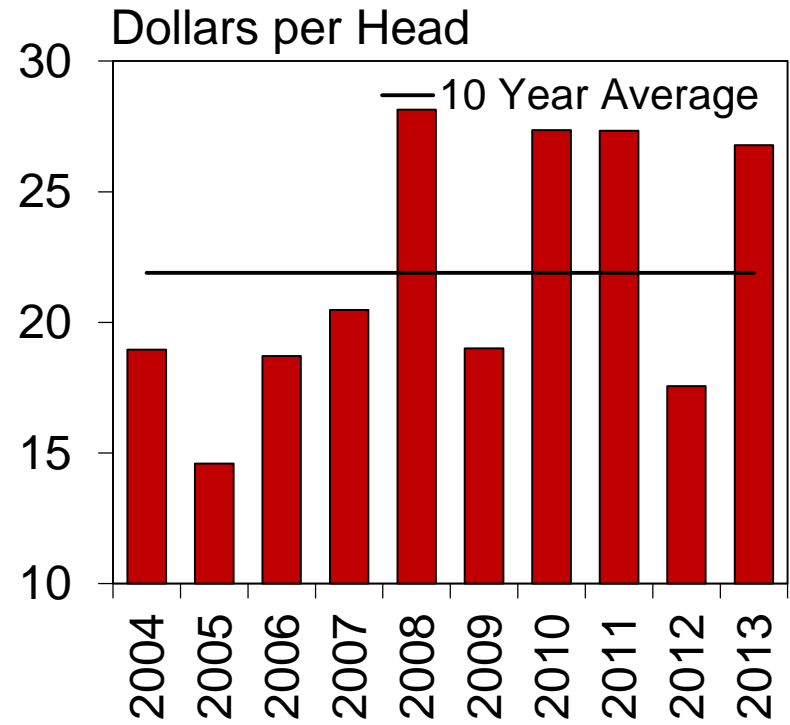
Beef processors have struggled to maintain profitability.

Beef Packer Margins



Source: University of Missouri

Pork Packer Margins



Source: University of Missouri



**Could the transition in
agriculture lead to a bust?**



There are many potential risks.

Farm Incomes



Farmland Values



Agricultural Exports



Global Competition



Energy Policy



Farm Debt

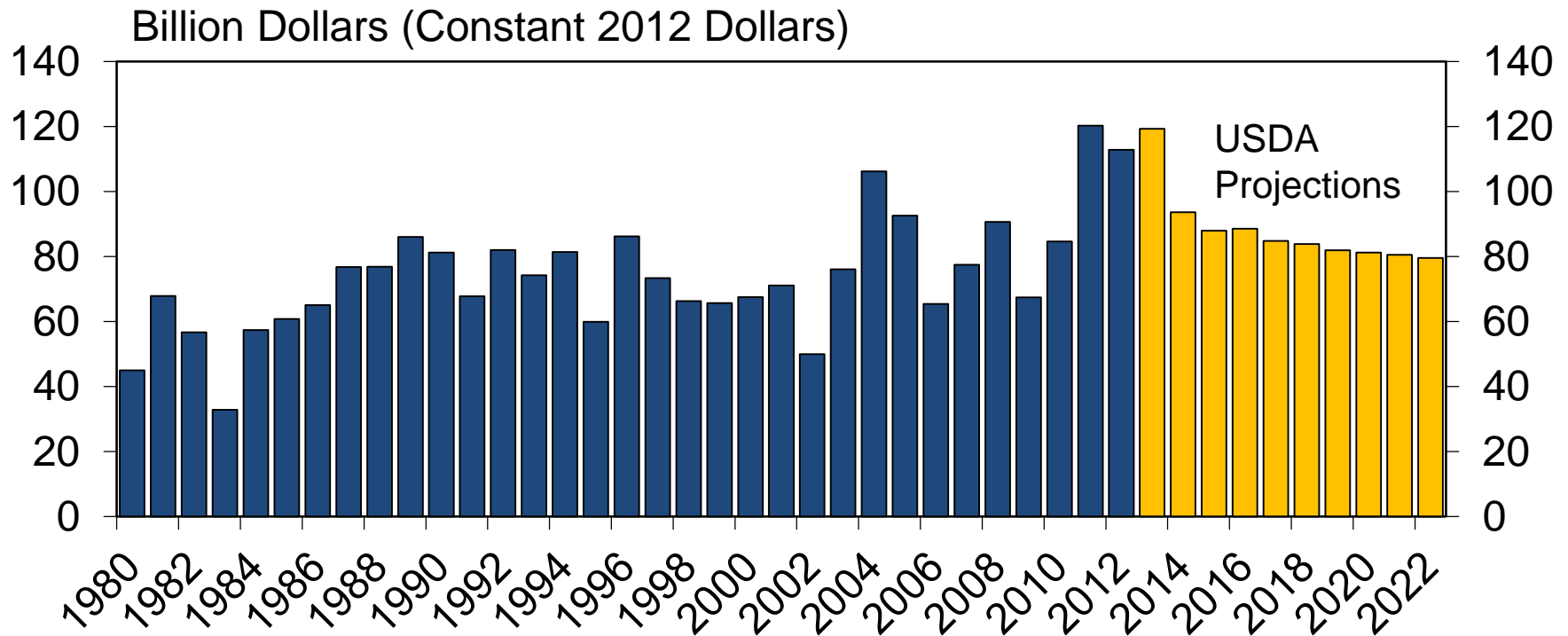


Interest Rates



Farm incomes are projected to drop sharply in 2014.

U.S. Real Net Farm Income

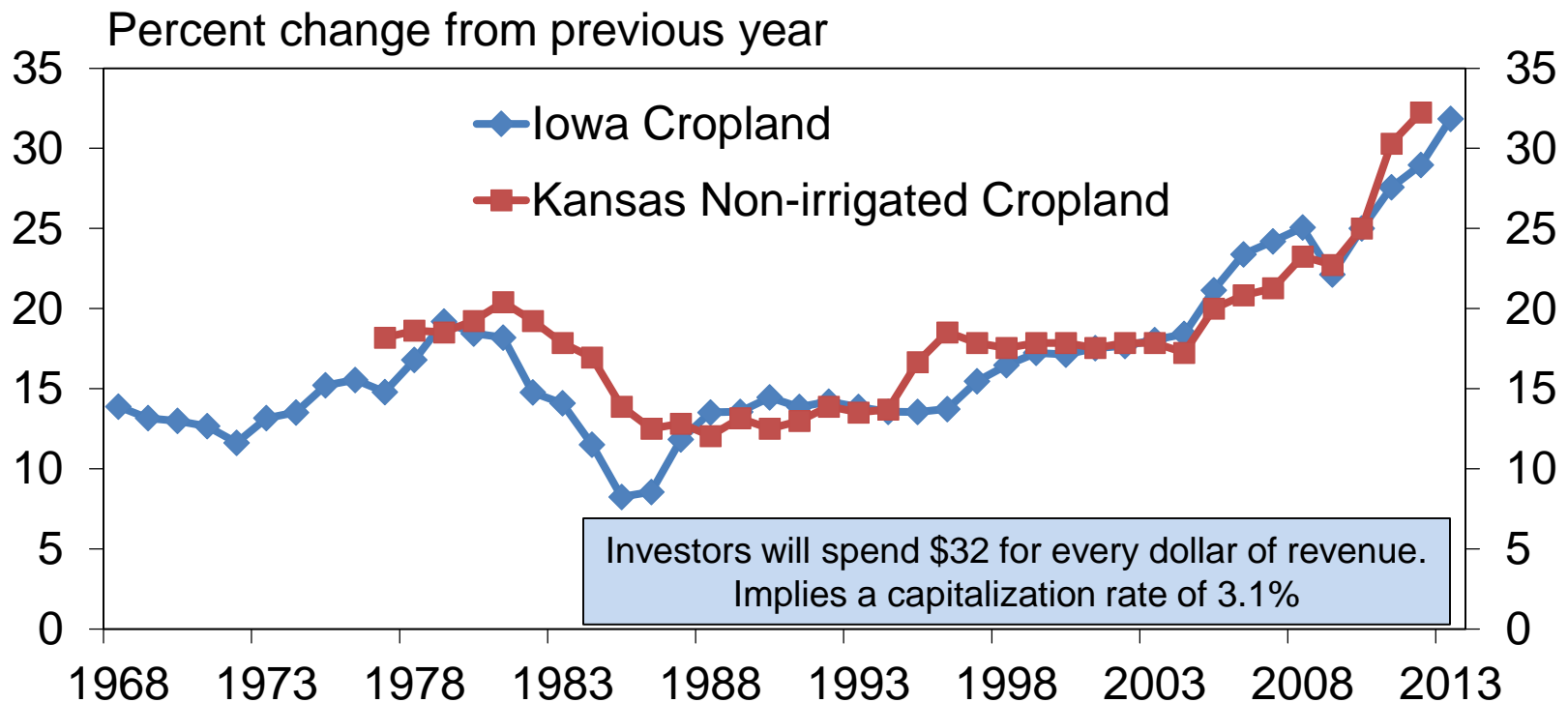


Source: USDA



Is farmland overvalued?

Cropland Value-to-Cash Rent Ratios

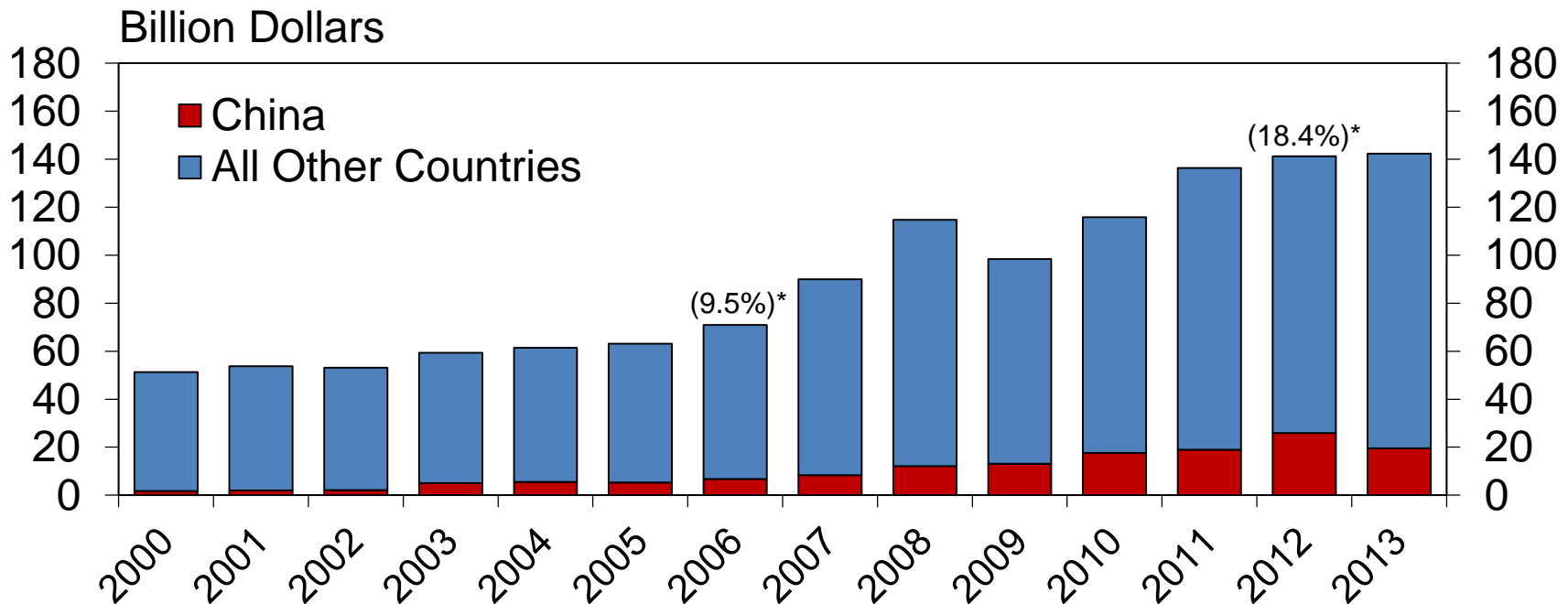


Source: NASS, USDA and Iowa State University



Will export demand from China strengthen?

U.S. Agricultural Exports



Source: USDA

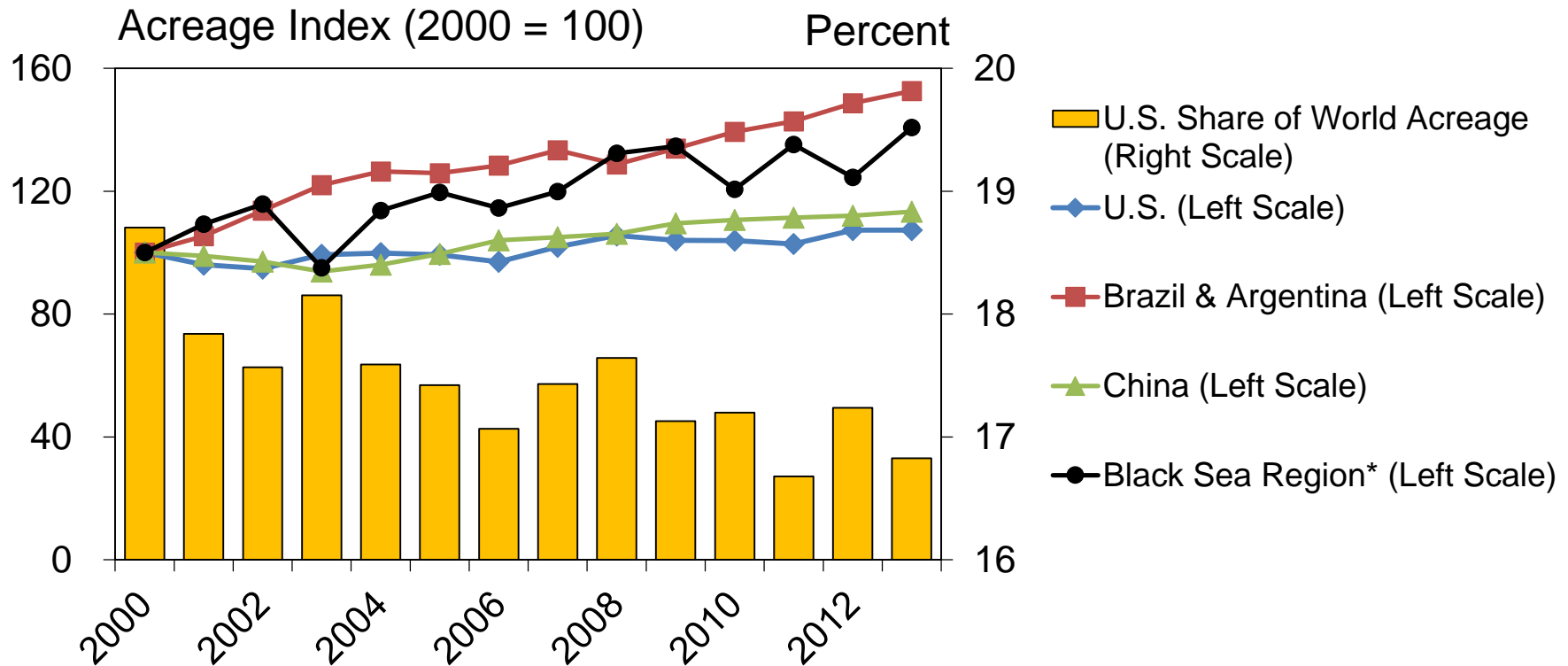
Note: 2013 agricultural exports forecast based on year-to-date 2013 annual growth rate.

* China's share of total U.S. agricultural exports in parentheses.



Will the U.S. lose market share?

Global Corn, Soybean, and Wheat Expansion



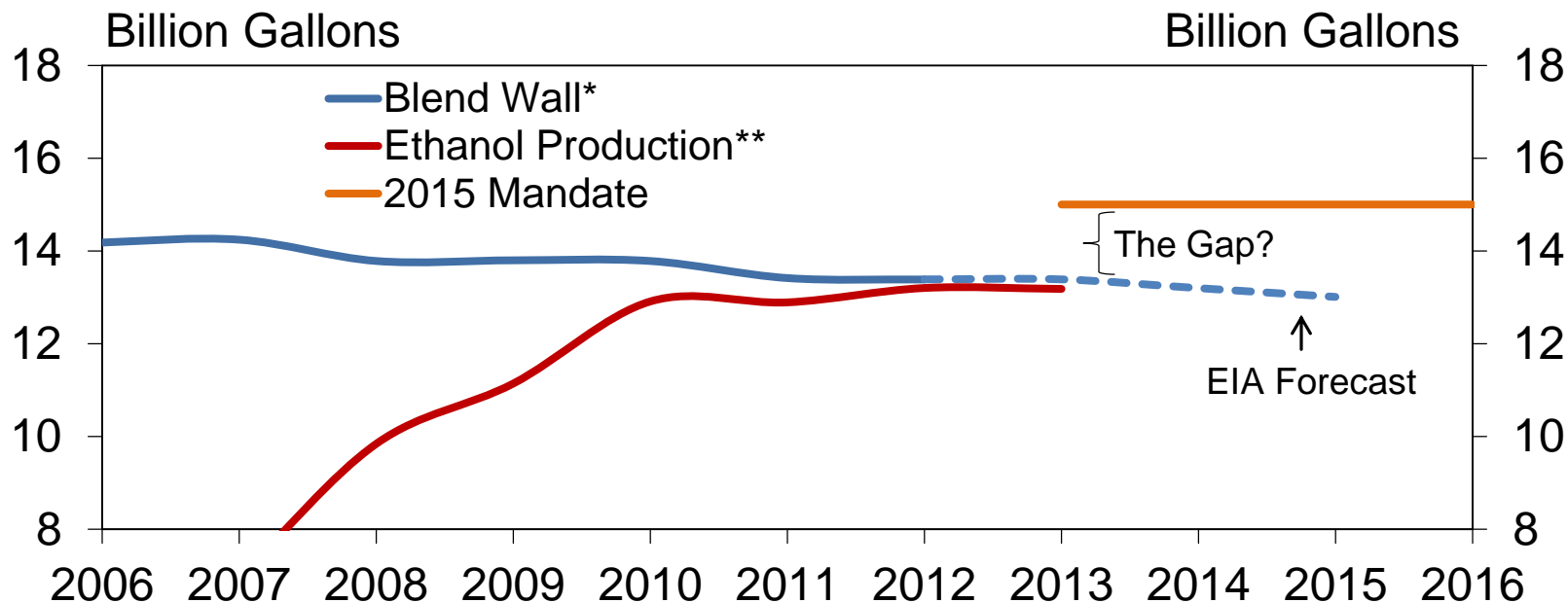
* Black Sea Region includes Russia, Ukraine, and Kazakhstan

Source: USDA



What will future Renewable Energy Policy look like?

U.S. Gasoline Consumption, Ethanol Production, and Mandates



Source: Energy Information Administration.

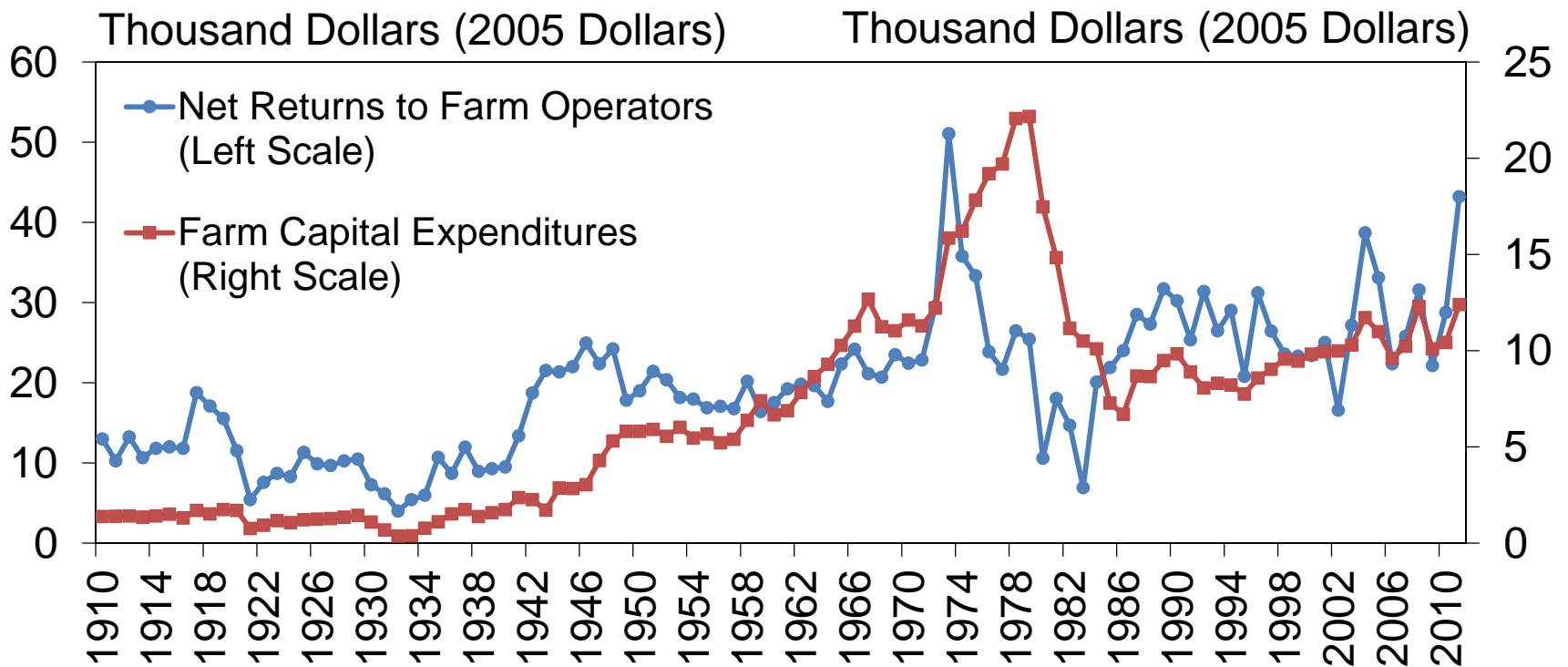
* 10% of gasoline consumption

** Ethanol Production is net of trade



How will investments and debt respond to income changes?

U.S. Farm Profits and Capital Investments per Farm

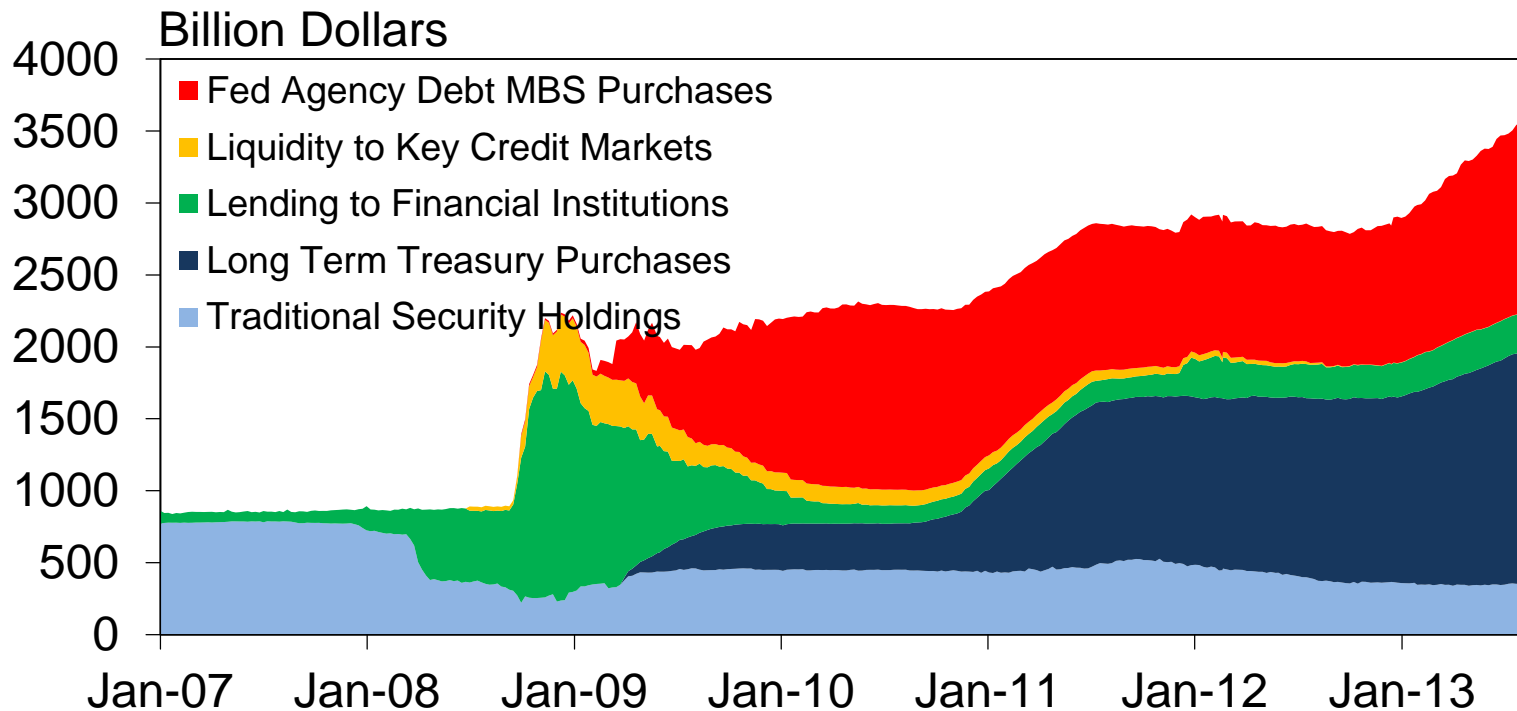


Source: USDA



What would higher interest rates mean for agriculture?

Federal Reserve Balance Sheet: Assets



Source: Federal Reserve Board of Governors



Conclusions

- Modest economic recovery continues, but in transition.
- Commodities drive a transition in U.S. agriculture.
 - Softer crop sector profits
 - Strengthening livestock profits, but cattle a concern
- In the transition, there are risks to U.S. agriculture, possibly beyond 2014.
 - Farm incomes, farmland values, export markets, global competition, ethanol, farm debt, and interest rates
- Working capital is key in managing through a downturn.



**For More Information
on
The Midwestern Economy and Rural America**

www.kansascityfed.org/omaha

