Macroeconomic Risks for Farmer Cooperatives

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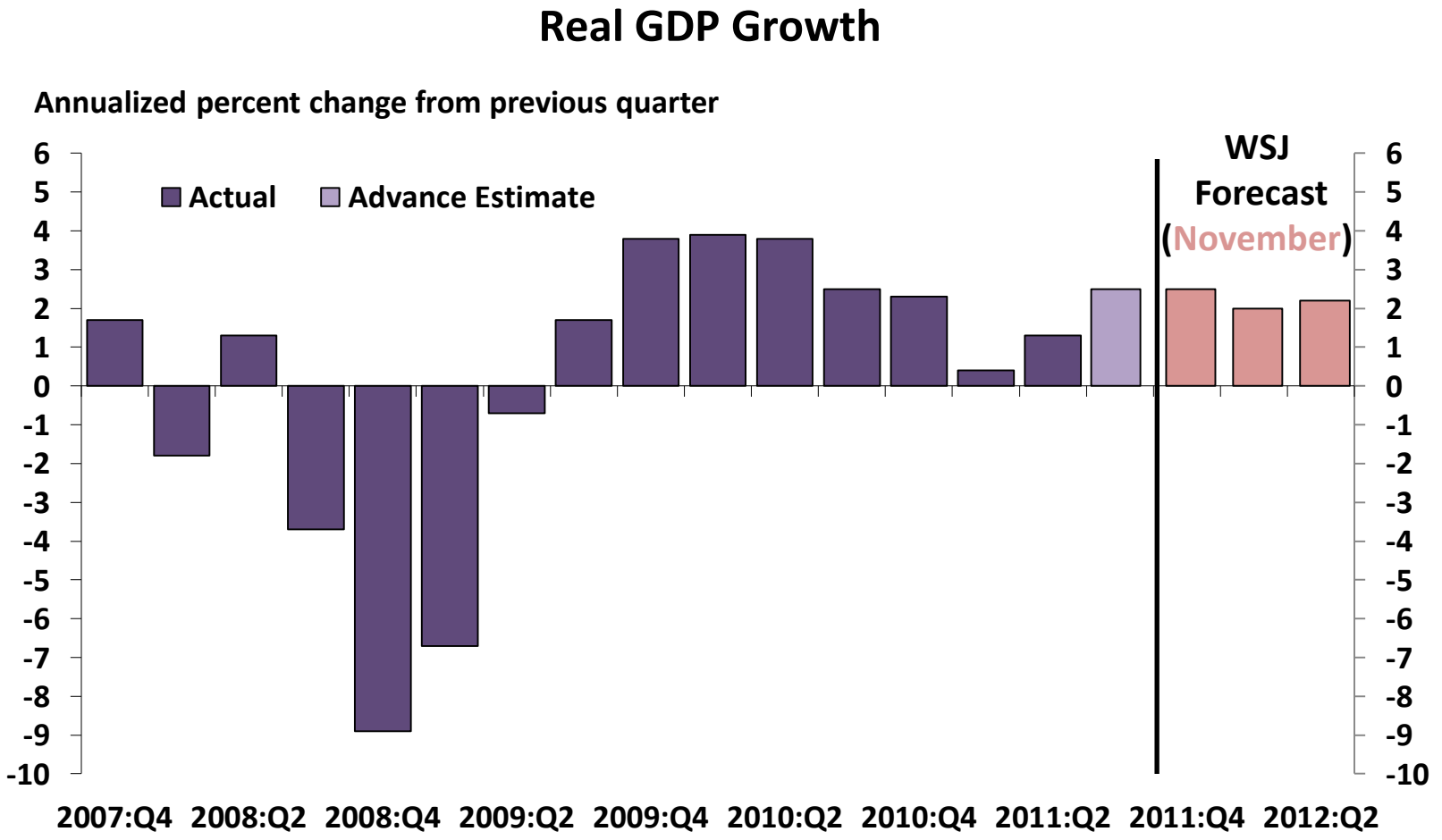
Macroeconomic Risks

- While there are many macro and global factors that can affect your farmer cooperative, I'm going to focus on four that could build on each other:

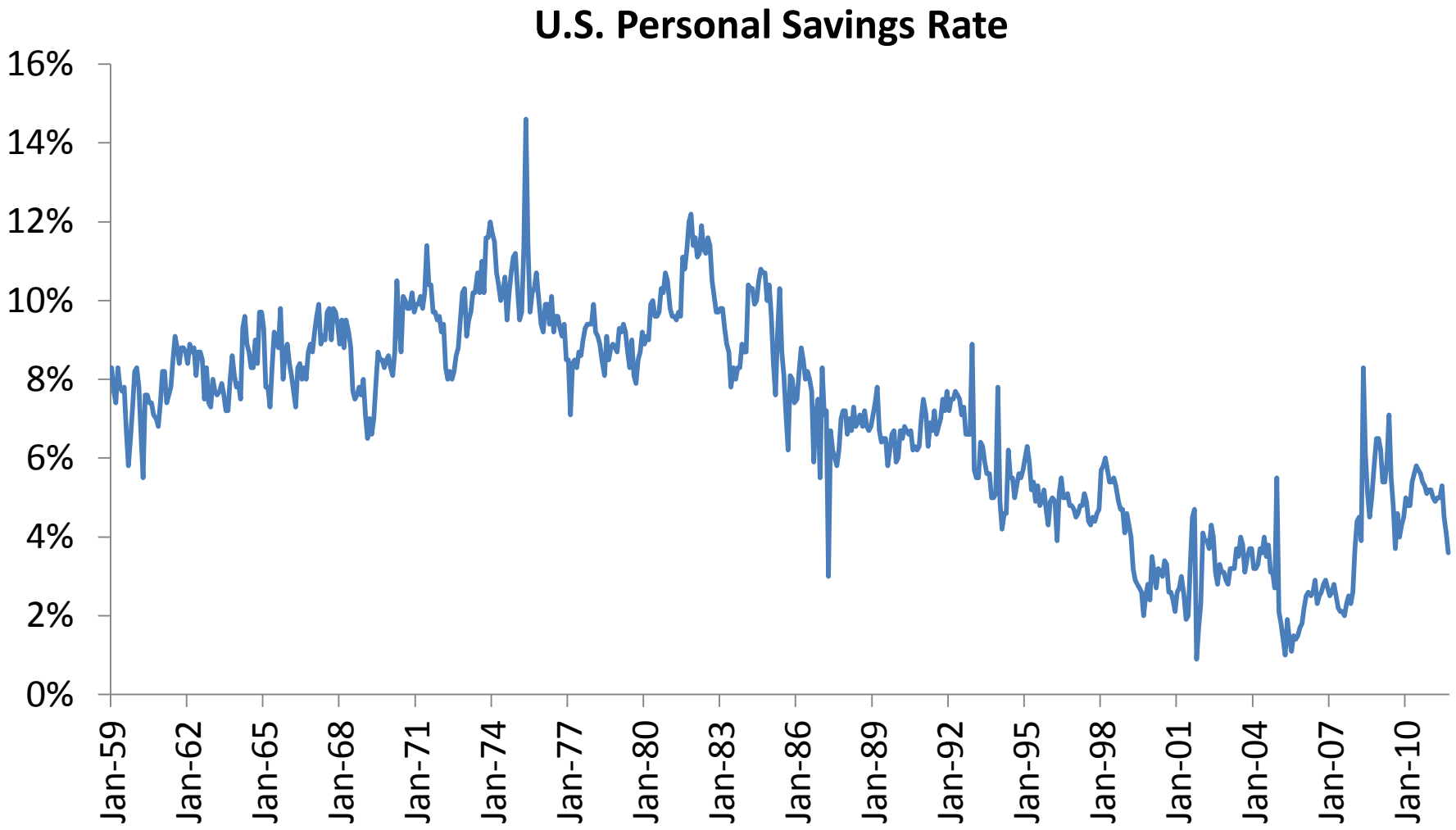
1. Interest Rates – The Good (low), The Bad (low) and The Ugly (surging)
2. Inflation
3. Crop prices
4. Farmland Values

Growth improved in the 3rd quarter of 2011, but is it sustainable as forecasters project?



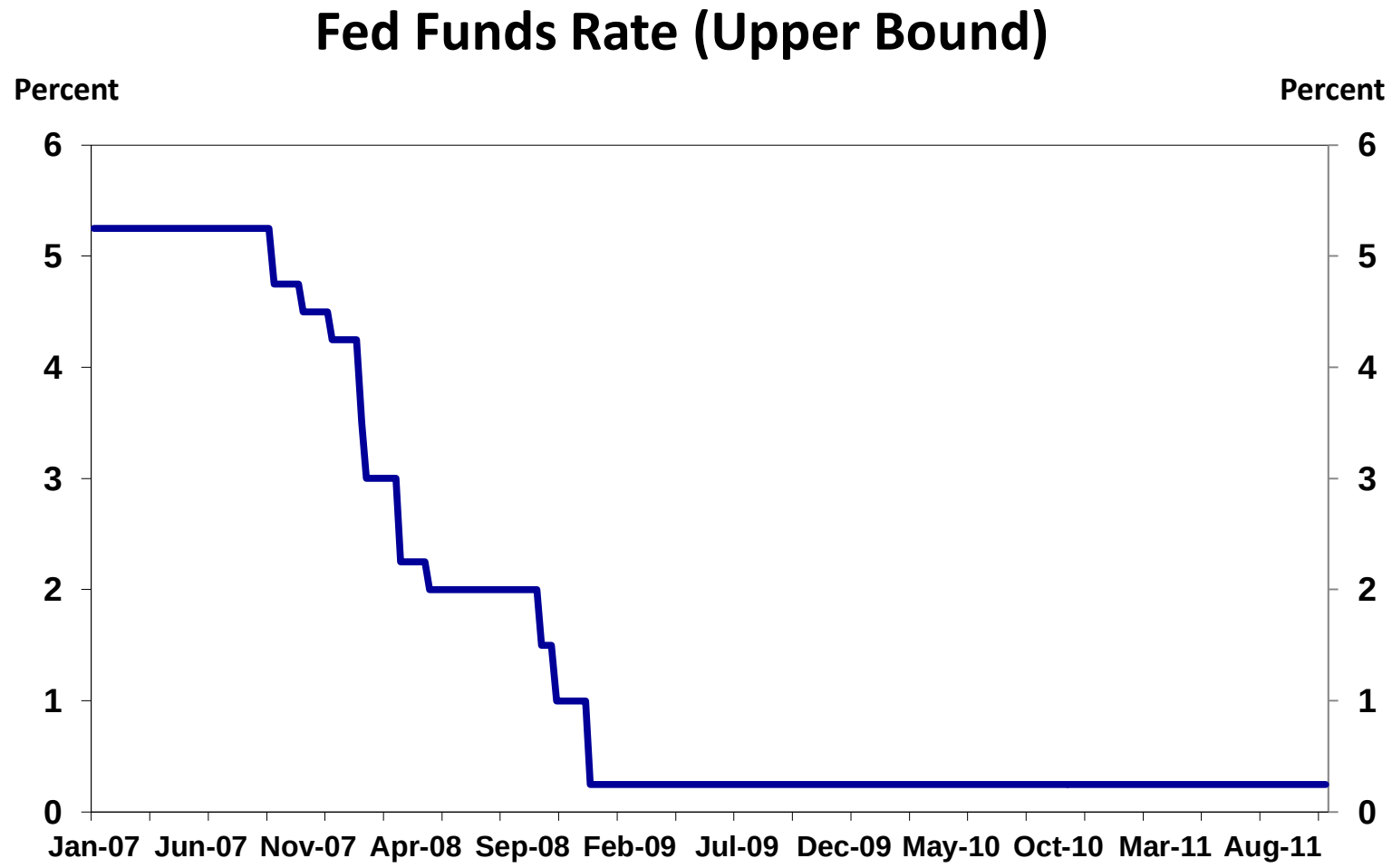
Source: Bureau of Economic Analysis and Wall Street Journal November 2011 Forecast Survey (Average)

Recent growth, however, came at the expense of savings…



Source: Federal Reserve Bank of St. Louis

…but when interest rates are at or near zero, what incentive do consumers have to save?



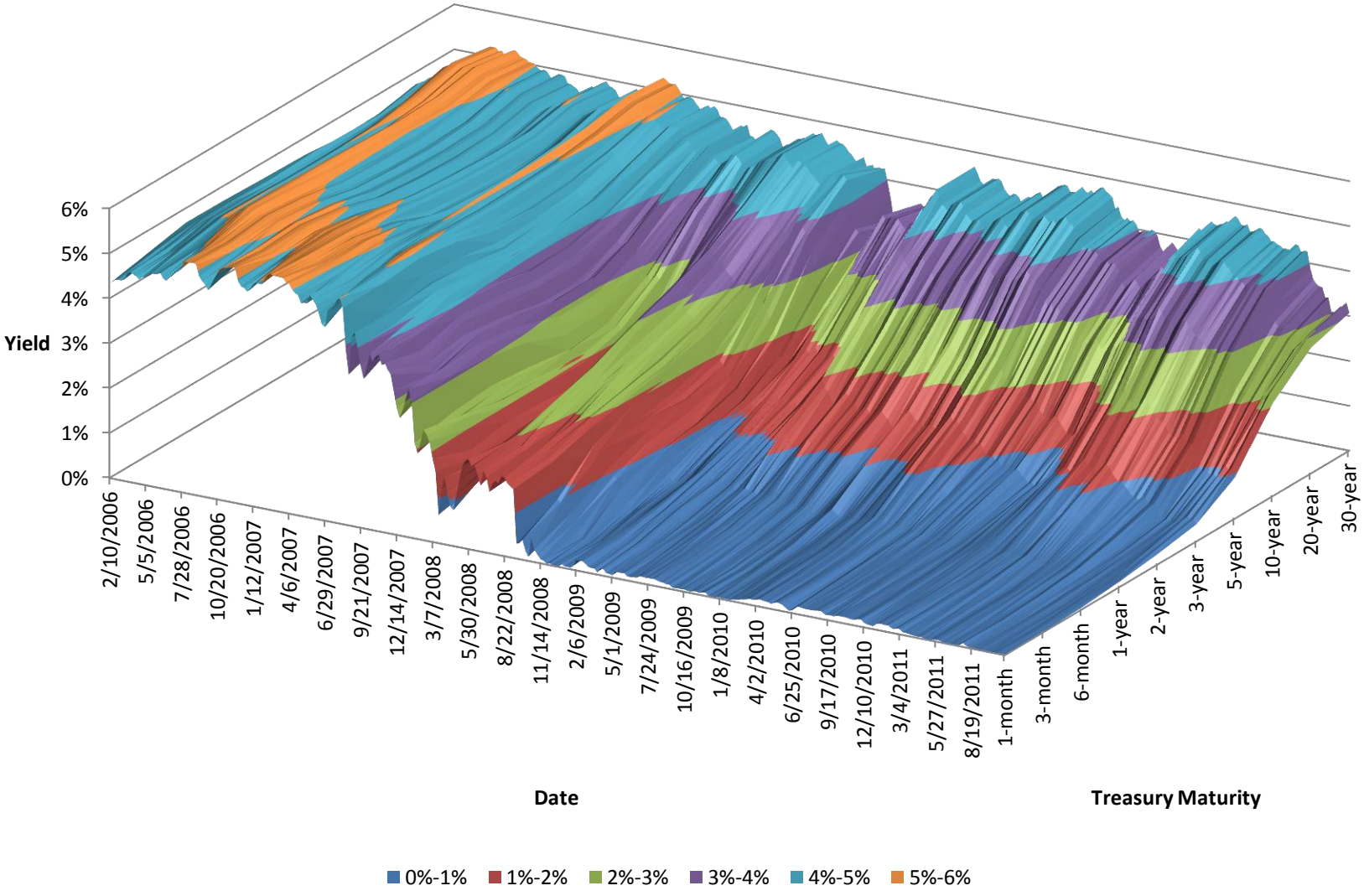
Source: Federal Reserve Board of Governors

INTEREST RATES – THE GOOD, THE BAD AND THE UGLY

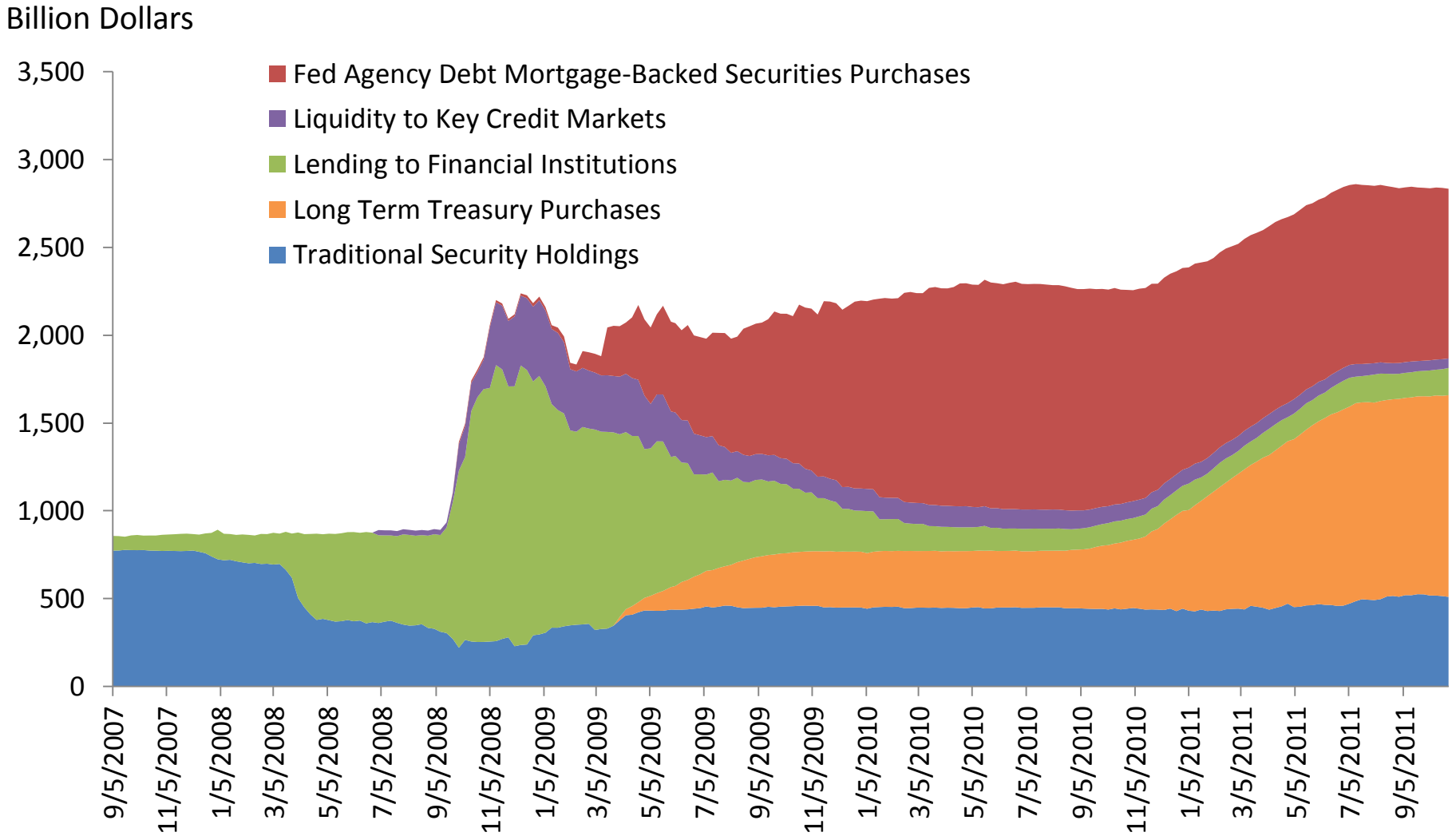
Low interest rates have pushed down the cost of borrowing.

Source: Federal Reserve Board of Governors

When the Fed is at the zero bound, can the "long-end" of the yield curve move?

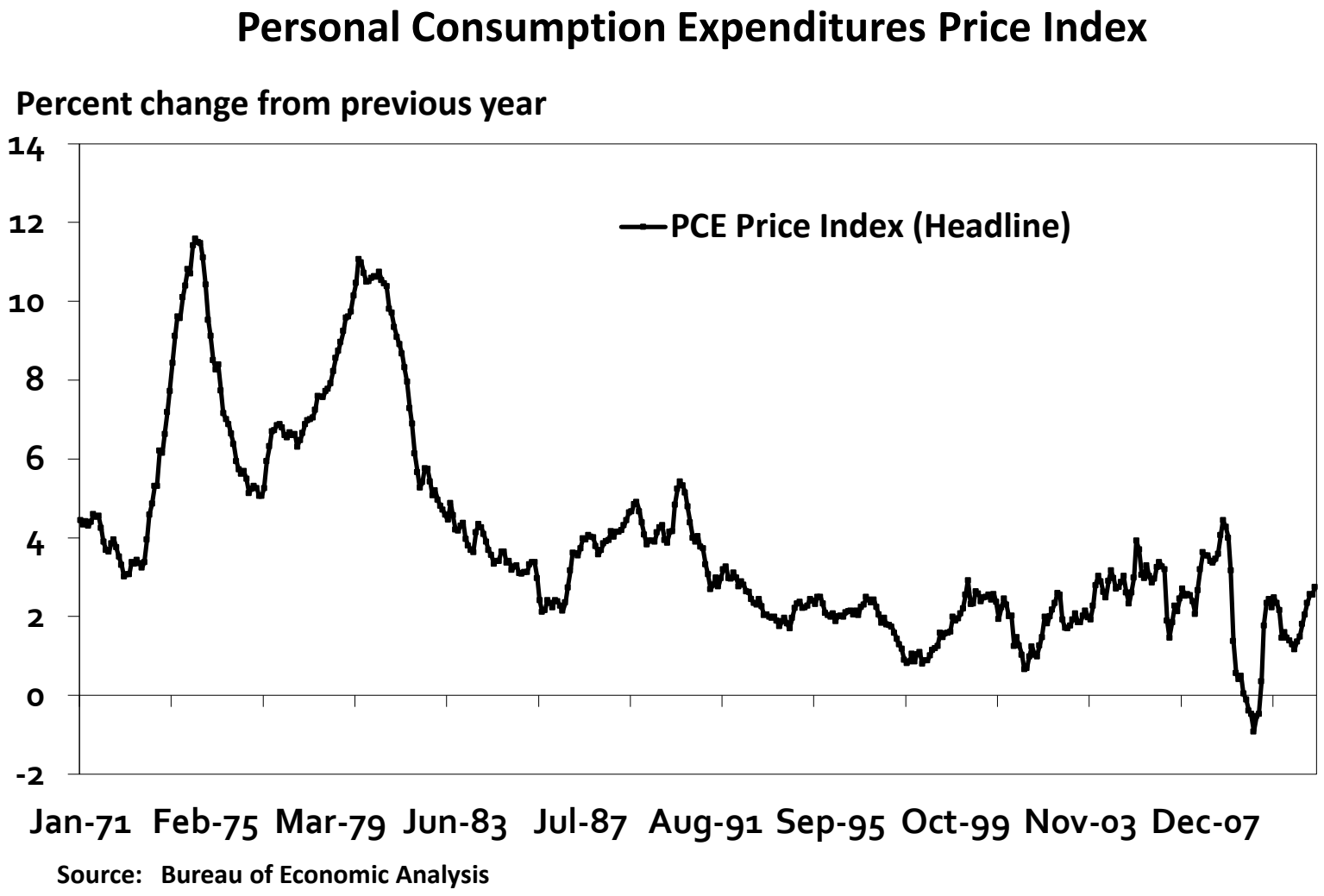


How does the Fed return to a more "normal" balance sheet?



Source: Federal Reserve Bank of Cleveland

Today, inflation remains well below the levels experienced during the 1970s and 1980s.



Source: Bureau of Economic Analysis

To understand the current environment for inflation, it is helpful to pull a page from Econ 101.

A rapid rise in inflation occurs when **too much money** *is chasing* **too few goods**.

Quantity Theory of Money

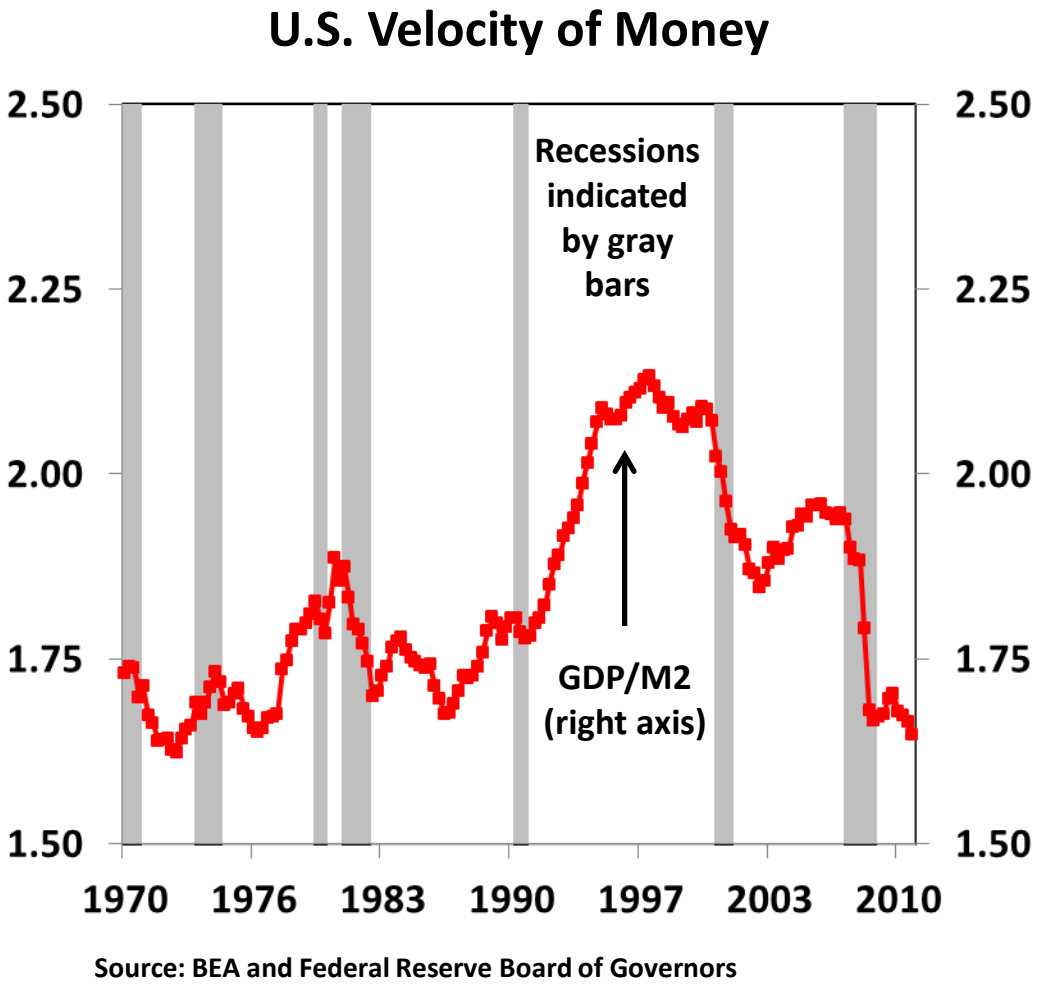
$$Price = \frac{Money * Velocity}{Quantity\ of\ Goods} = \frac{M * V}{Q}$$

So, for rapid price inflation:

$$\frac{M\uparrow * V\uparrow}{Q\downarrow}$$

Why is inflation low? Velocity has plummeted.

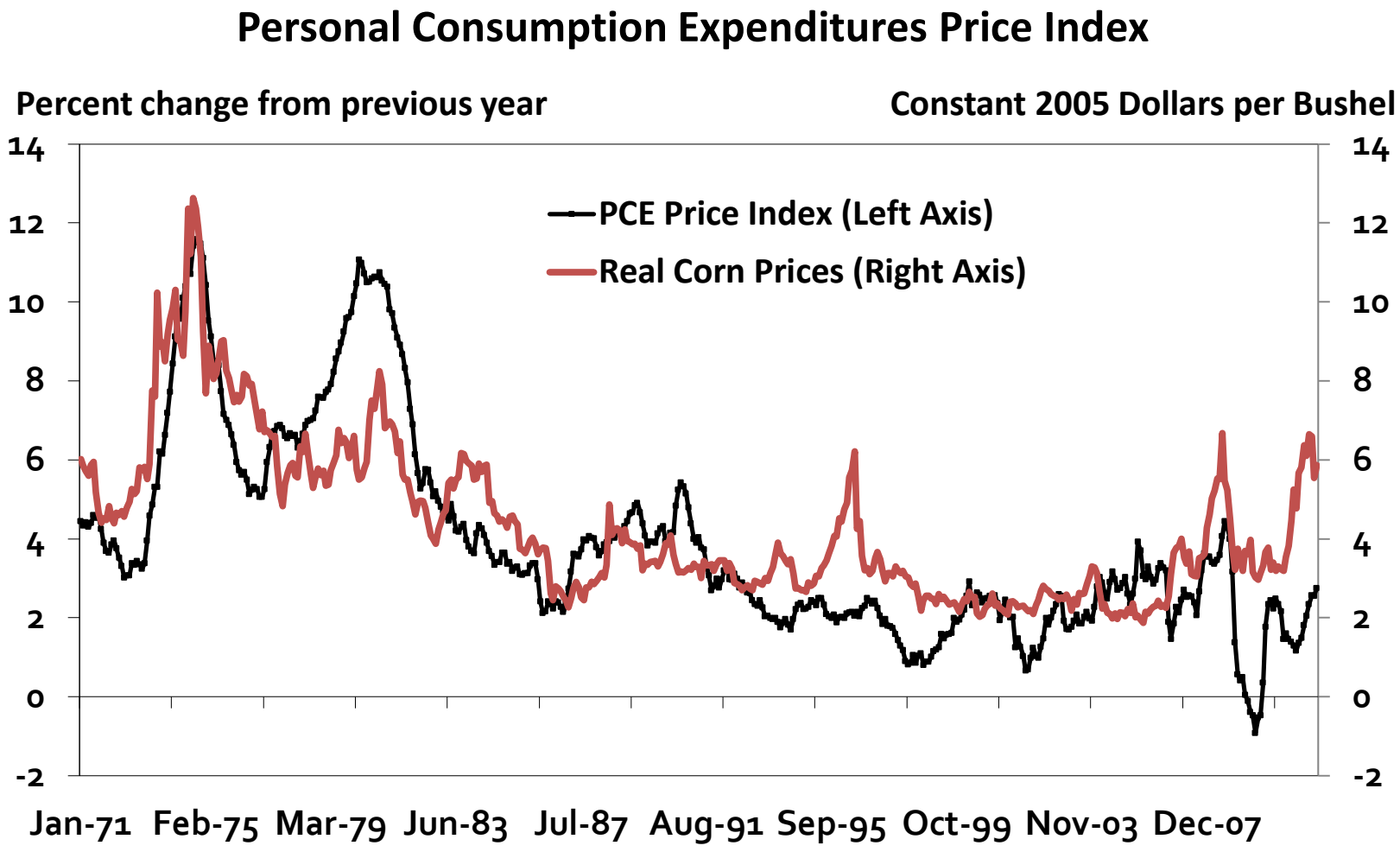
- One way to measure velocity is by calculating the ratio of gross domestic product (GDP) to money (M2).
- This ratio is essentially a turnover ratio of how quickly money is turned into output.
- Today, velocity is very low. So, what will it take to raise velocity, and when might this happen?



Source: BEA and Federal Reserve Board of Governors

POTENTIAL IMPACT OF “THE UGLY”

Historically, crop prices tend to move with inflation.



Source: Bureau of Economic Analysis and Chicago Board of Trade

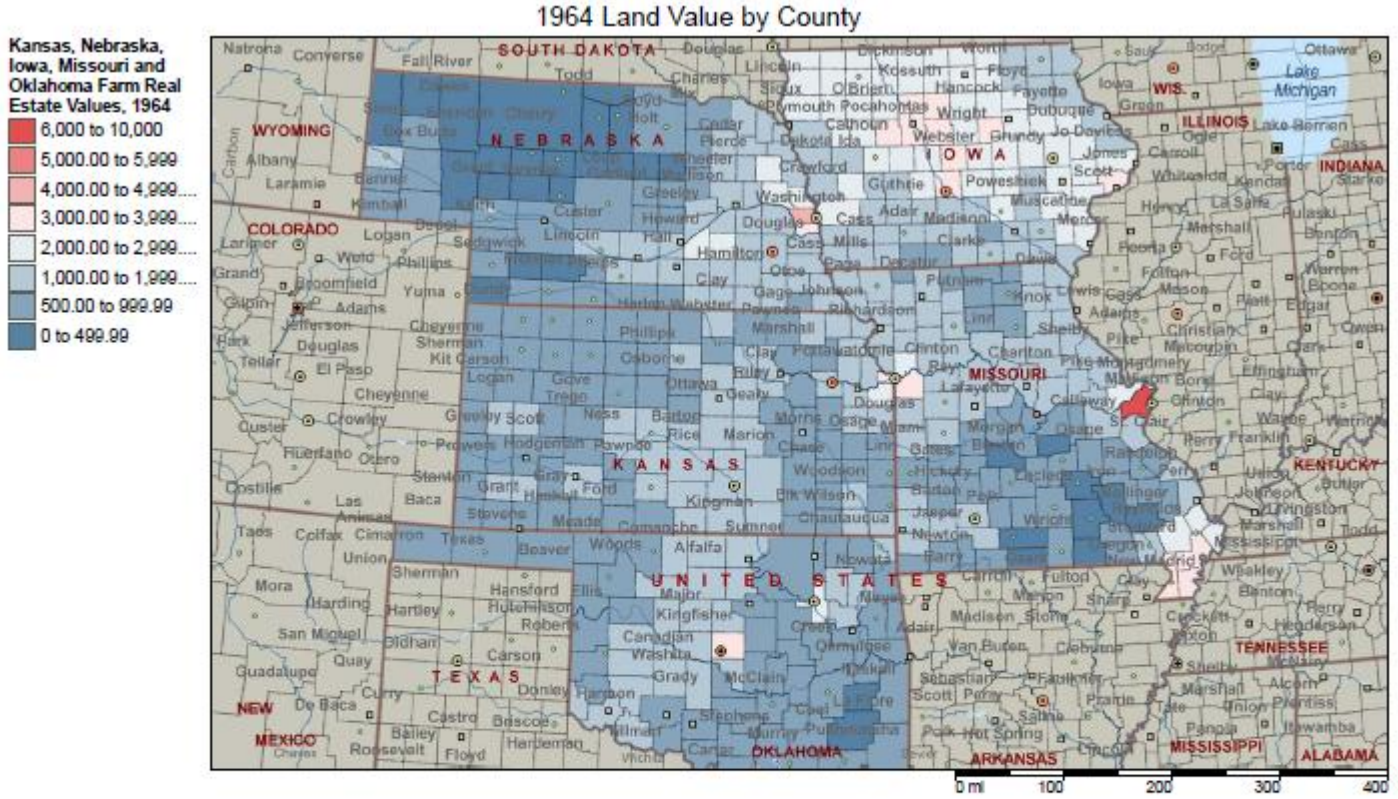
How might crop prices respond to a pick up in velocity?

- Based on some of my working research:
  - Steep rise, possibly like the real prices experienced in 1970s…doubling
  - Then, prices would likely plummet as the market searches for equilibrium
  - Bottom line, there would likely be more volatility with potentially bigger swings in crop prices.

- The Federal Reserve's exit strategy is key

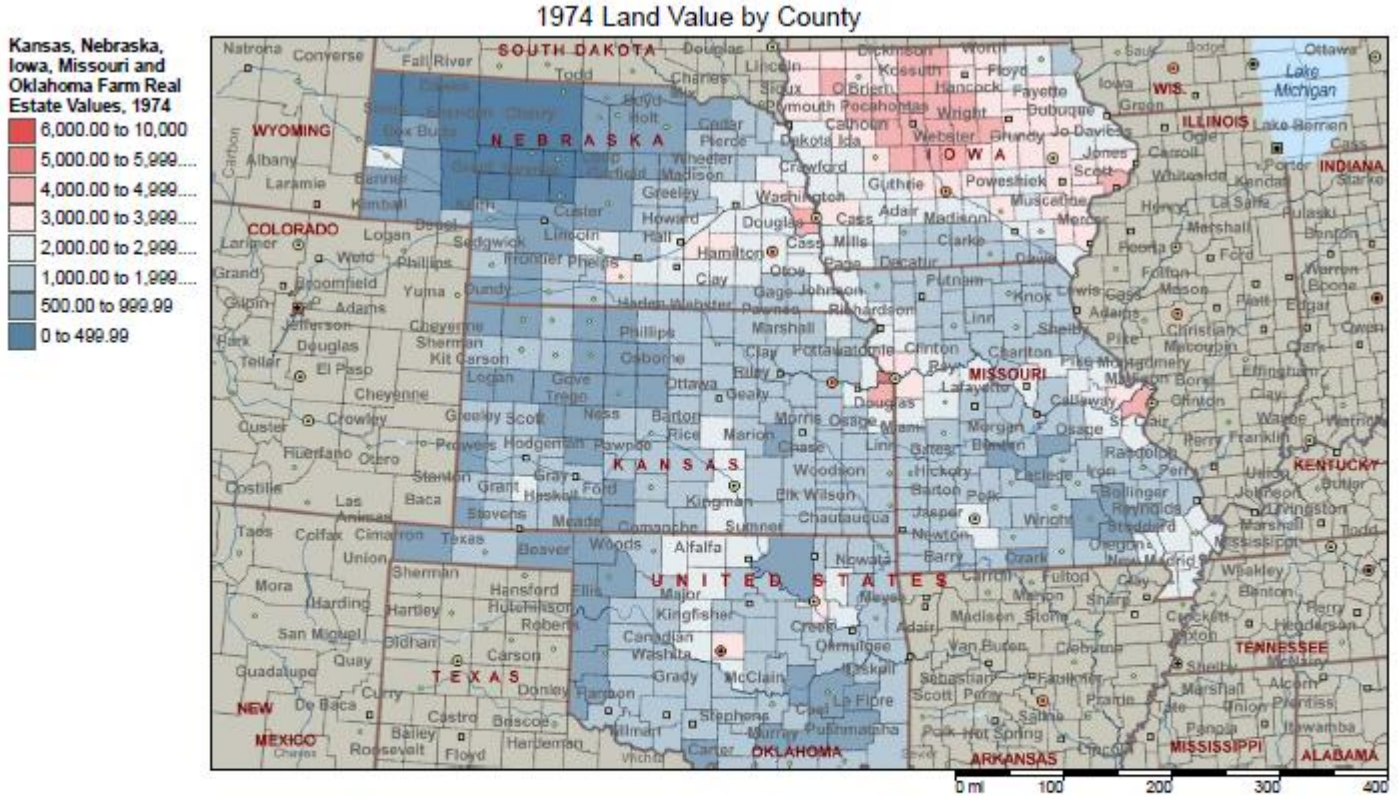
FARMLAND VALUES ARE A BELLWETHER FOR THE FINANCIAL HEALTH OF AGRICULTURE

After World War II, farmland values started to heat up as new technology was adopted.



Data is inflation adjusted farmland values from U.S. Agricultural Census. Farmland values are in constant 2011 dollars.

New export markets and easy credit lit a fire under the farmland value market, especially in the corn belt.



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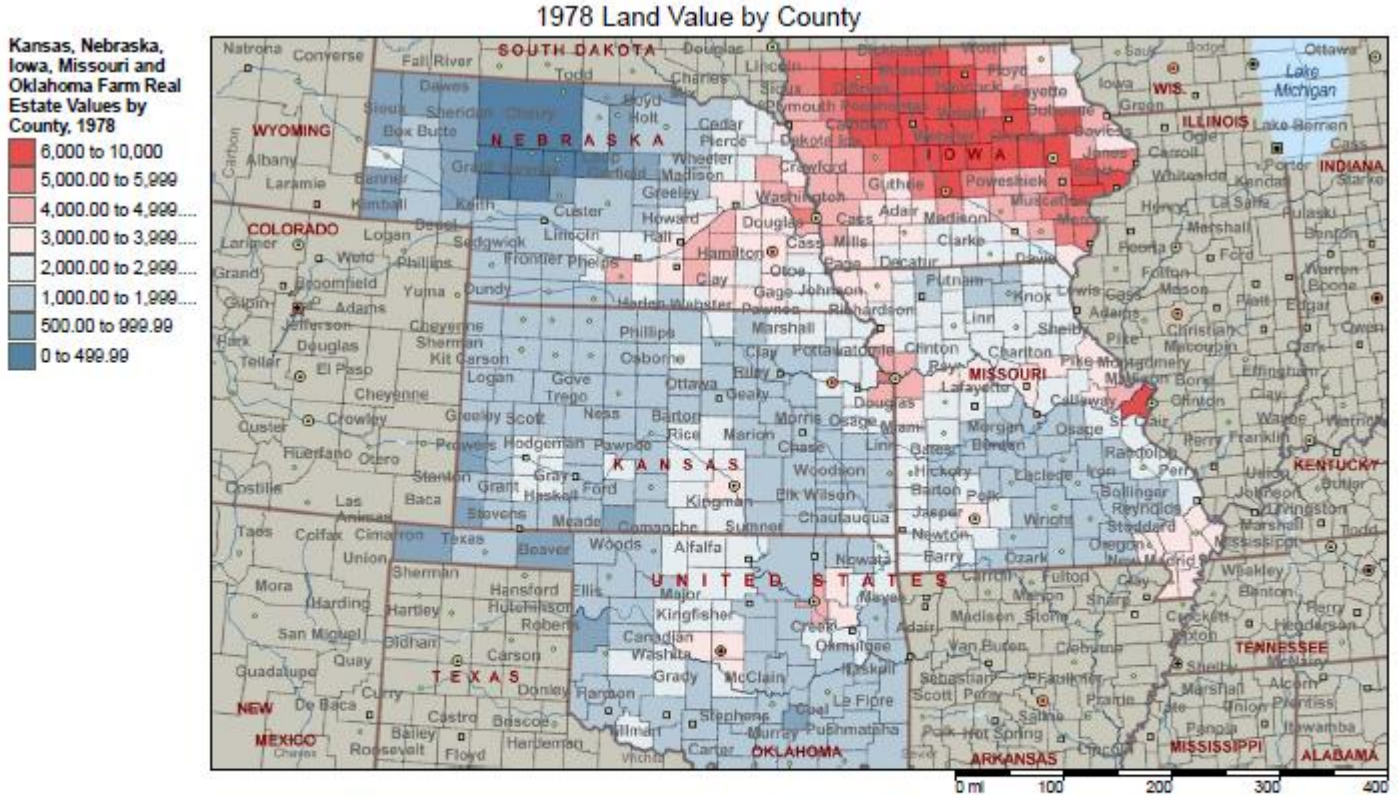
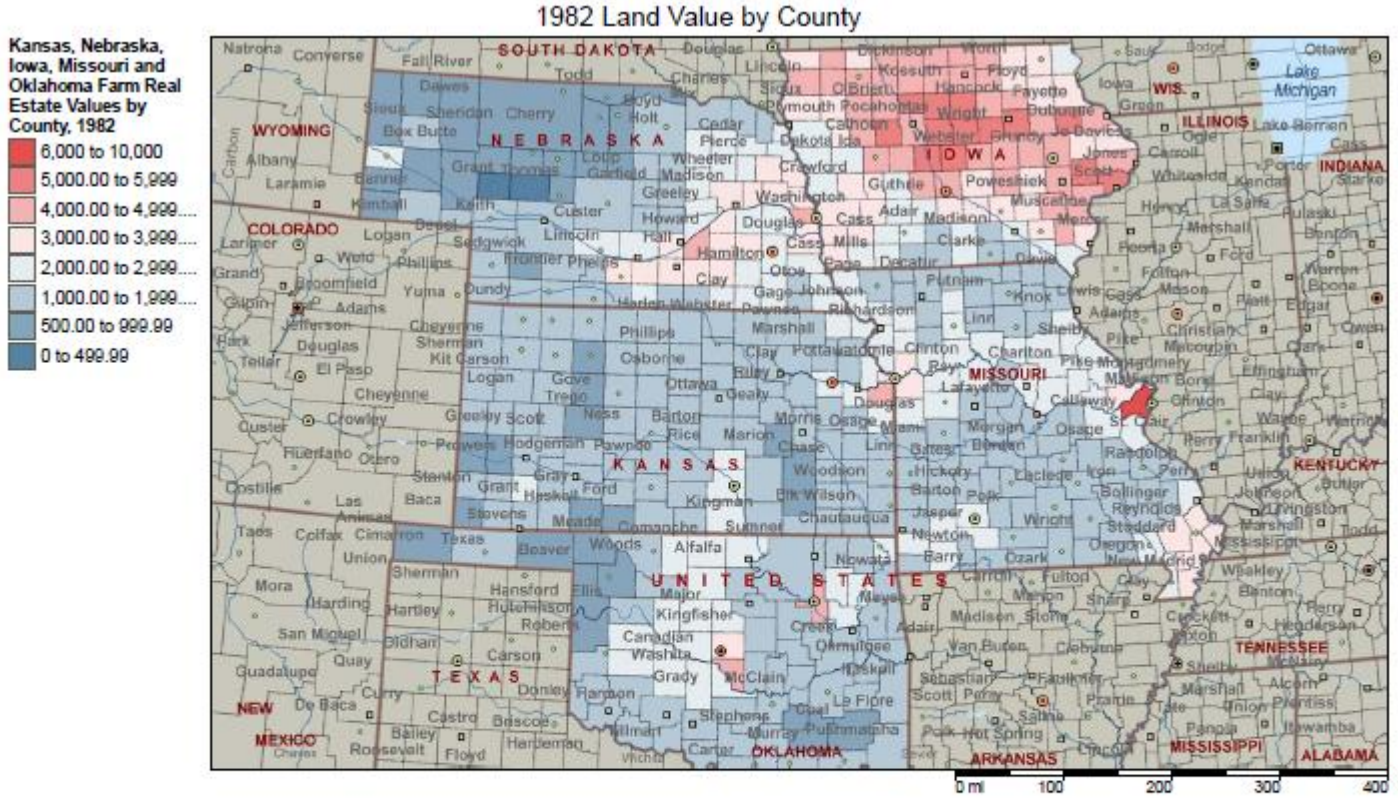
By 1978, Iowa farmland values were on “fire” and it was spreading throughout the region.



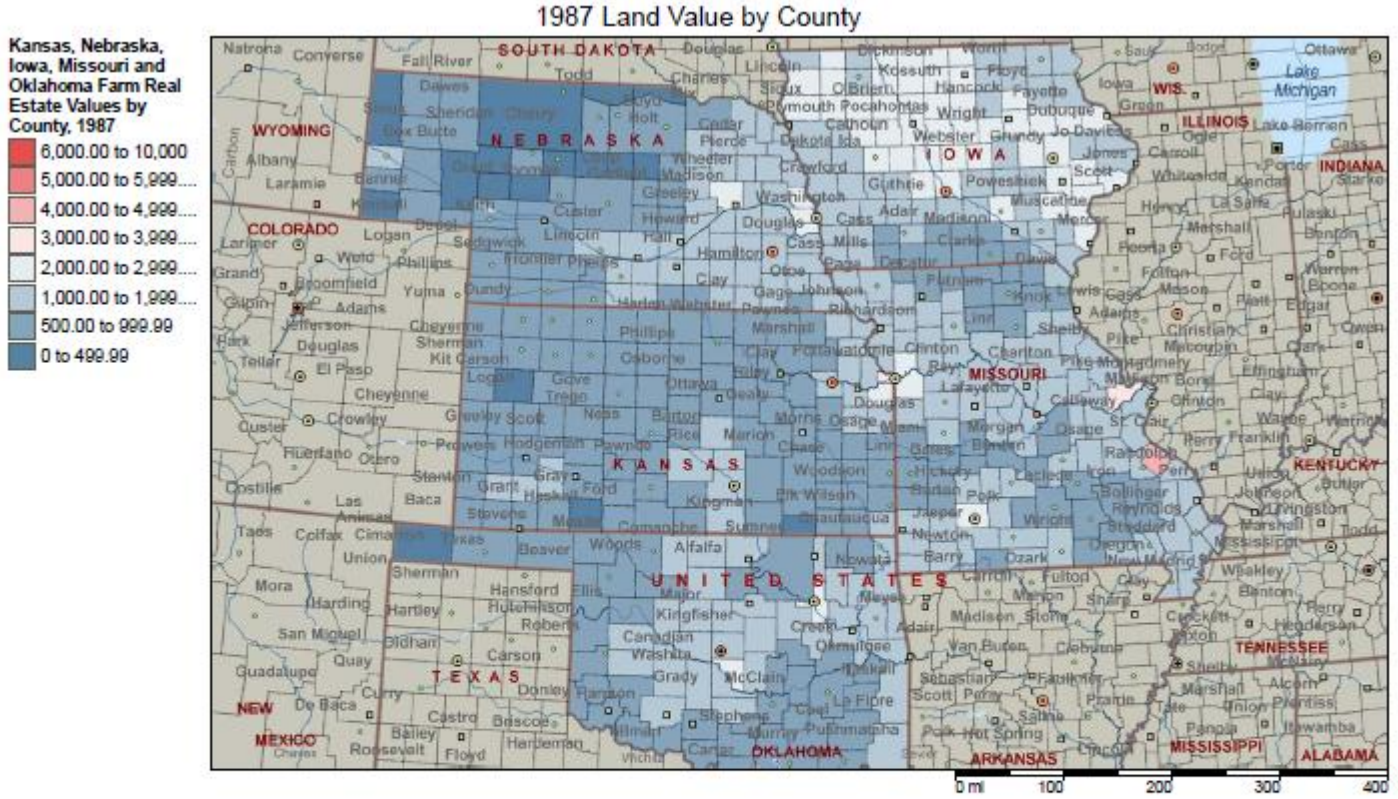
Data is inflation adjusted farmland values from U.S. Agricultural Census. Farmland values are in constant 2011 dollars.

The start of the 1980s farm debt crisis began to cool the flame surrounding farmland values.



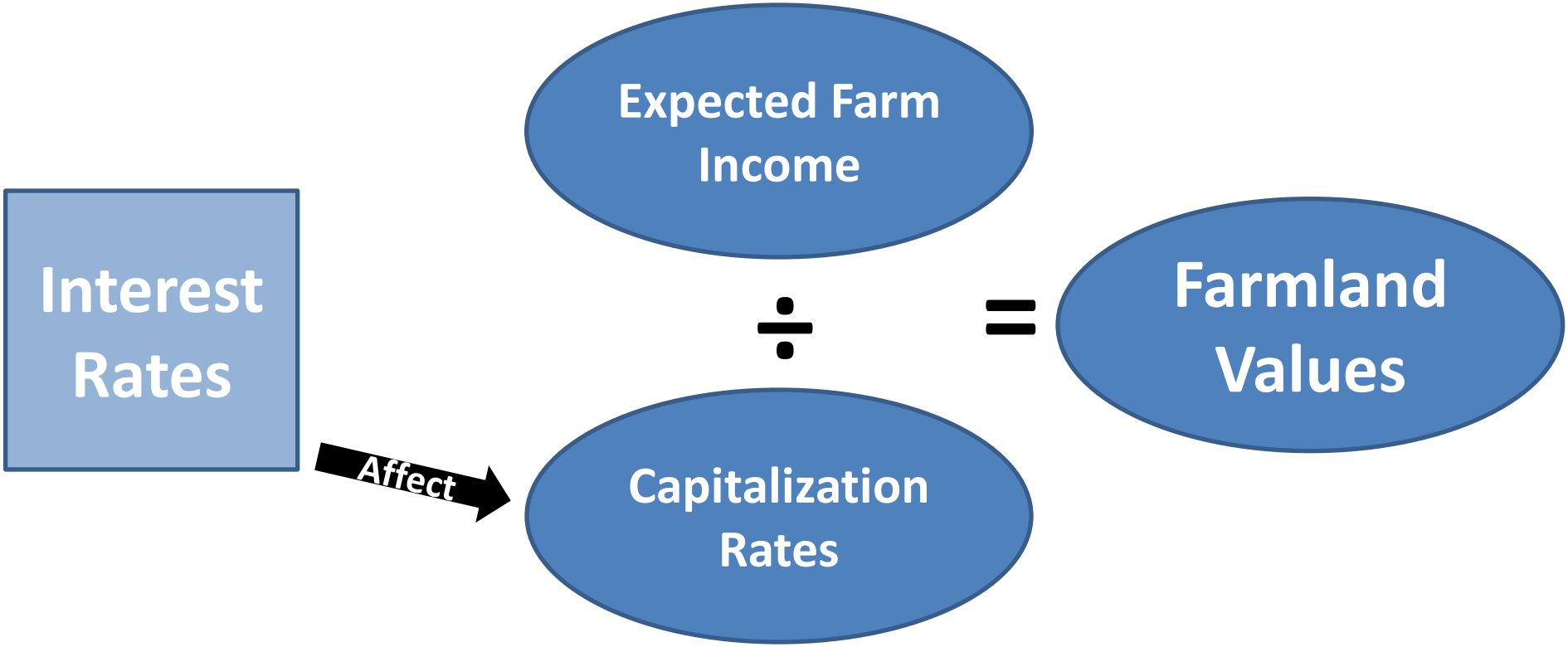
Data is inflation adjusted farmland values from U.S. Agricultural Census. Farmland values are in constant 2011 dollars.

By 1987, the “fire” was out.

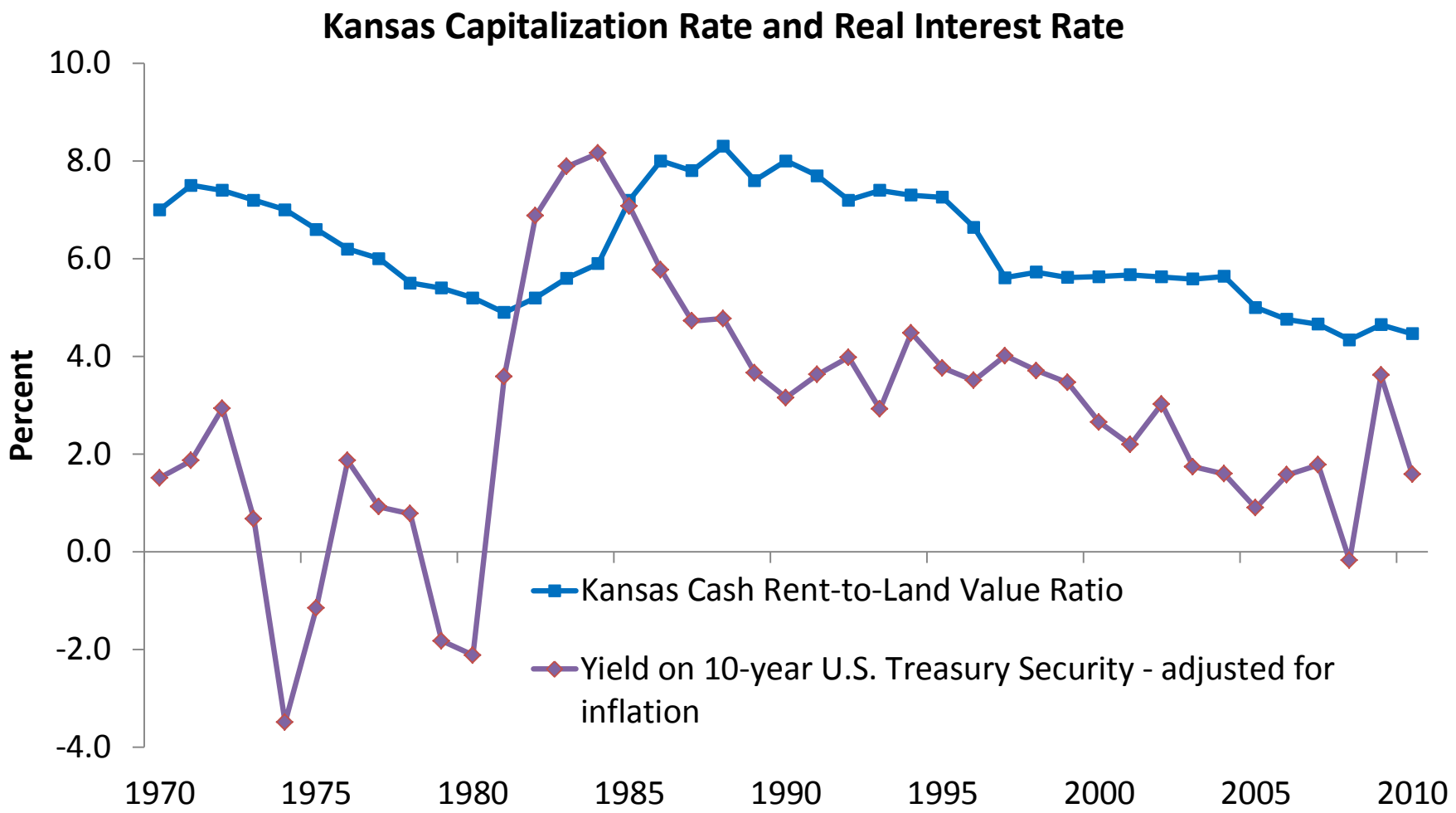


Data is inflation adjusted farmland values from U.S. Agricultural Census. Farmland values are in constant 2011 dollars.

While debt is not fueling the recent surge in farmland values today, ultra low interest rates are playing a significant role.

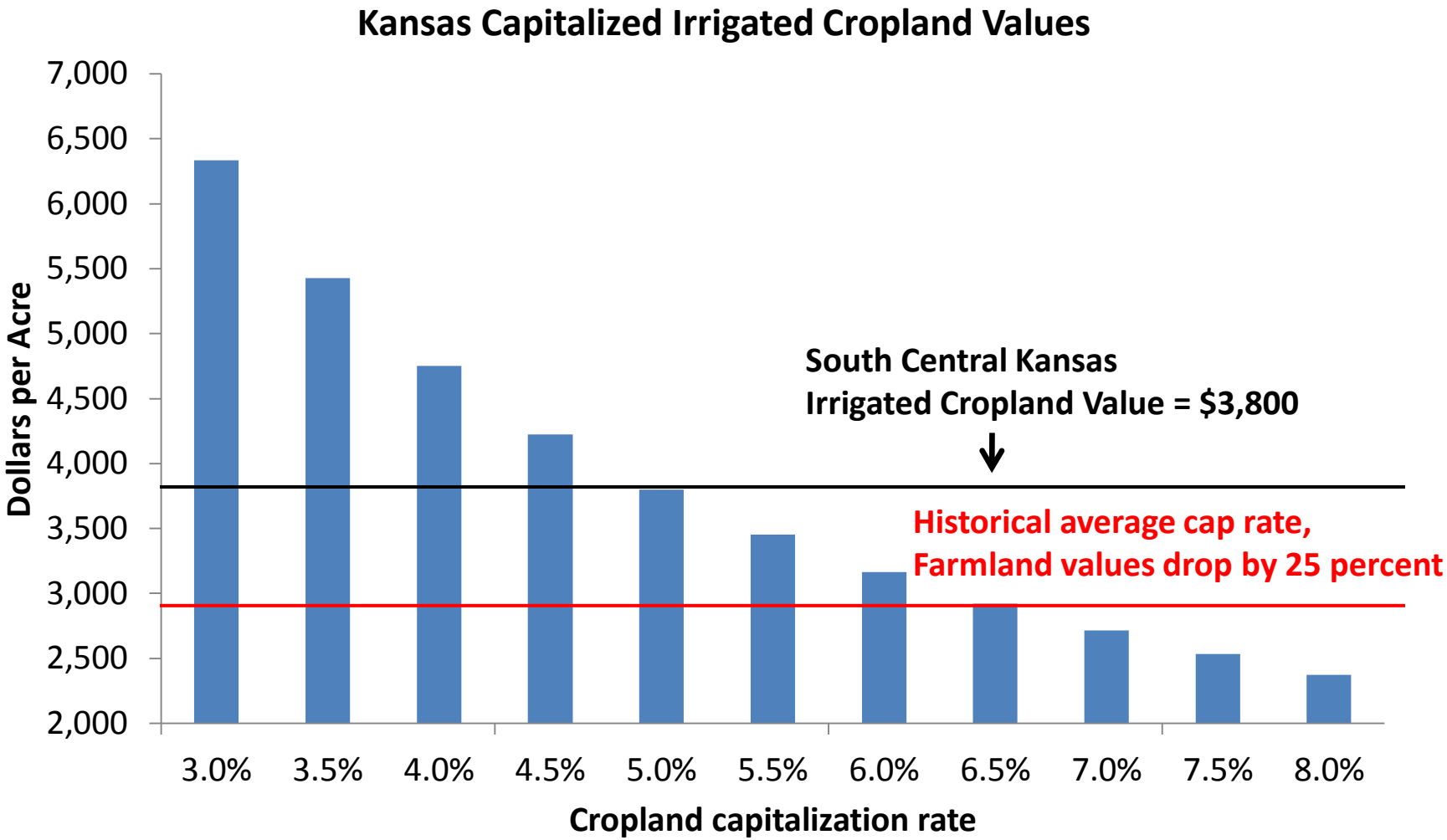


Capitalization rates and real interest rates tend to move together.



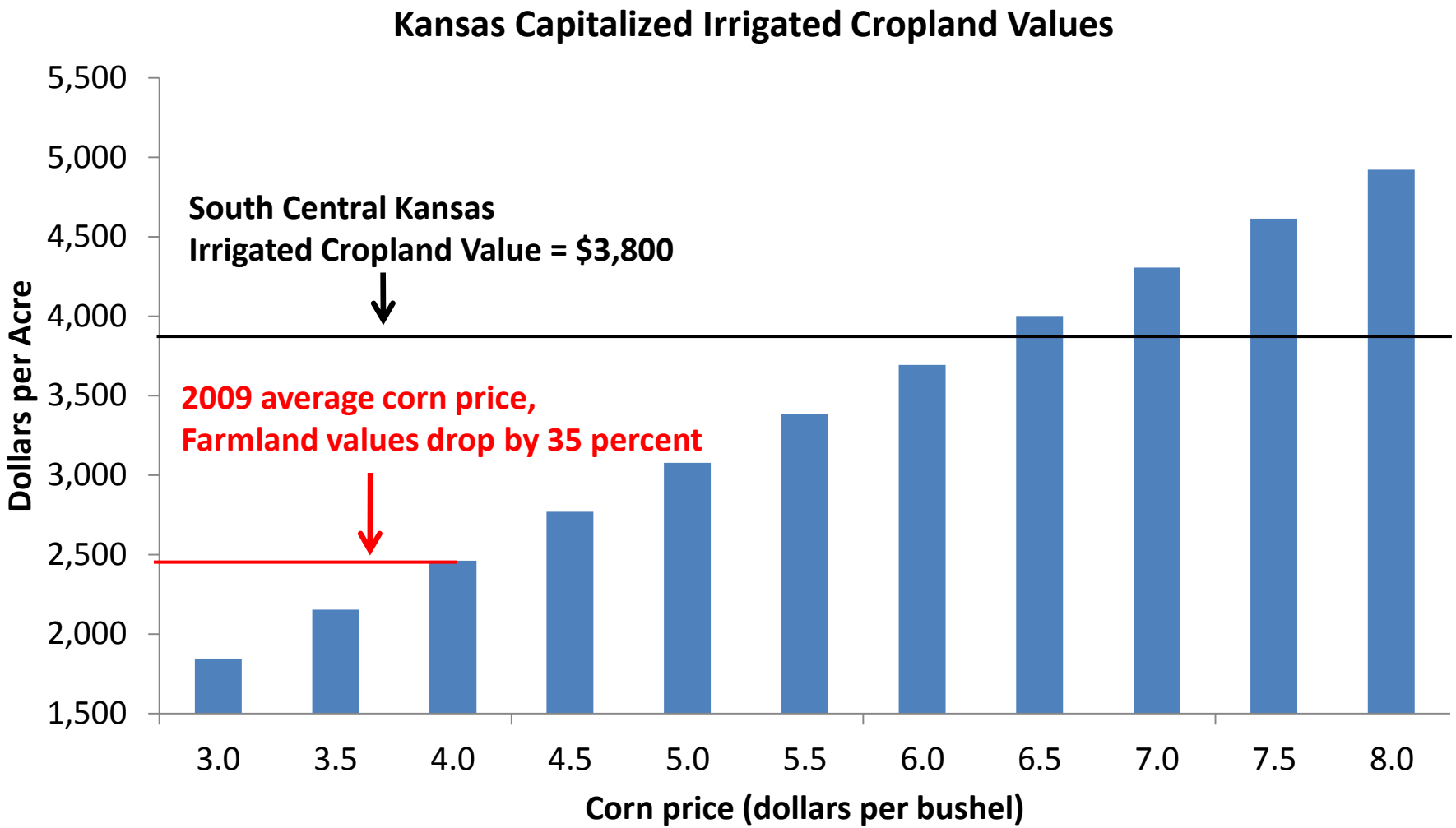
Sources: USDA , Federal Reserve and BLS

Historically low capitalization rates help support current Kansas cropland values.



Authors' calculations based on KSU Corn Cost-return Budget in South Central Kansas.
Assumed 200 bushels per acre, a corn price of $4.75 per bushel, and 20% of gross revenues capitalized into land.

At a historical average cap rate and today's corn prices, current Kansas cropland values are reasonable.



Authors' calculations based on KSU Corn Cost-return Budget in South Central Kansas.
Assumed 200 bushels per acre, a corn price of $4.75 per bushel, 20% of gross revenues capitalized into land, and cap rate of 6.5%.

What are the implications of the economic outlook for farmer cooperatives?

- Expectations of the economic outlook are already reflected in current prices and yields
- Make sure your revenue and asset growth outlook is reasonable
  - Difficult in today's volatile climate
- Manage volatility to the best of your ability
  - Lock in margins, fix interest rates, hold working capital, help your members mitigate their risk
- Seize opportunities when they are available
  - New employee talent pool for agriculture is big right now

Thank you.

Questions?

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