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Nebraska's Economic Conditions



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.

Today's Outline

- A Stronger Recovery in Nebraska.
- A Booming Farm Economy
 - Profits rebound with robust demand and tighter supplies.
 - Farm equipment sales and land values surge.
 - Agriculture faces major interest rate risk.
- Monetary Policy is Risk Management
 - Have the Risks Changed from Deflation to Inflation?
 - It depends on velocity: spending, lending, and investment.
 - Despite improvements in the economy, risks remain.



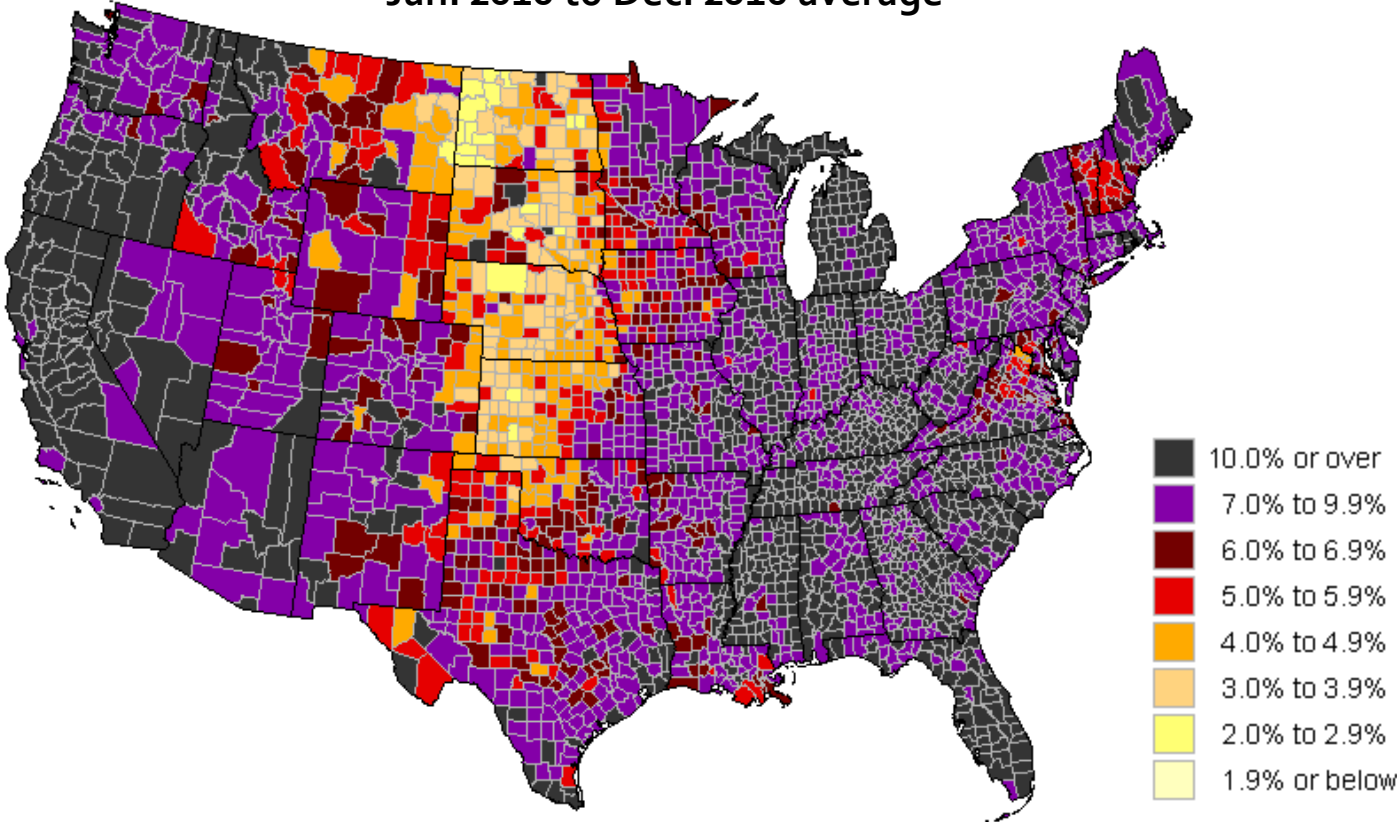
Strong Commodity Markets Drive the Nebraska Economy

DRIVE THE NEBRASKA ECONOMY



A better economic mood in Nebraska.

Unemployment Rates by County
Jan. 2010 to Dec. 2010 average



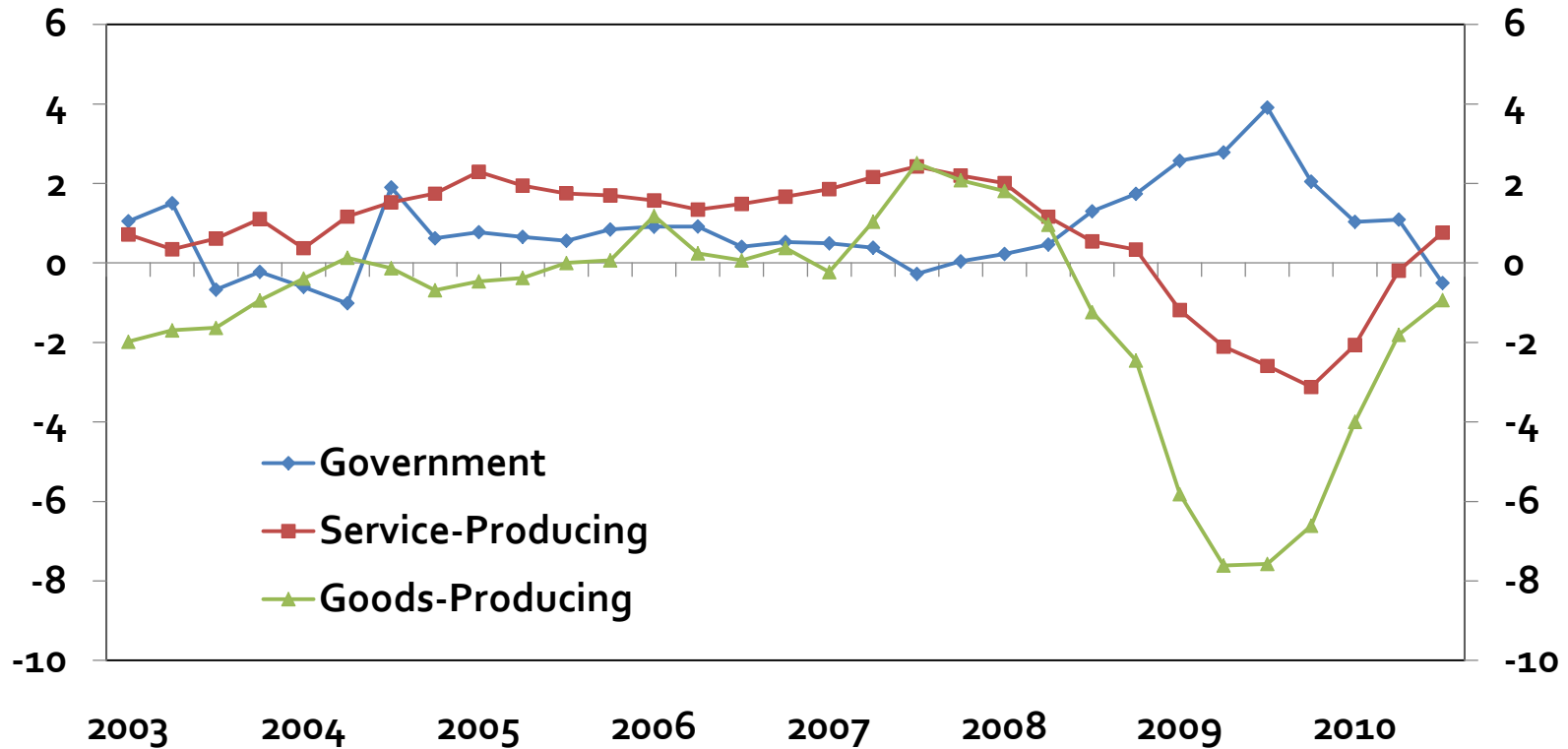
Source: Bureau of Labor Statistics



Nebraska's private sector employment is strengthening.

Nebraska Job Growth by Sector

Percent change from year ago



Source: BLS



Nebraska's retail activity has rebounded, especially in rural areas.

Nebraska's Retail Jobs and Sales Growth

Percent change from year ago

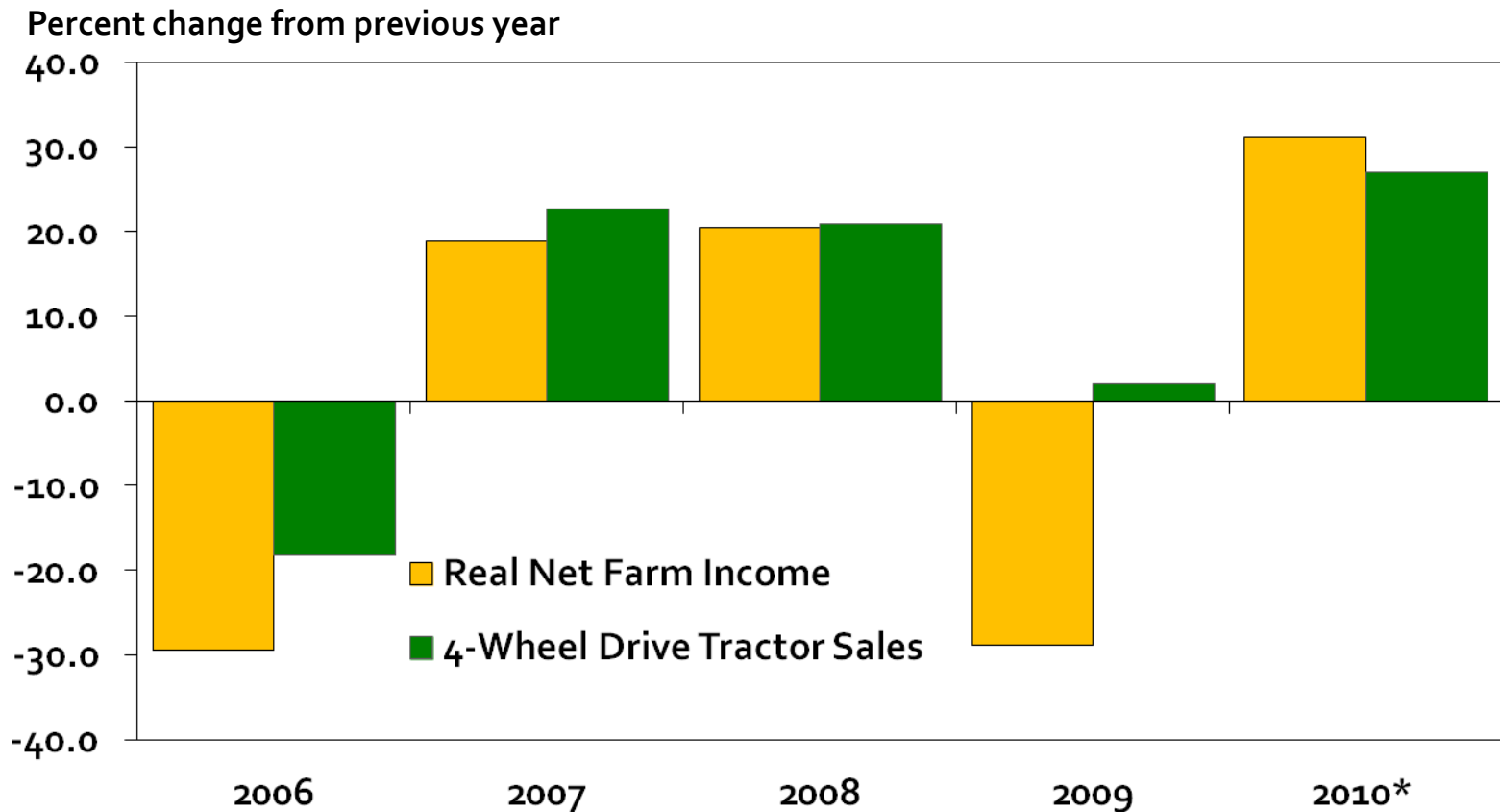


Source: BLS and Nebraska Dept. of Revenue



Stronger farm incomes boost agricultural equipment sales.

U.S. Real Net Farm Income and Agricultural Equipment Sales



Source: Association of Equipment Manufacturers and USDA

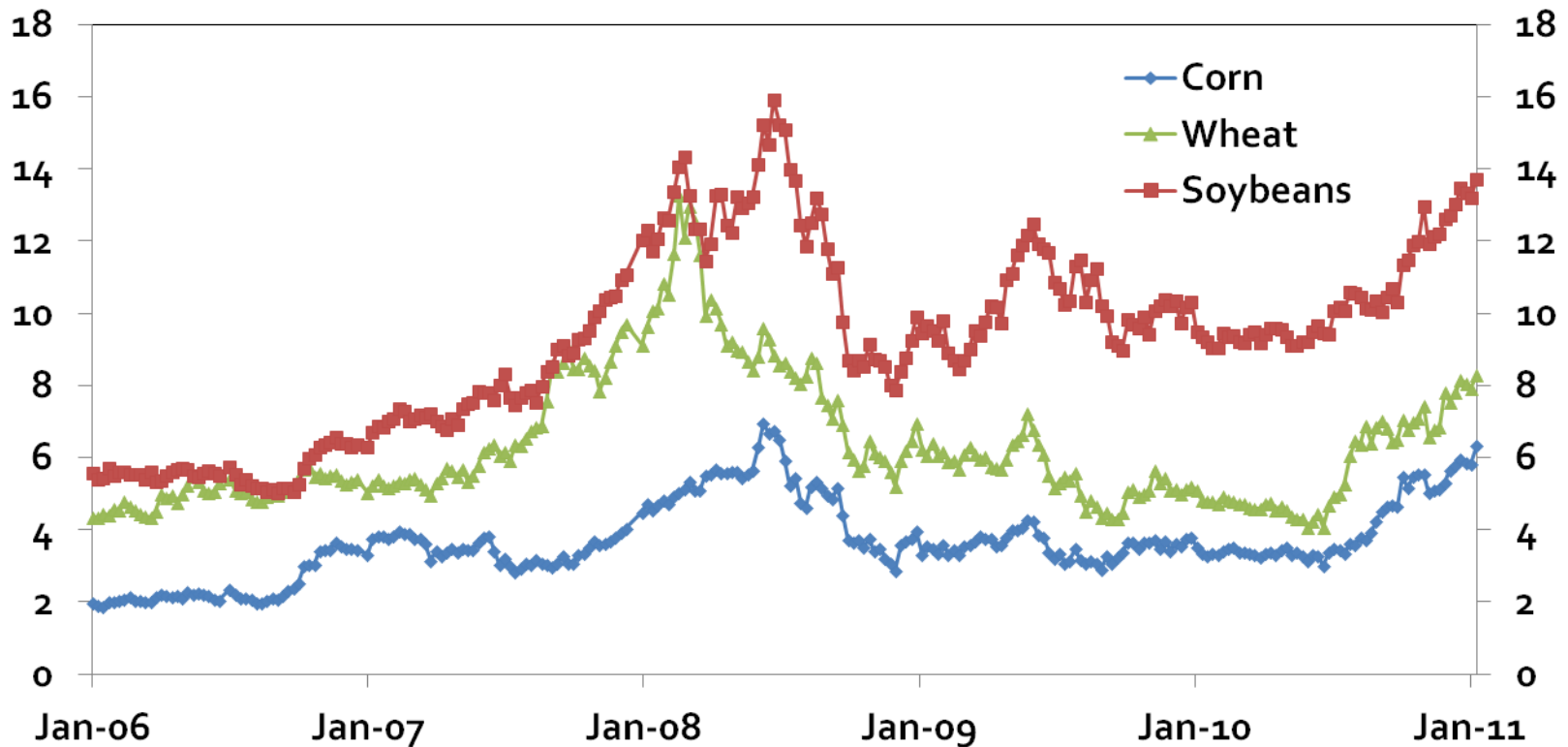
* Tractor Sales data are year-to-date through November and Net Farm Income forecast for 2010 dated November 30, 2010.



Crop Prices Spike with Resurgent Demand and Tight Supplies.

U.S. Crop Prices

Constant 2005 dollars (billions)

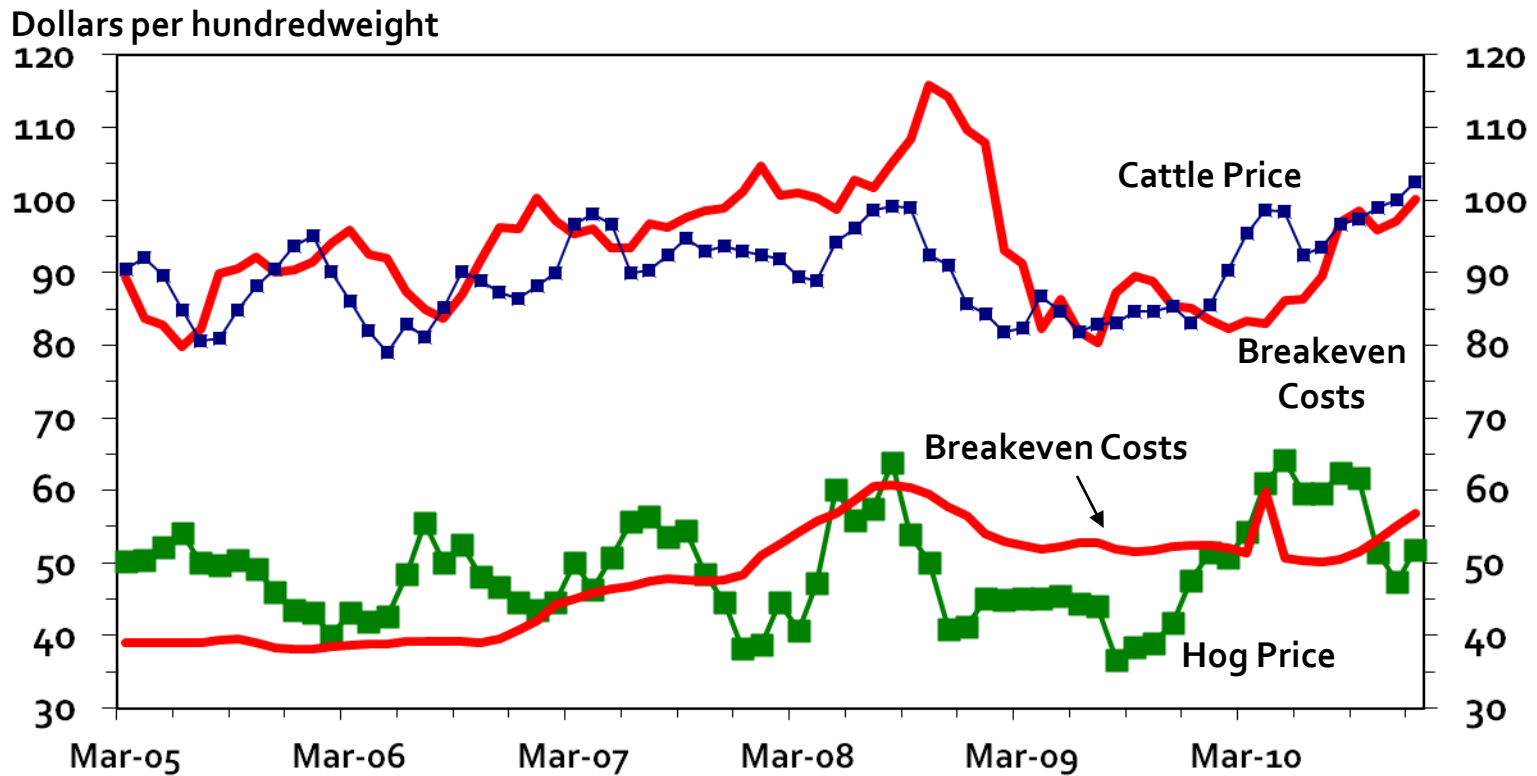


Source: Commodity Research Bureau



Rising feed costs strain profit margins.

U.S. Livestock Prices and Breakeven Costs

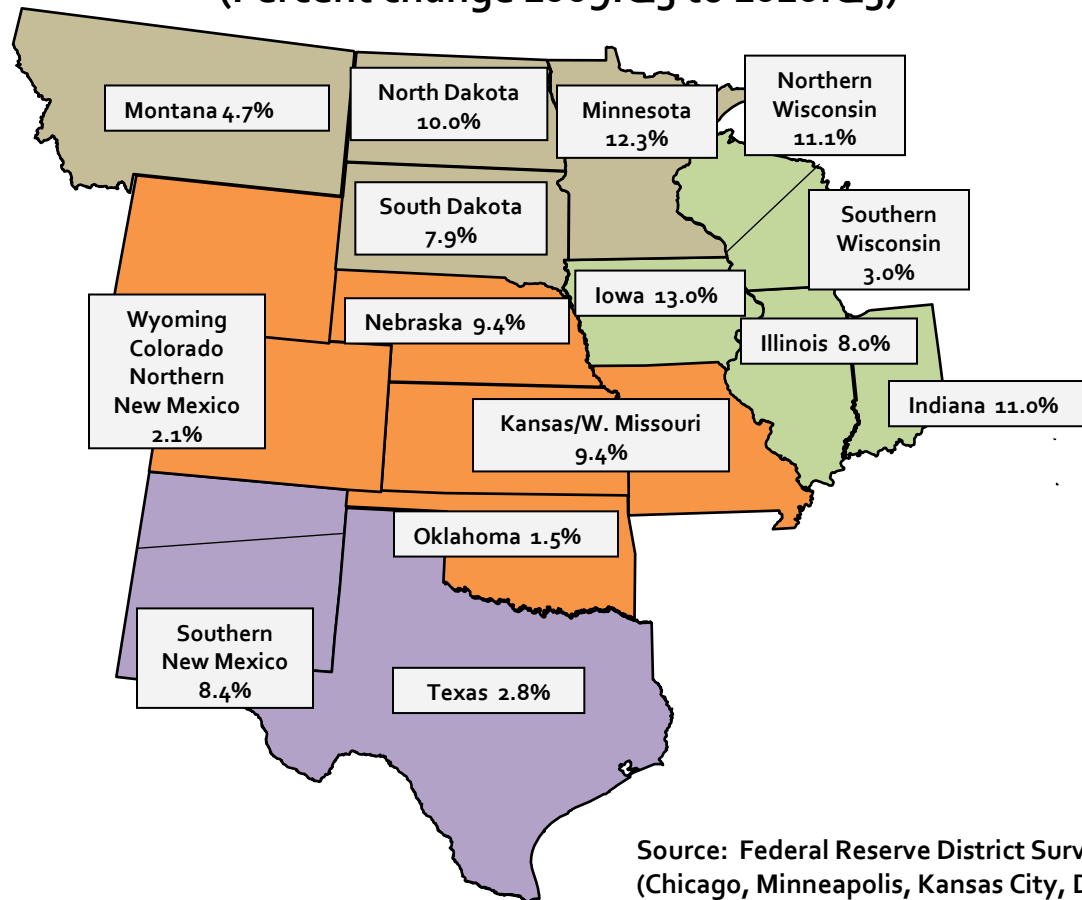


Source: USDA and Iowa State University



Cropland values surge across the Corn Belt.

Non-irrigated Cropland Values
(Percent change 2009:Q3 to 2010:Q3)

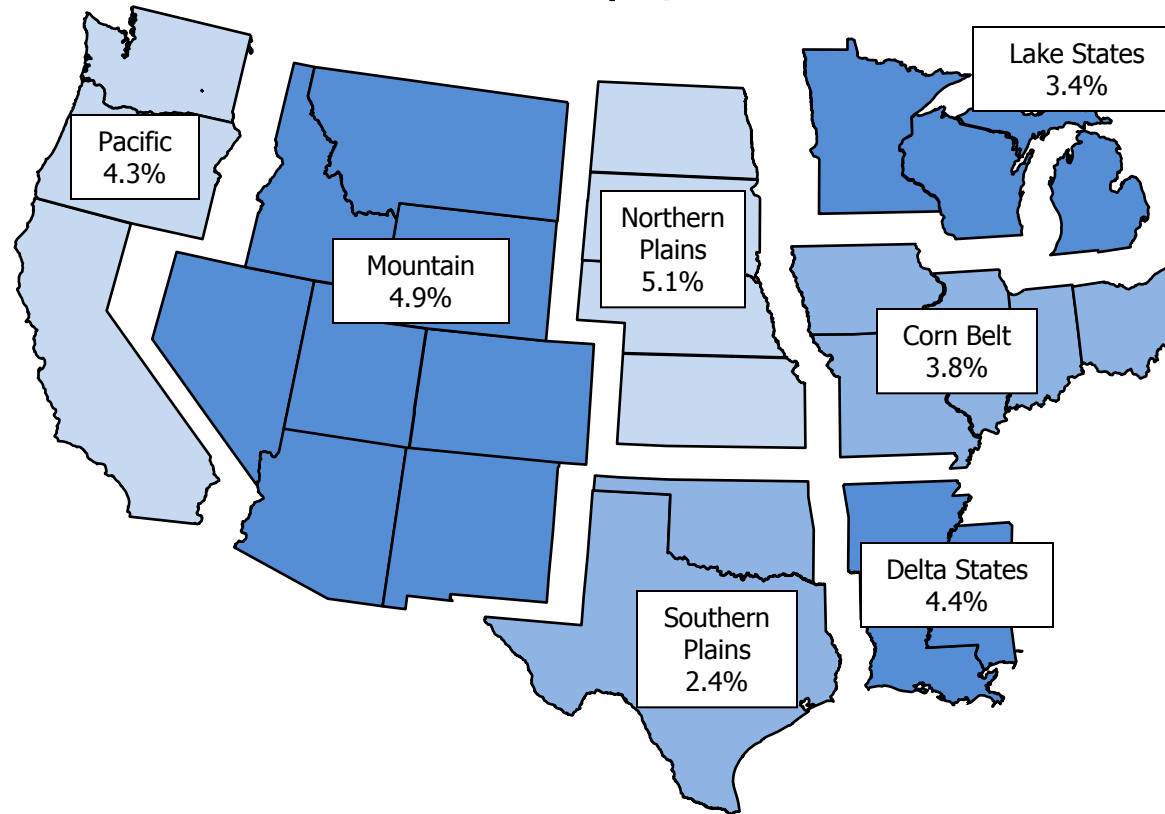


Source: Federal Reserve District Surveys
(Chicago, Minneapolis, Kansas City, Dallas)



Land values rise faster than cash rents, pushing rent to value ratios to record lows.

Cropland Cash Rent to Land Value Ratio January 1, 2010



Calculations based on USDA Land Values and Cash Rents, August 2010



Capitalized Revenues from Corn Production

Land values should equal capitalized revenues

$$\text{Land Values} = \frac{\text{Expected Revenues}}{\text{Capitalization Rate}}$$

Assumptions:

Corn Price: \$5.35 per bushel
25% of gross revenues go to land

	Yield (bushel per acre)	
	170 bushels	200 bushels
Capitalization rate		
5%	4548	5350
4%	5684	6690
3%	7579	8920

Nebraska's average yield was 164 from 2006 to 2010

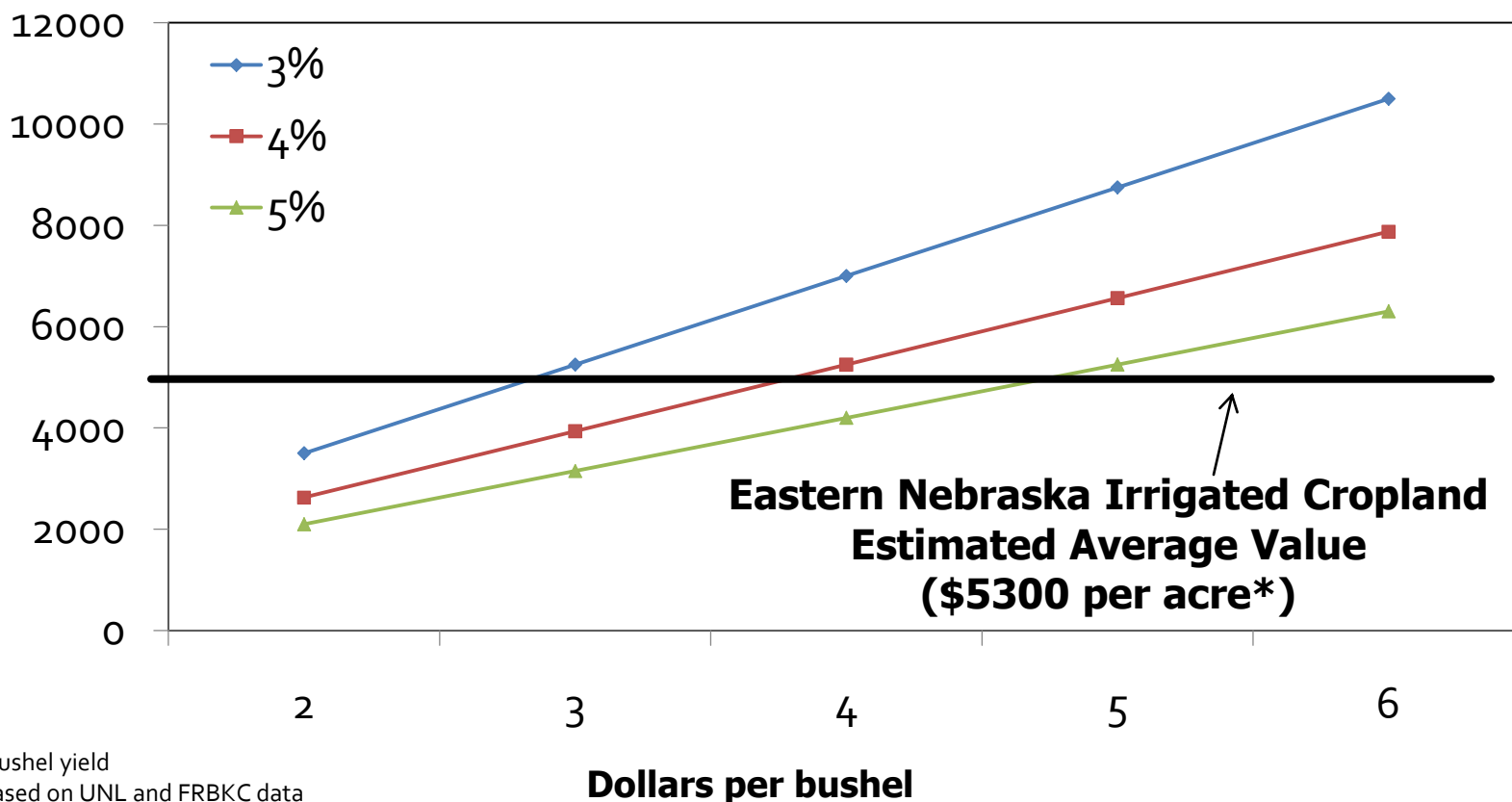
U.S. average annual price \$5.35 per bushel in 2010



Current land values assume historically high prices and historically low interest rates.

Capitalized Land Revenues from Corn Production

Dollars per acre



**Eastern Nebraska Irrigated Cropland
Estimated Average Value
(\$5300 per acre*)**

•Based on 210 bushel yield

*Calculations based on UNL and FRBKC data



Agriculture Faces Huge Interest Rate Risk

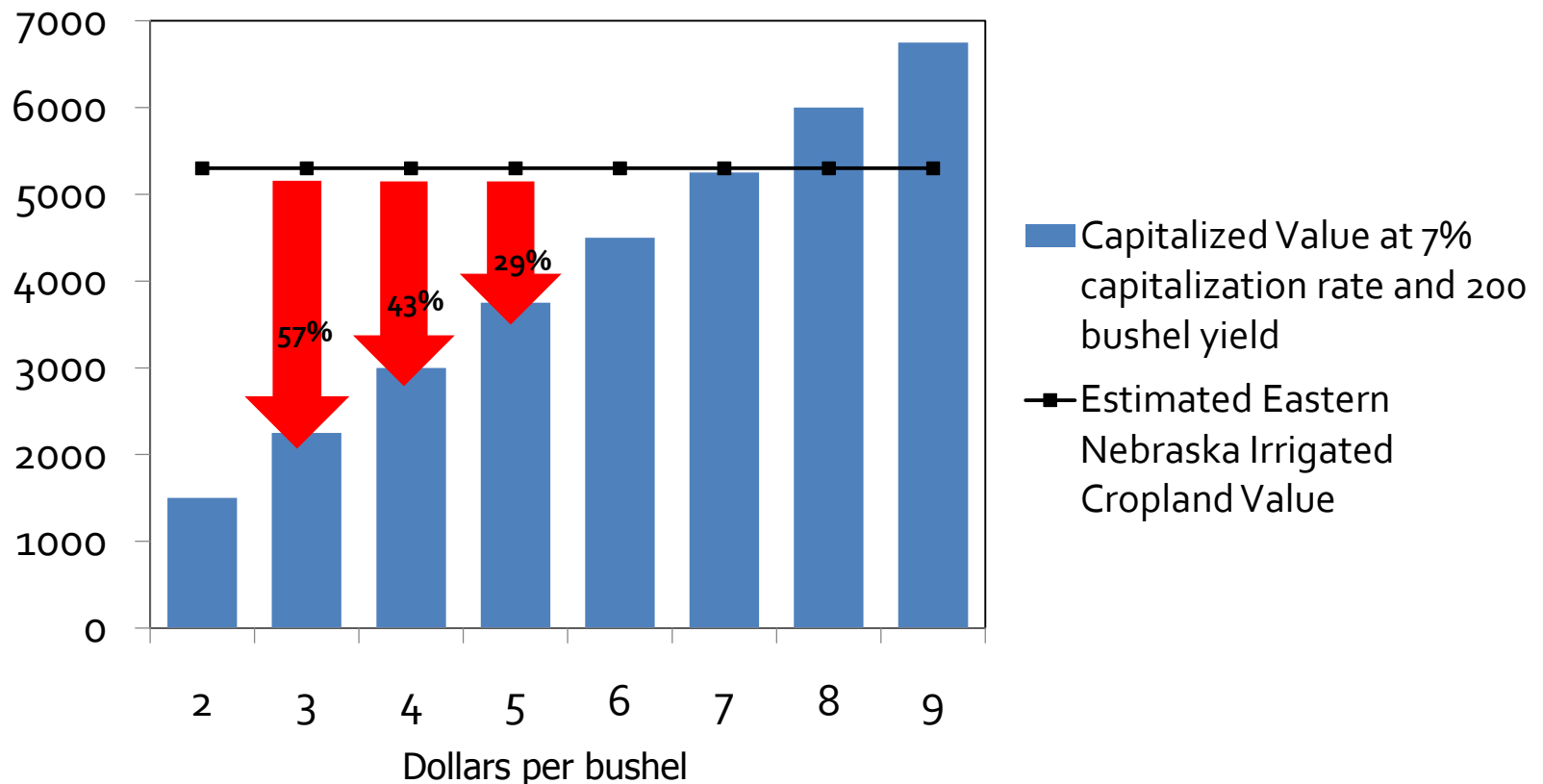
INTEREST RATE RISK



What happens if capitalization rates and interest rates rise?

Capitalized Revenues from Corn Production

Dollars per acre



How do interest rates affect farm incomes?

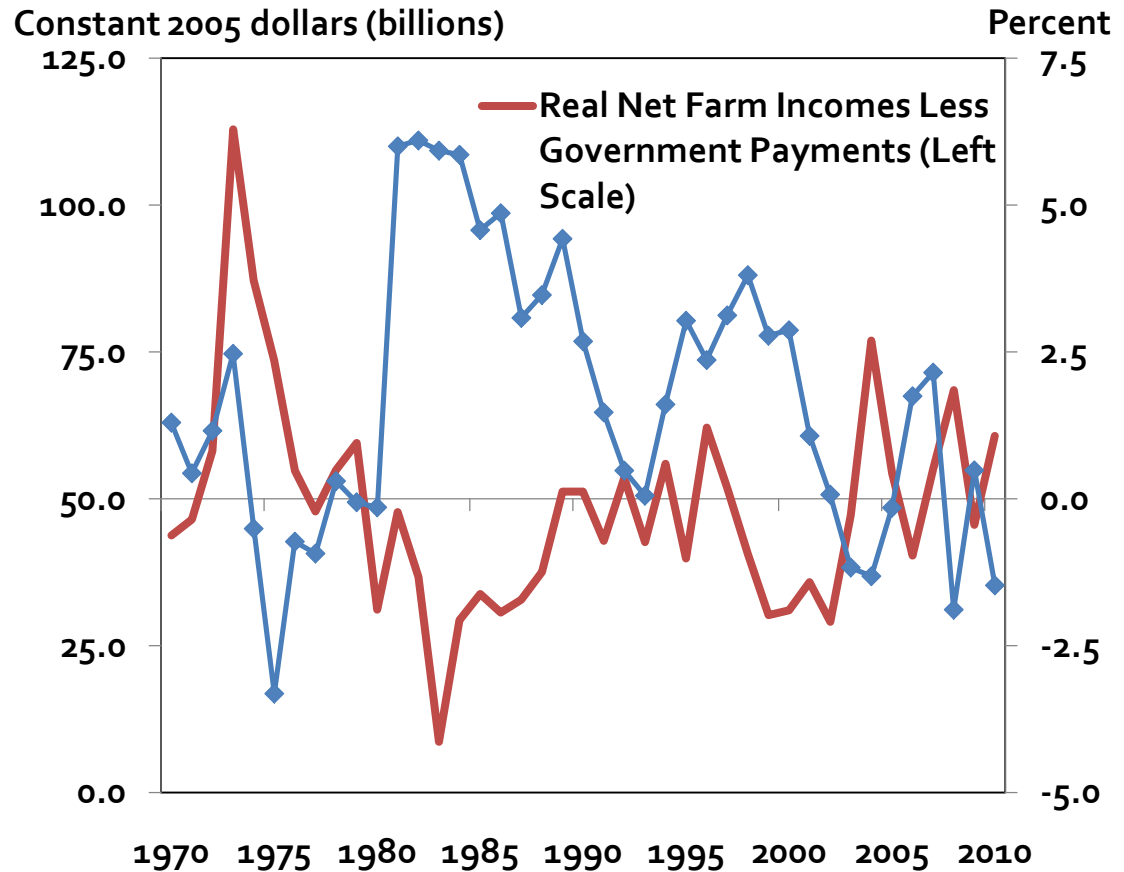
Falling interest rates ...

- Weakens the dollar,
- Lifts exports,
- Raises commodity prices,
- Boosts farm incomes

Rising interest rates ...

- Strengthens the dollar,
- Shrinks exports,
- Lowers commodity prices,
- Cuts farm incomes

Real Fed Funds Rate and Net Farm Incomes



Sources: USDA , Federal Reserve, BLS



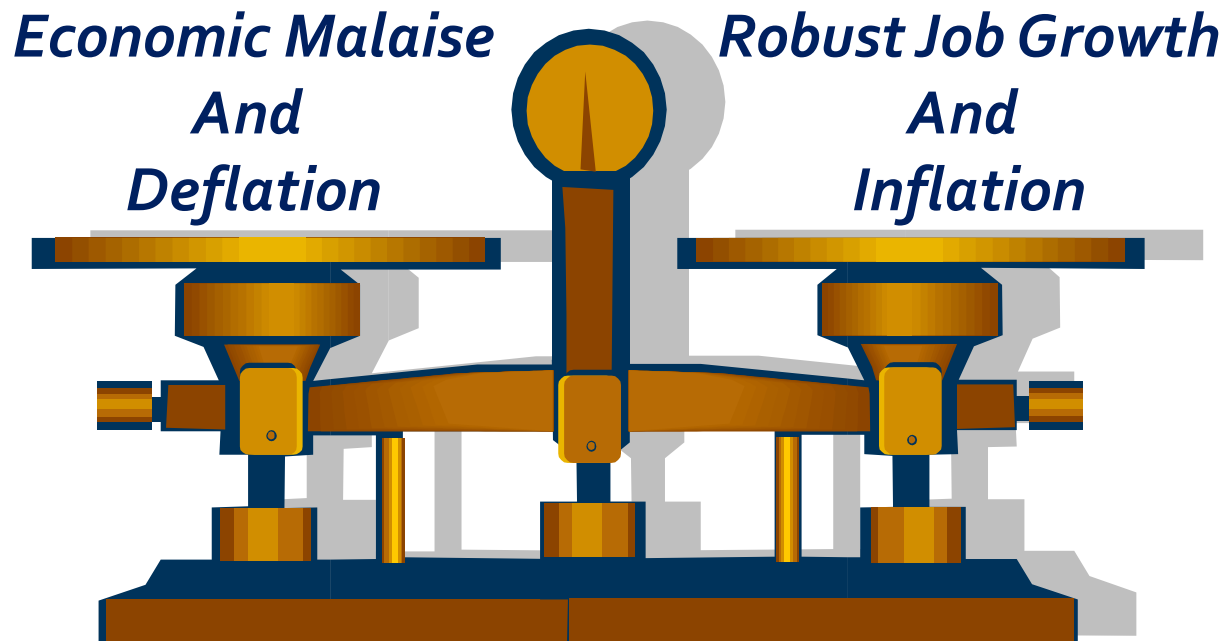
Monetary Policy as Risk Management

RISK MANAGEMENT



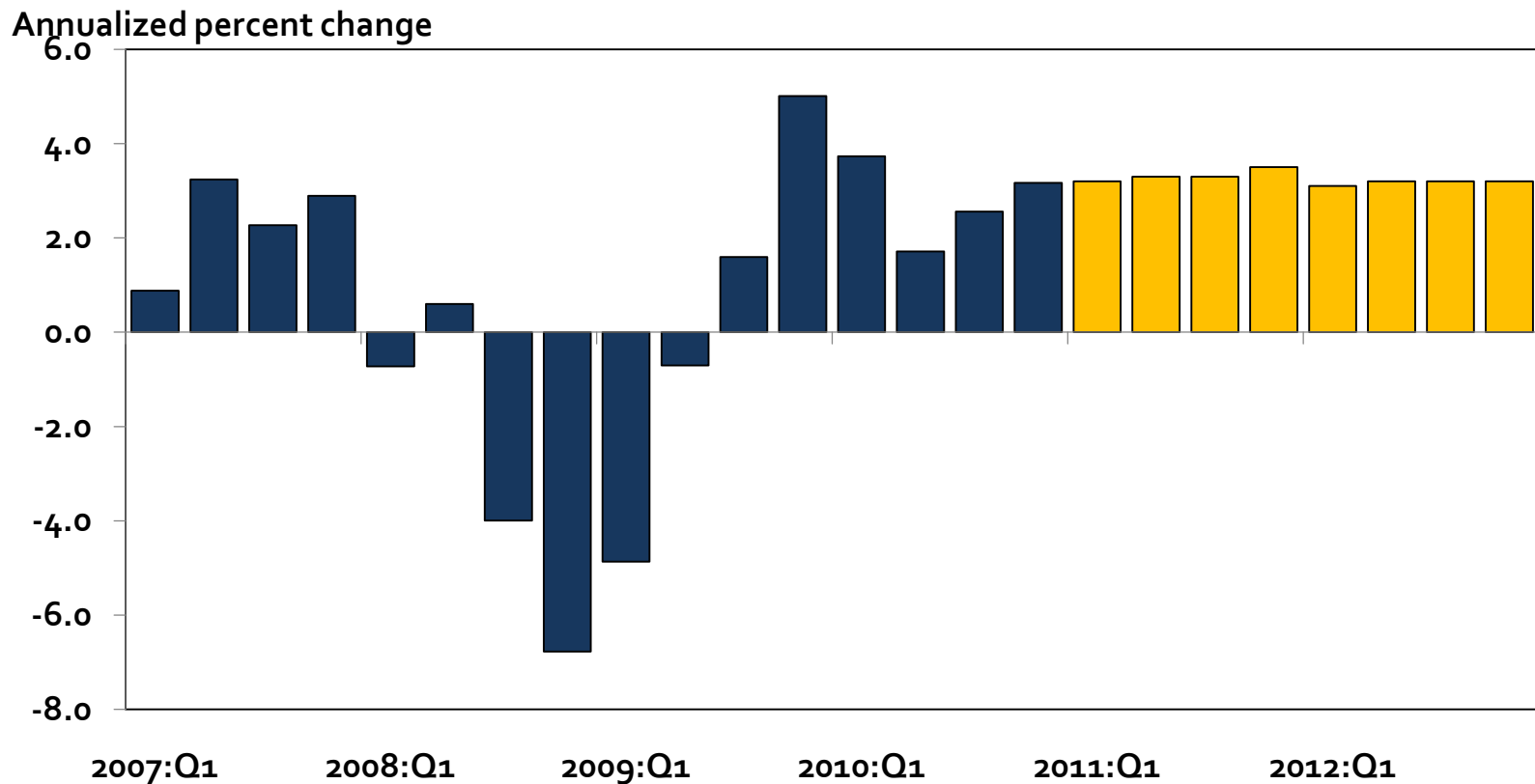
U.S. Monetary Policy: A Risk Management Approach

What is the Risk?



Forecasts of economic growth weakened last summer.

U.S. GDP Growth



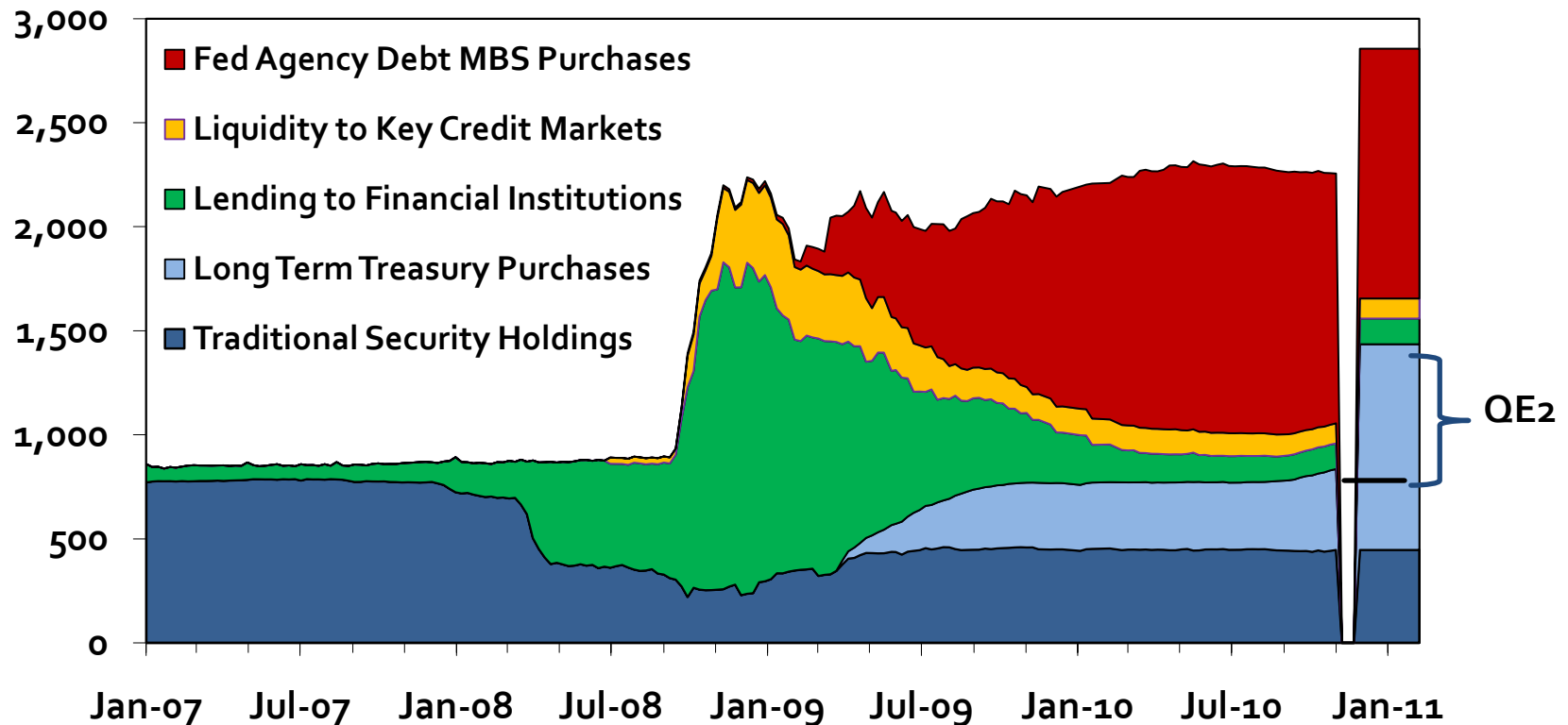
Source: Bureau of Economic Analysis



Quantitative easing (QE) is designed to expand the Federal Reserve balance sheet to lower long term rates.

Federal Reserve Balance Sheet: Assets

Billion Dollars



Source: Federal Reserve Bank of Cleveland



Have the Risks Changed?

Have the Risks Changed?



Inflation is based on money and velocity.

Quantity Theory of Money

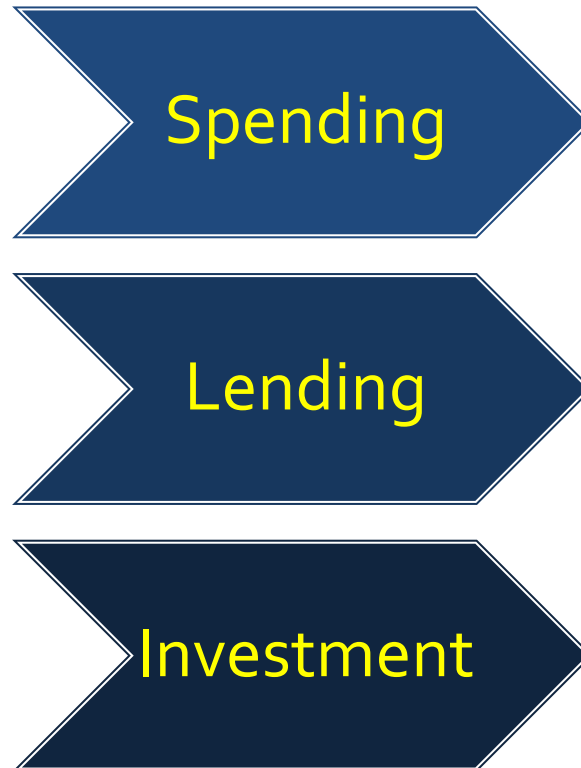
$$\text{Price} = \frac{\text{Money} * \text{Velocity}}{\text{Quantity}}$$

Definition of Inflation:

Too much money $M \uparrow$
chasing $V \uparrow$
too few goods $Q \downarrow$



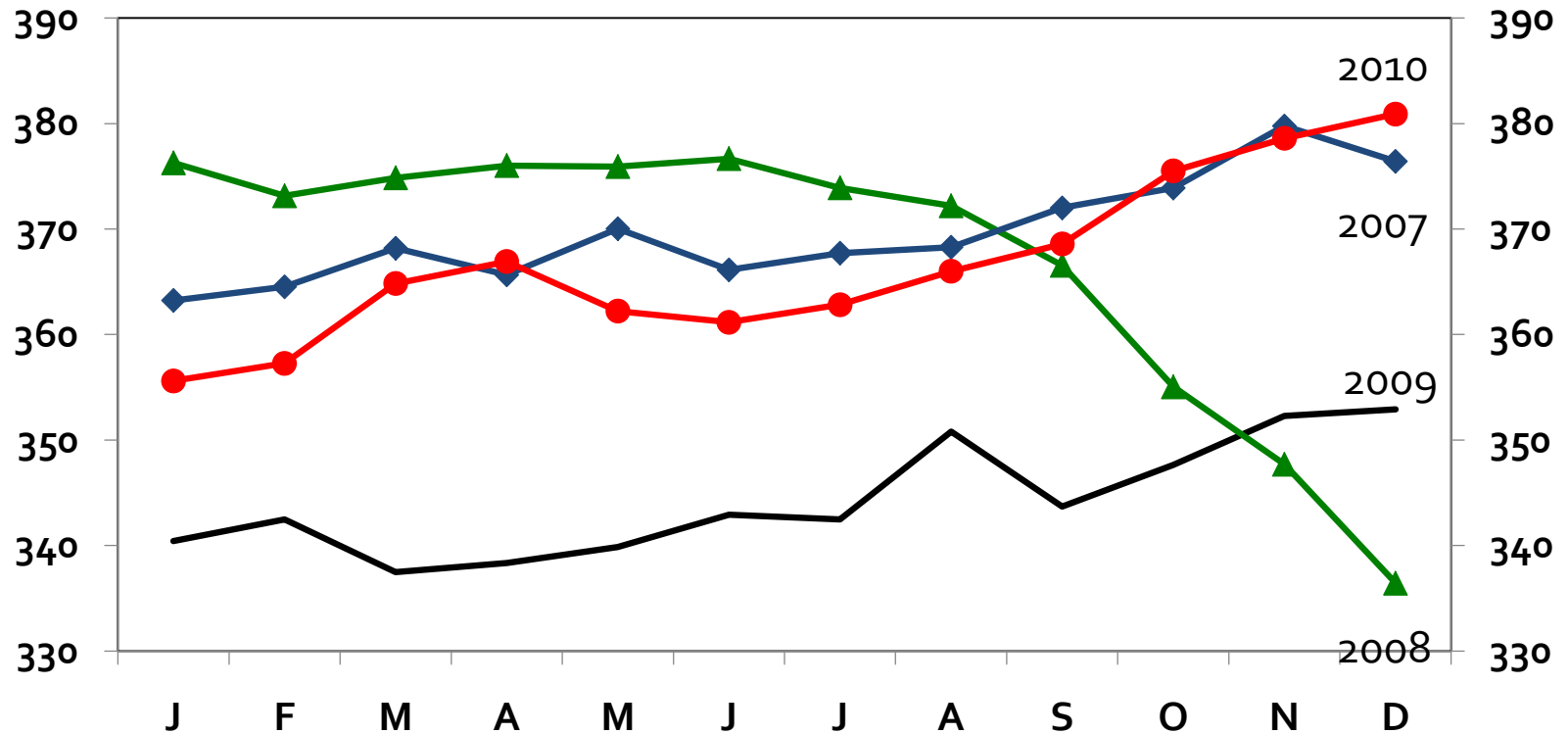
What Shapes Velocity?



After a summer lull, consumer spending is on the rise.

U.S. Monthly Retail and Food Sales

Billion dollars



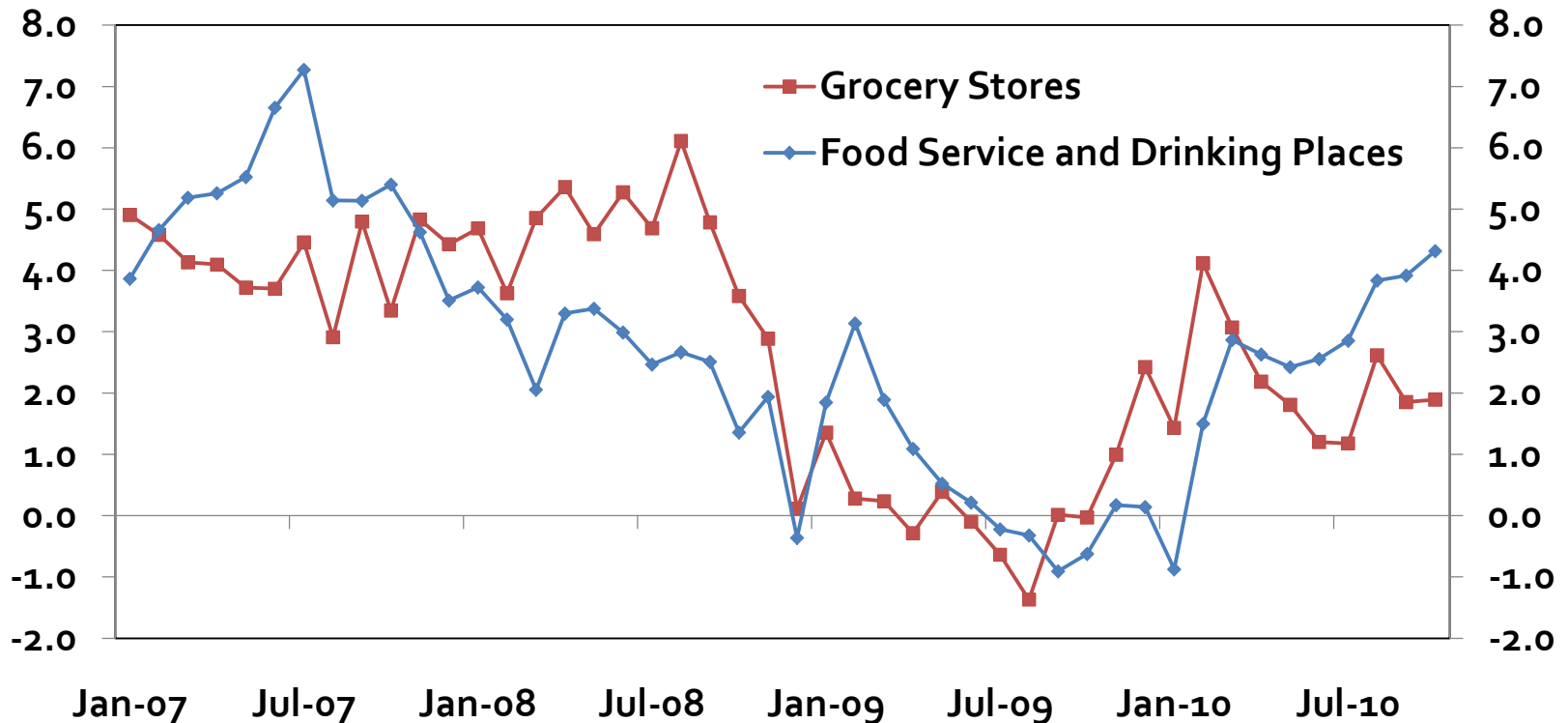
Source: U.S. Census Bureau



U.S. food expenditures have rebounded.

U.S. Retail Sales at Grocery Stores and Restaurants

Percent change from year ago



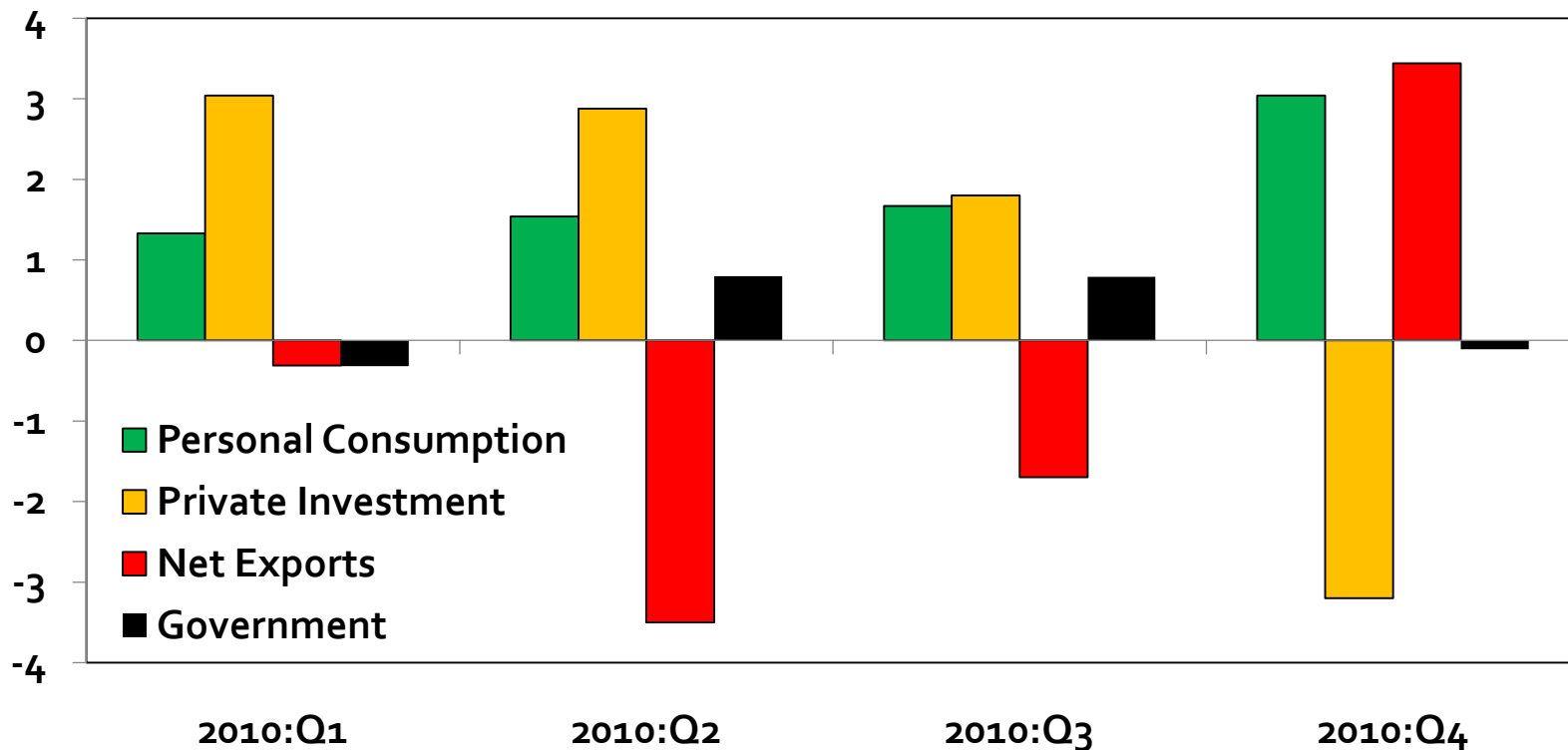
Source: Census Bureau



Net exports were the drag on the U.S. economy.

Contributions to GDP

Annualized percent change

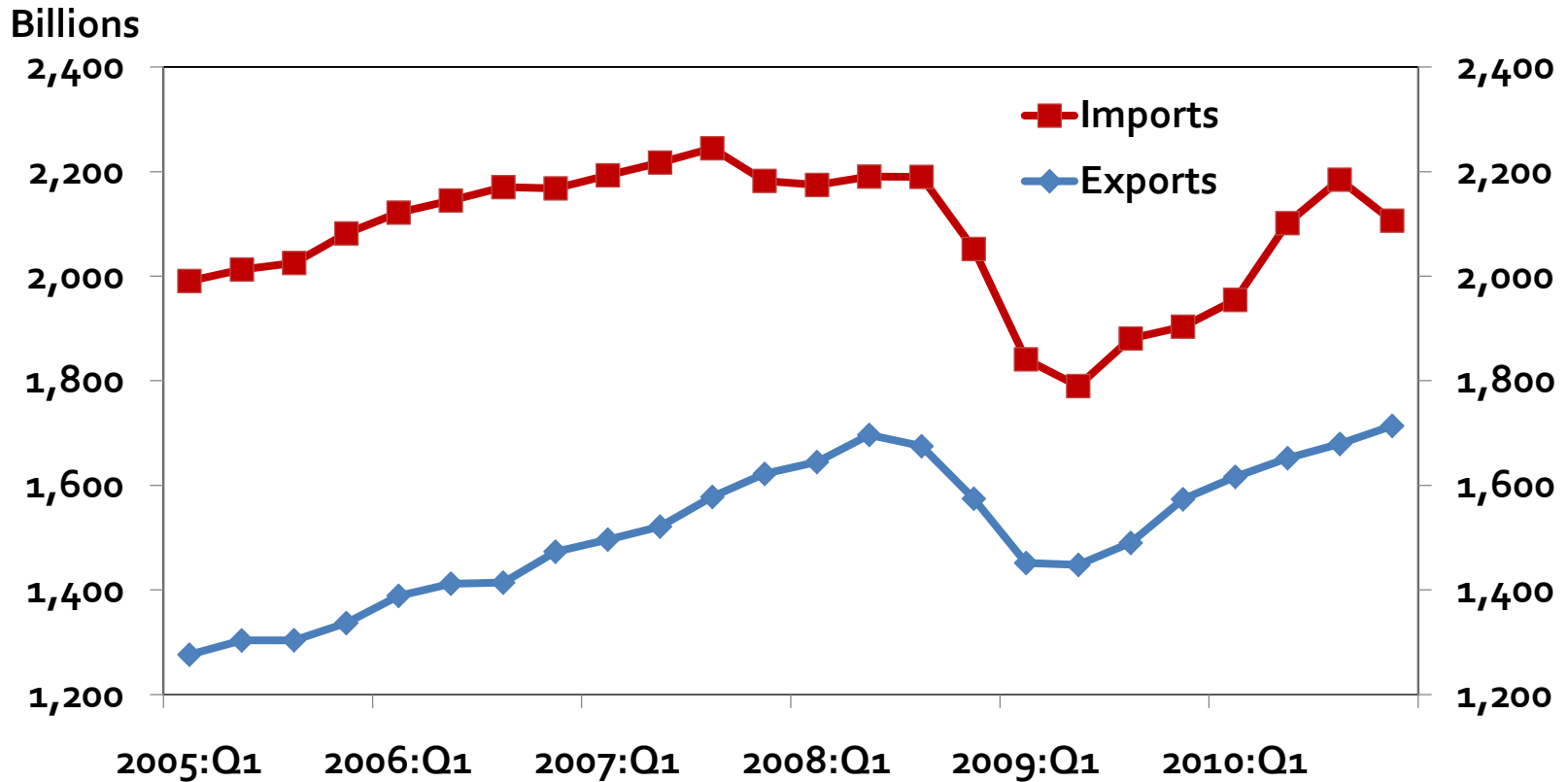


Source: Bureau of Economic Analysis



The summer export drag was caused by spending and rising imports.

U.S. GDP Growth



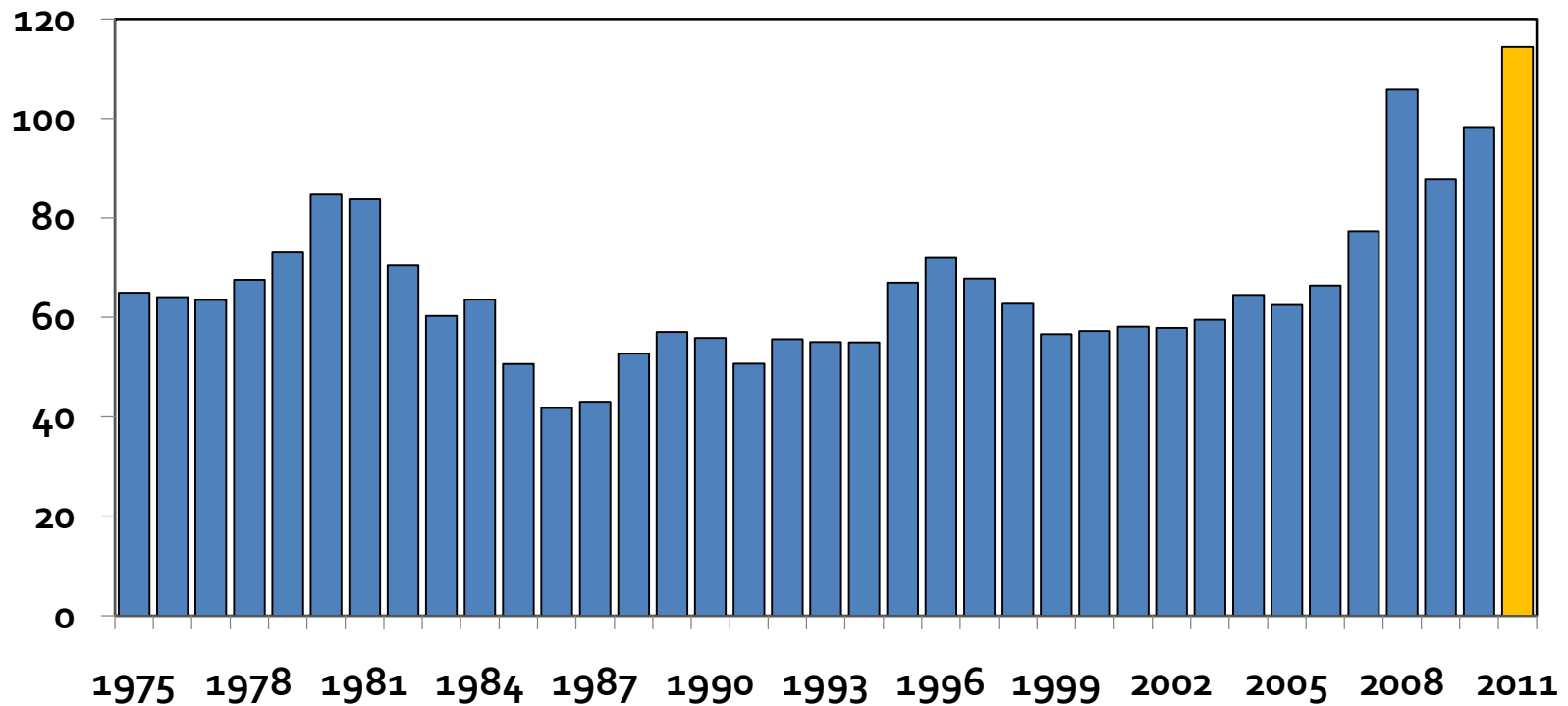
Source: Bureau of Economic Analysis



U.S. agricultural exports are expected to rise.

U.S. Agricultural Exports

Constant 2005 dollars (billions)



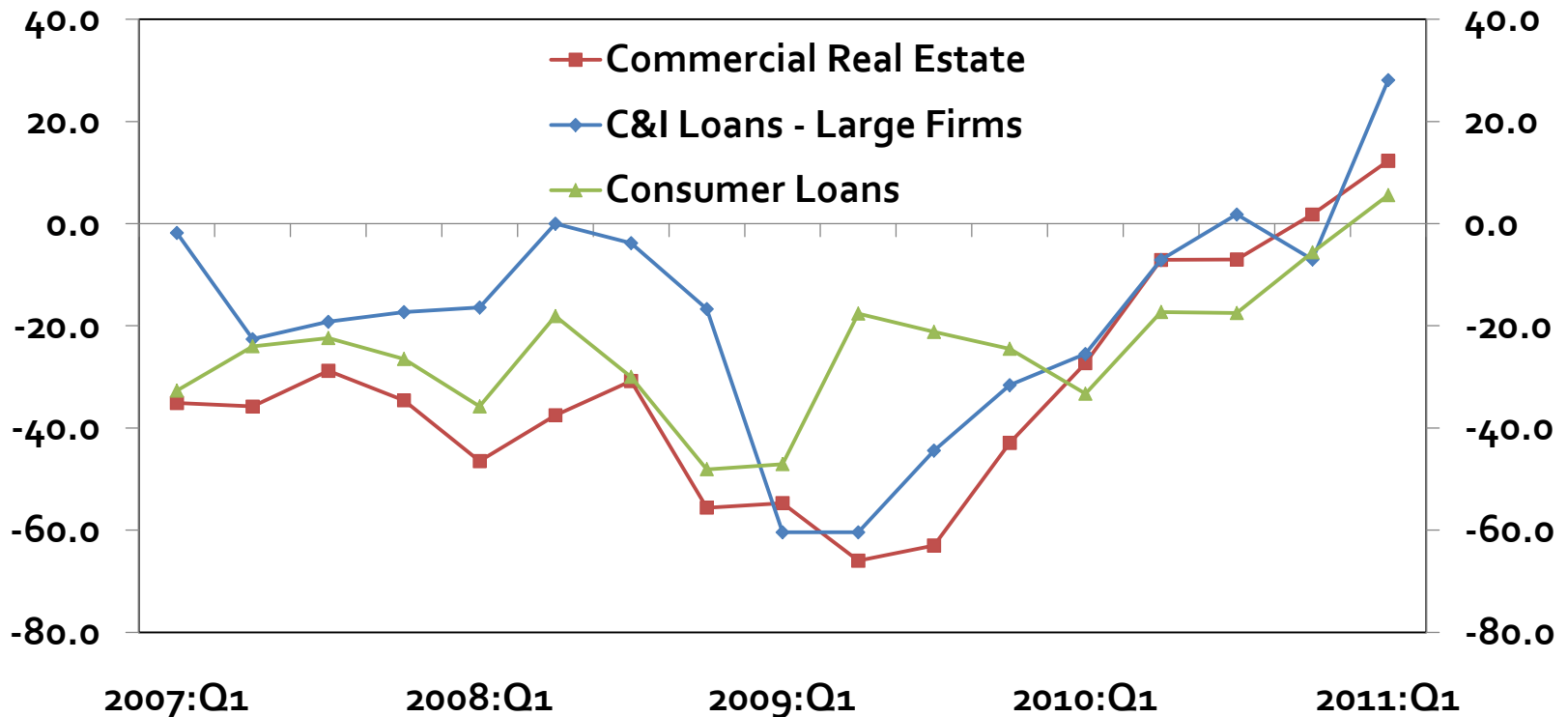
Source: Census Bureau



With rising loan demand and easing credit standards, lending should rise.

Loan Demand at Commercial Banks

Net percent of bankers reporting stronger loan demand

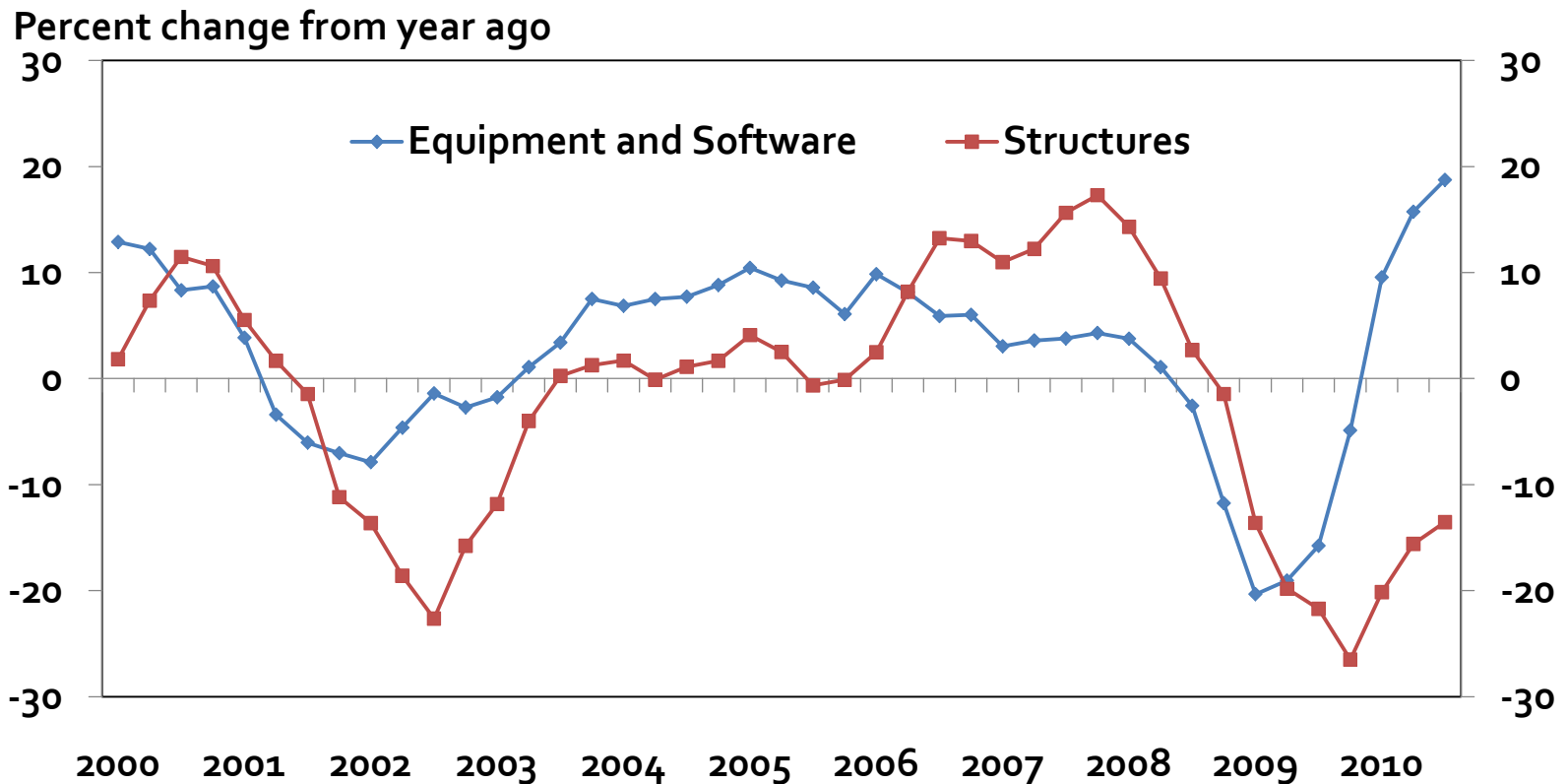


Source: Federal Reserve Board of Governors



Business investment is beginning to rebound.

Nonresidential Fixed Investment



Source: Bureau of Economic Analysis



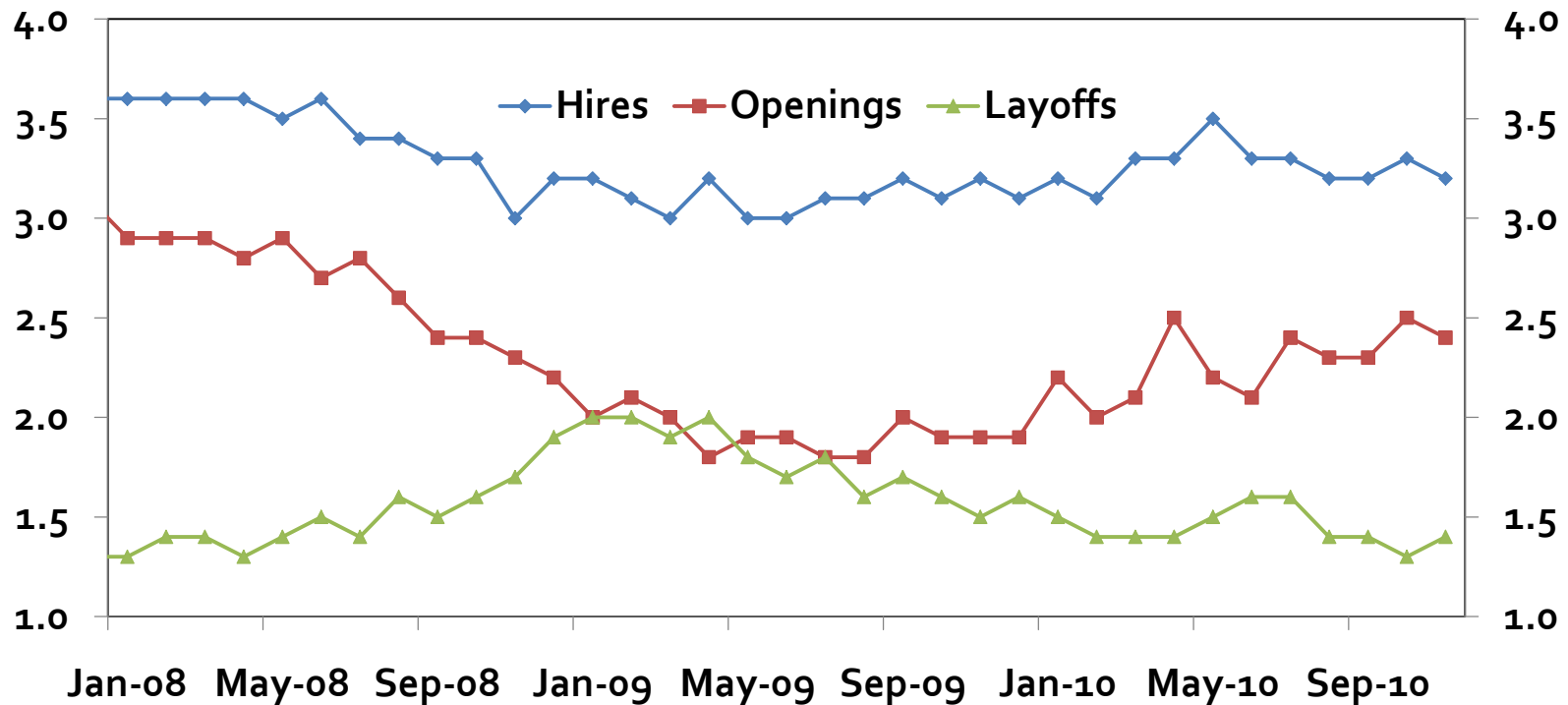
What are the Headwinds?



Job openings are on the rise, will hiring follow?

Job Openings and Labor Turnover

Percent of employment



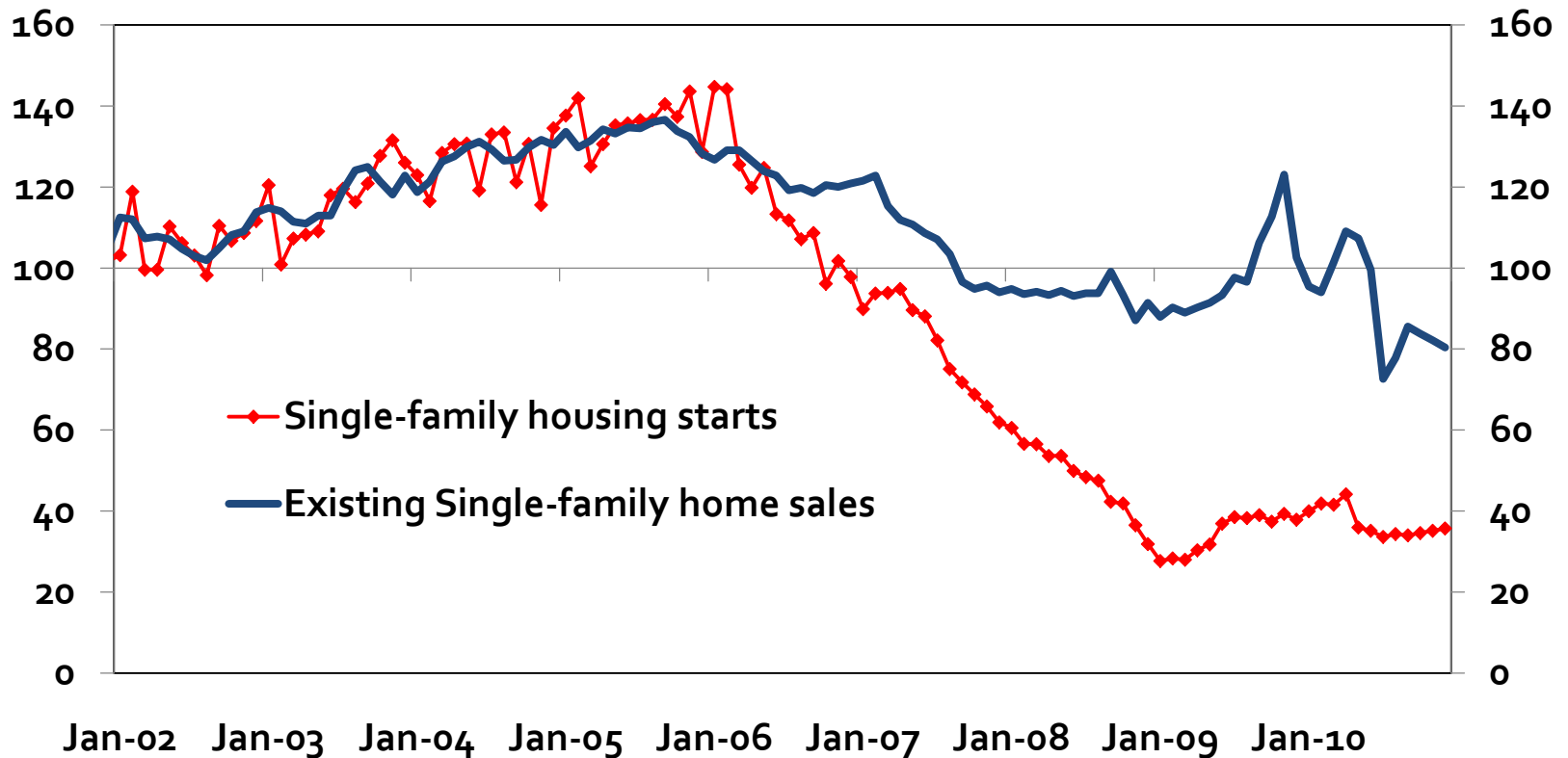
Source: Bureau of Labor Statistics



Housing markets slump after the tax credits.

U.S. Housing Starts and Home Sales

Index (2000:Q2 = 100)



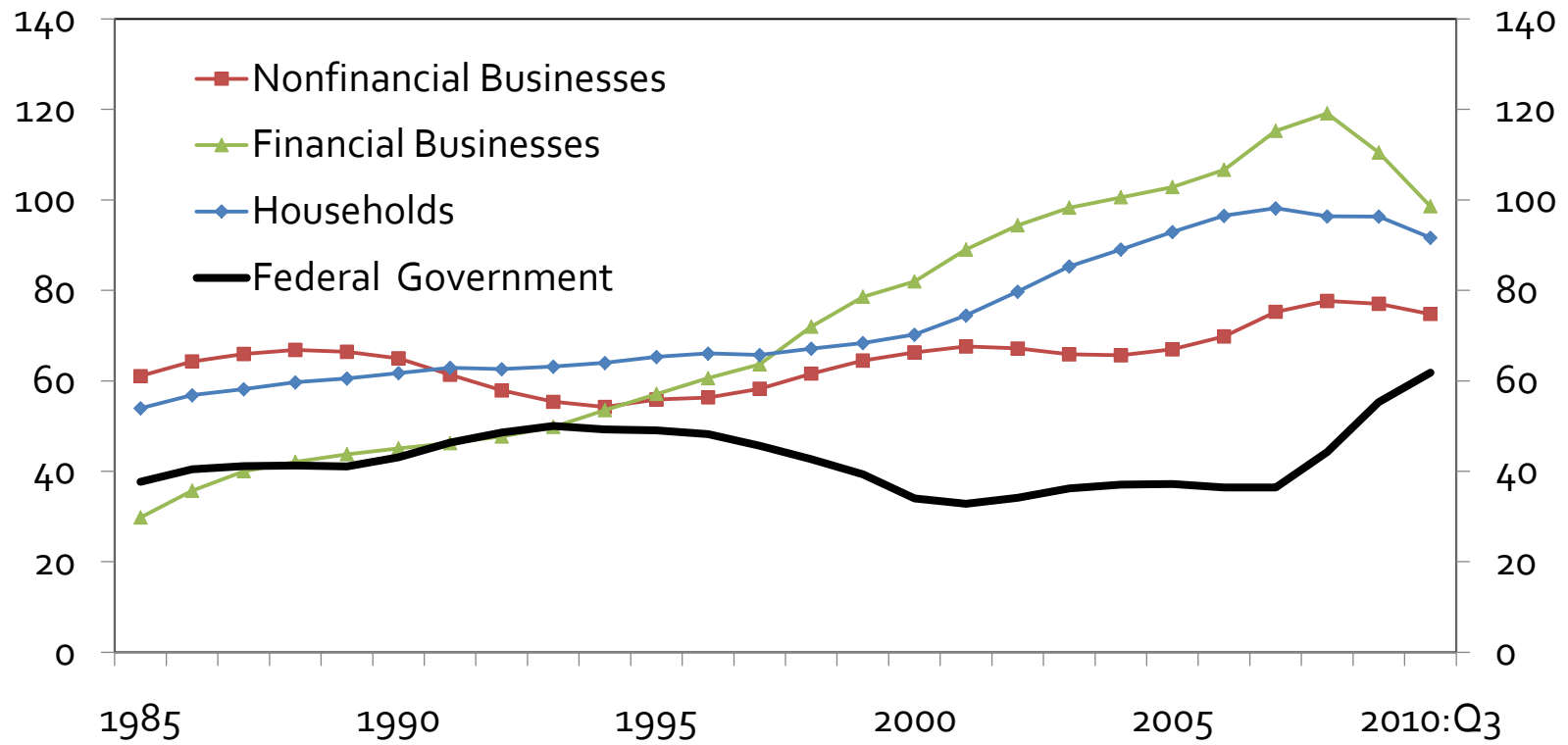
Source: U.S. Census Bureau and National Association of Realtors



Debt, Debt and More Debt

U.S. Debt Outstanding by Sector

Percent of U.S. GDP



Source: Federal Reserve Board of Governors



Conclusions

- Nebraska's is enjoying a stronger economy, fueled by commodity markets.
- Farm incomes are booming and farmers are buying tractors, land, and more.
- Agriculture faces major interest rate risk.
- Monetary policy is risk management.
- Inflation depends on velocity:
 spending, lending, and investment.

***Economic conditions and interest rates
will shape agriculture's landscape.***



**For More Information
on
Agricultural and Rural Economies**

**Federal Reserve Bank of Kansas City
Omaha Branch**

www.kansascityfed.org/omaha



**Main Street Economist
Agricultural Finance Databook
Survey of Agricultural Credit Conditions**