



Photos courtesy of USDA

Farmland Prices, Cash Rents, and Potential Credit Availability

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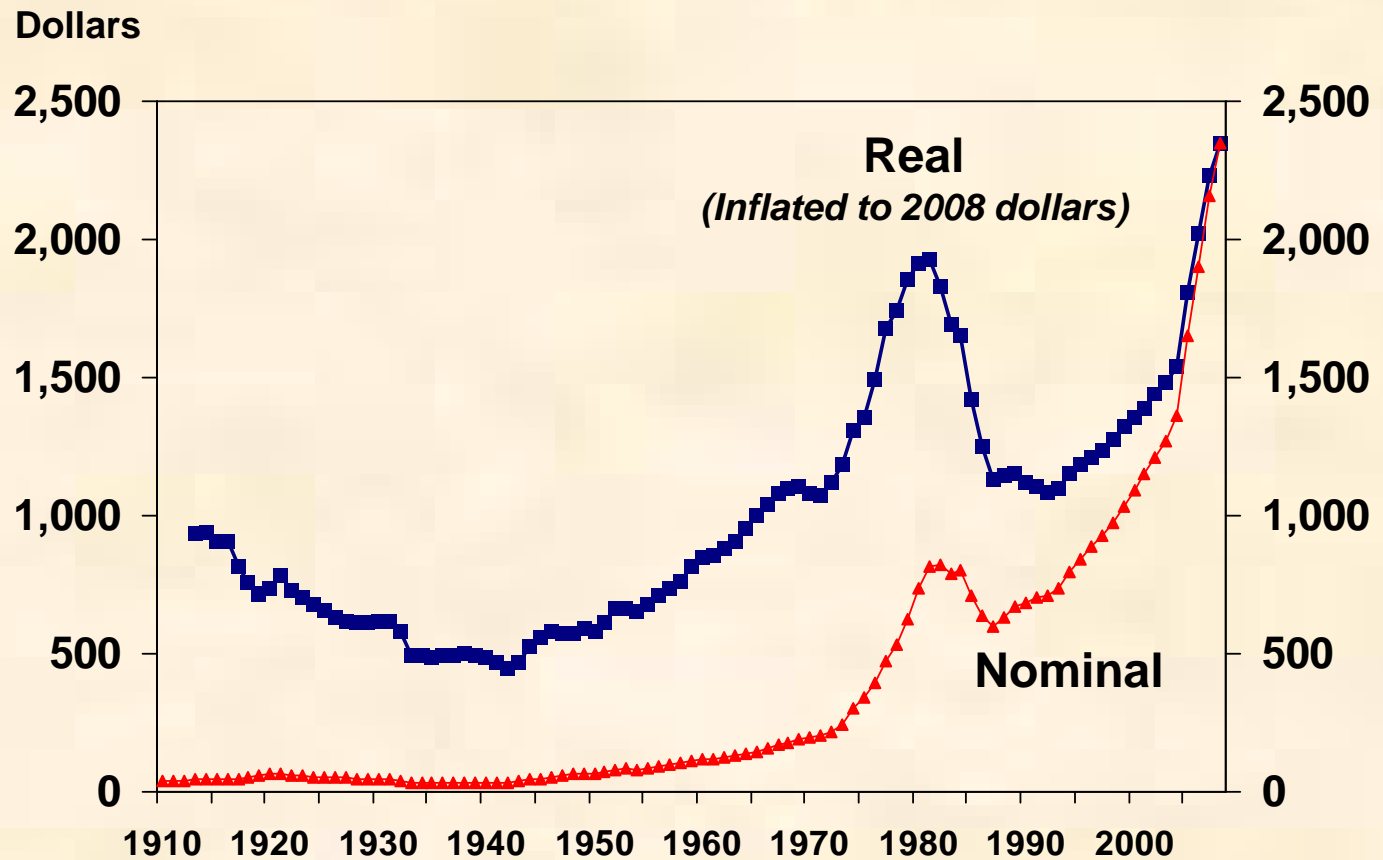
Farmland Prices, Cash Rents, and Potential Credit Availability

- **Today's Outline:**
 - **The Drivers of Change**
 - **Non-farm demand**
 - **Farm demand surges**
 - **Has the Farm Boom Peaked?**
 - **Credit Availability**



On a national basis, real farmland values have topped their 1980s highs

U.S. Farmland Values

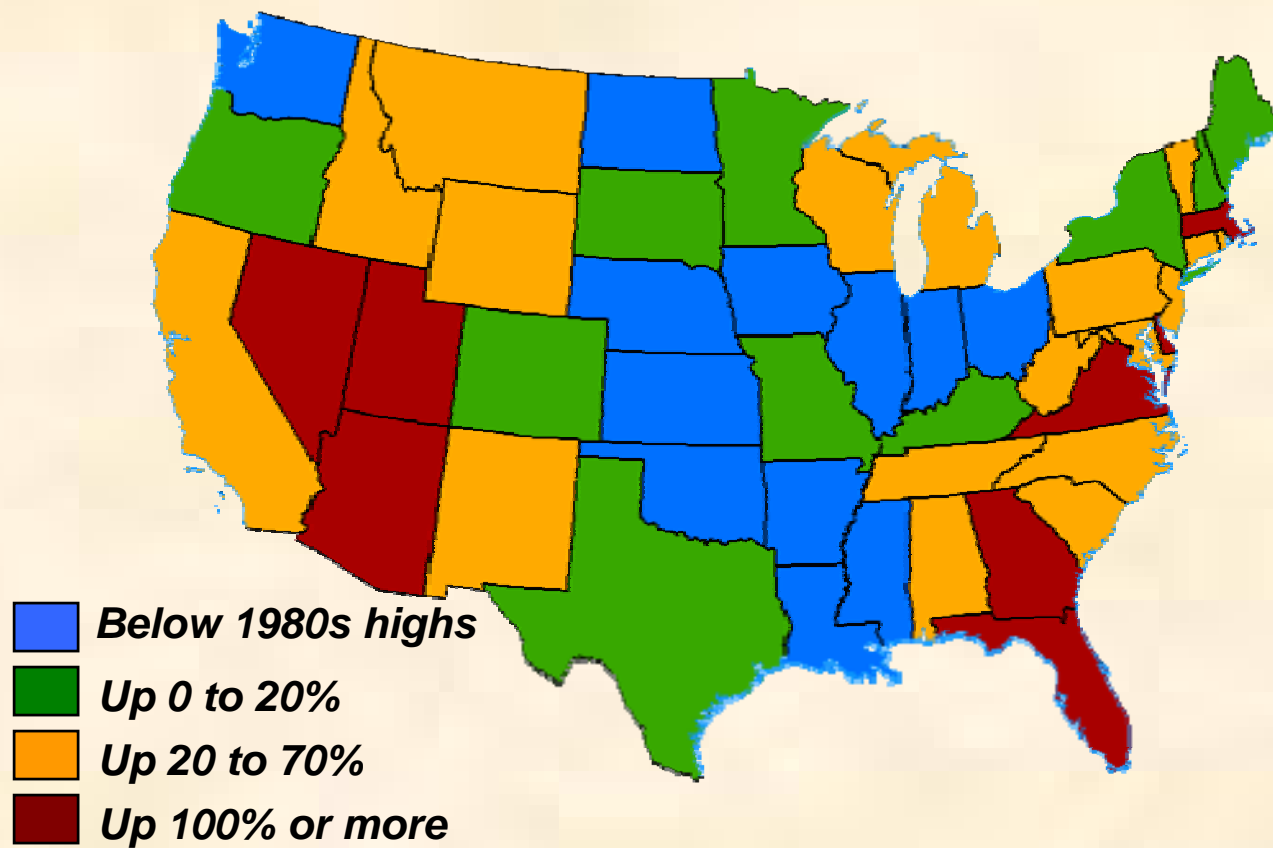


Source: USDA



The Heartland, however, has not topped their 1980s highs

Real Farmland Value Gains
(Percent change from 1980s highs to 2008)

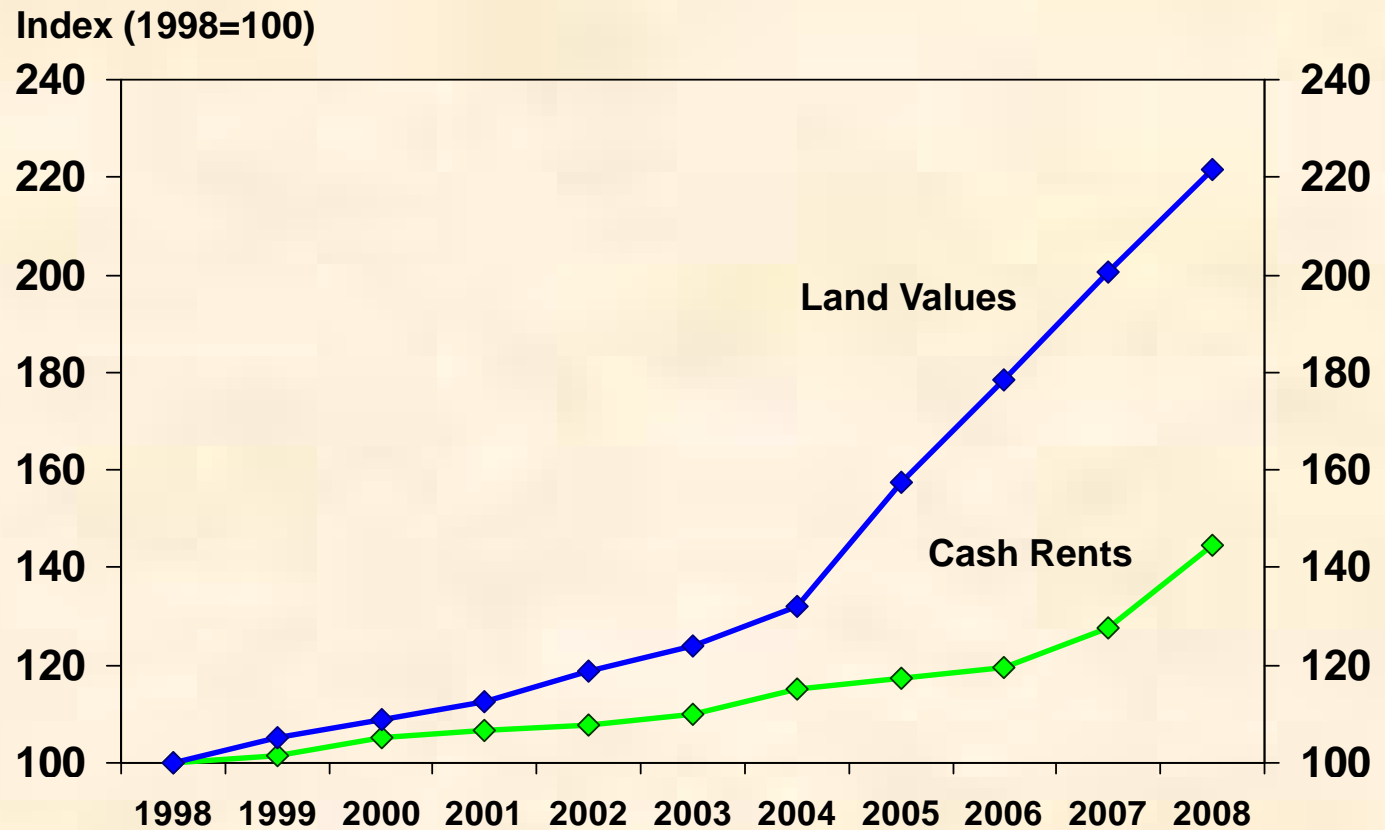


Source: USDA



Land value gains outpace cash rents

U.S. Cropland Values and Cash Rents

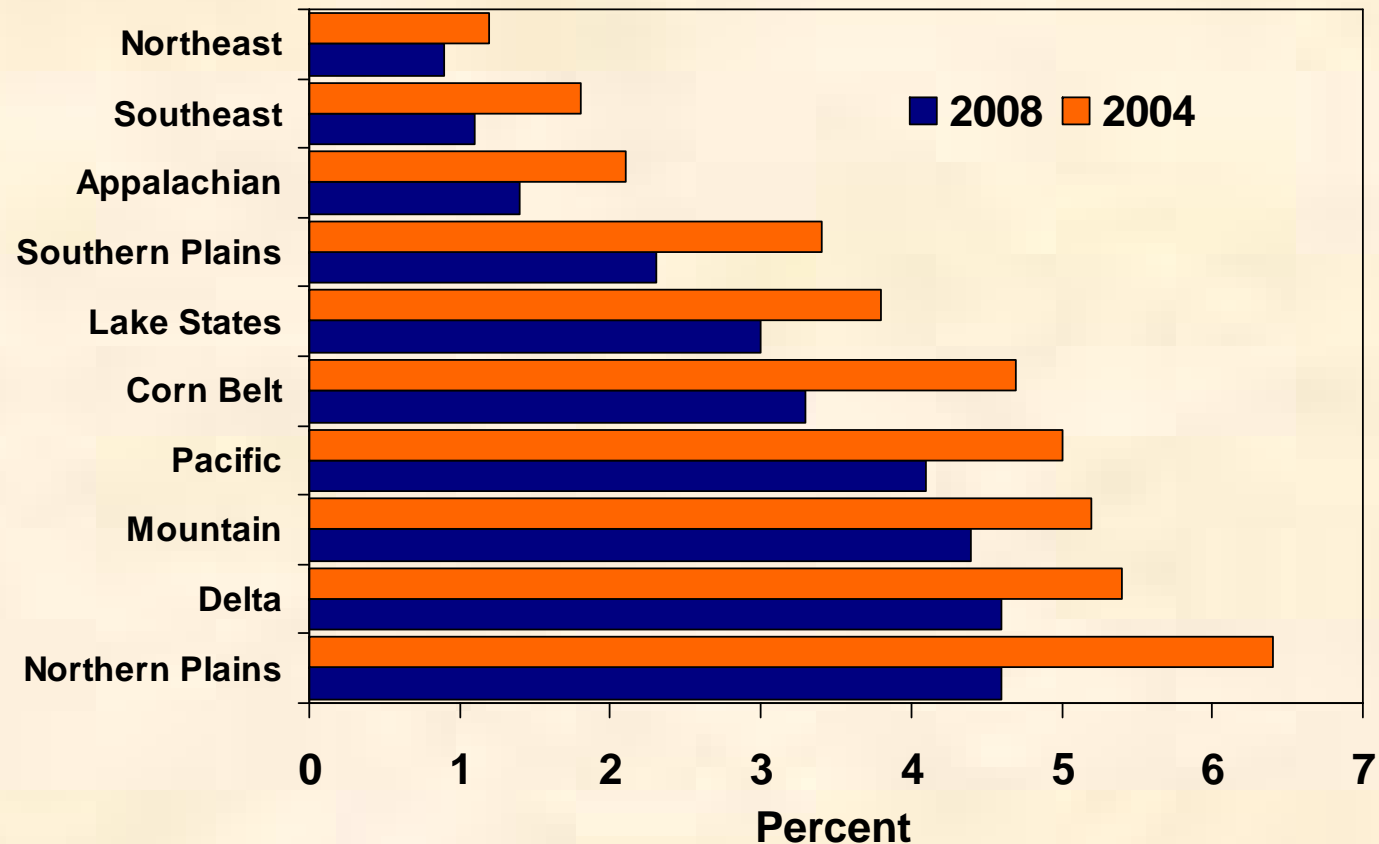


Source: USDA



Rent to value ratios have fallen across the country

Cash Rent to Cropland Value Ratios



Source: USDA



Photos courtesy of USDA

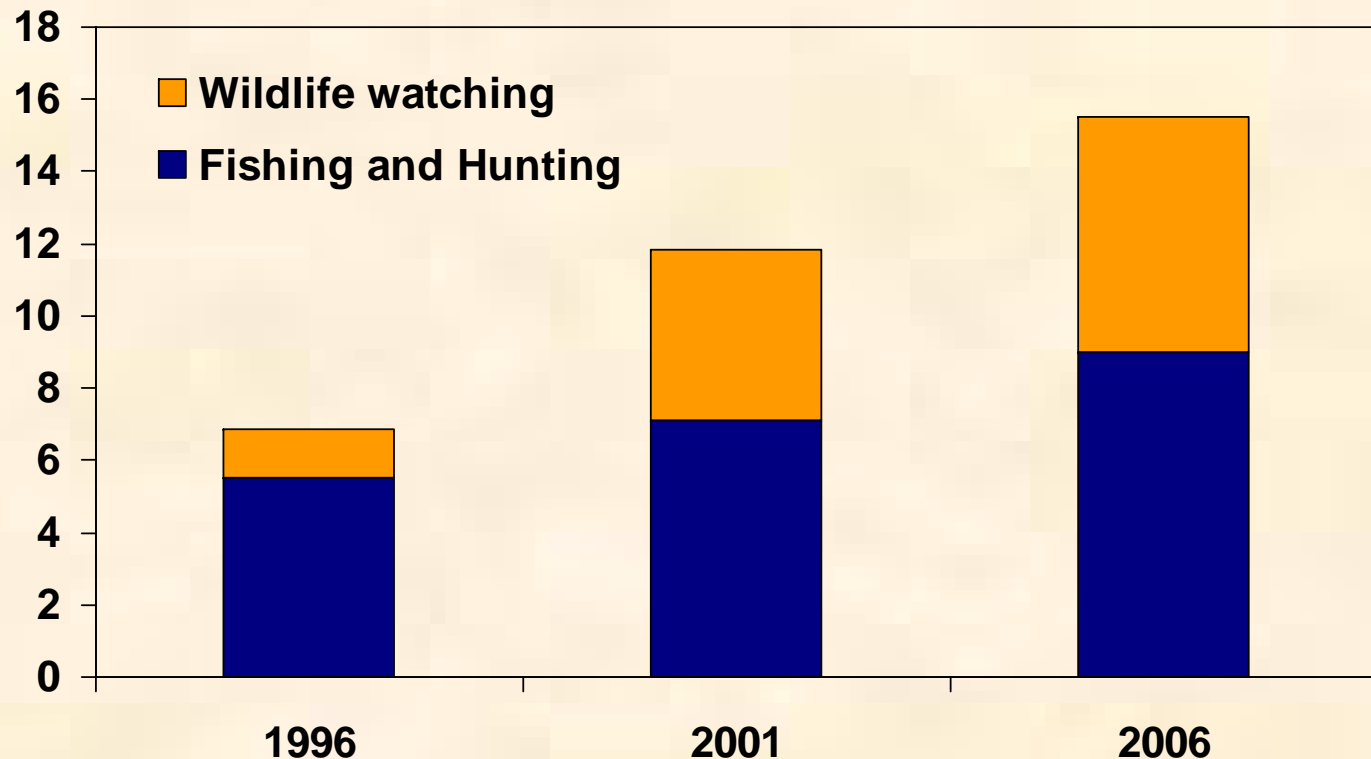
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Recreational demand surged over the past decade

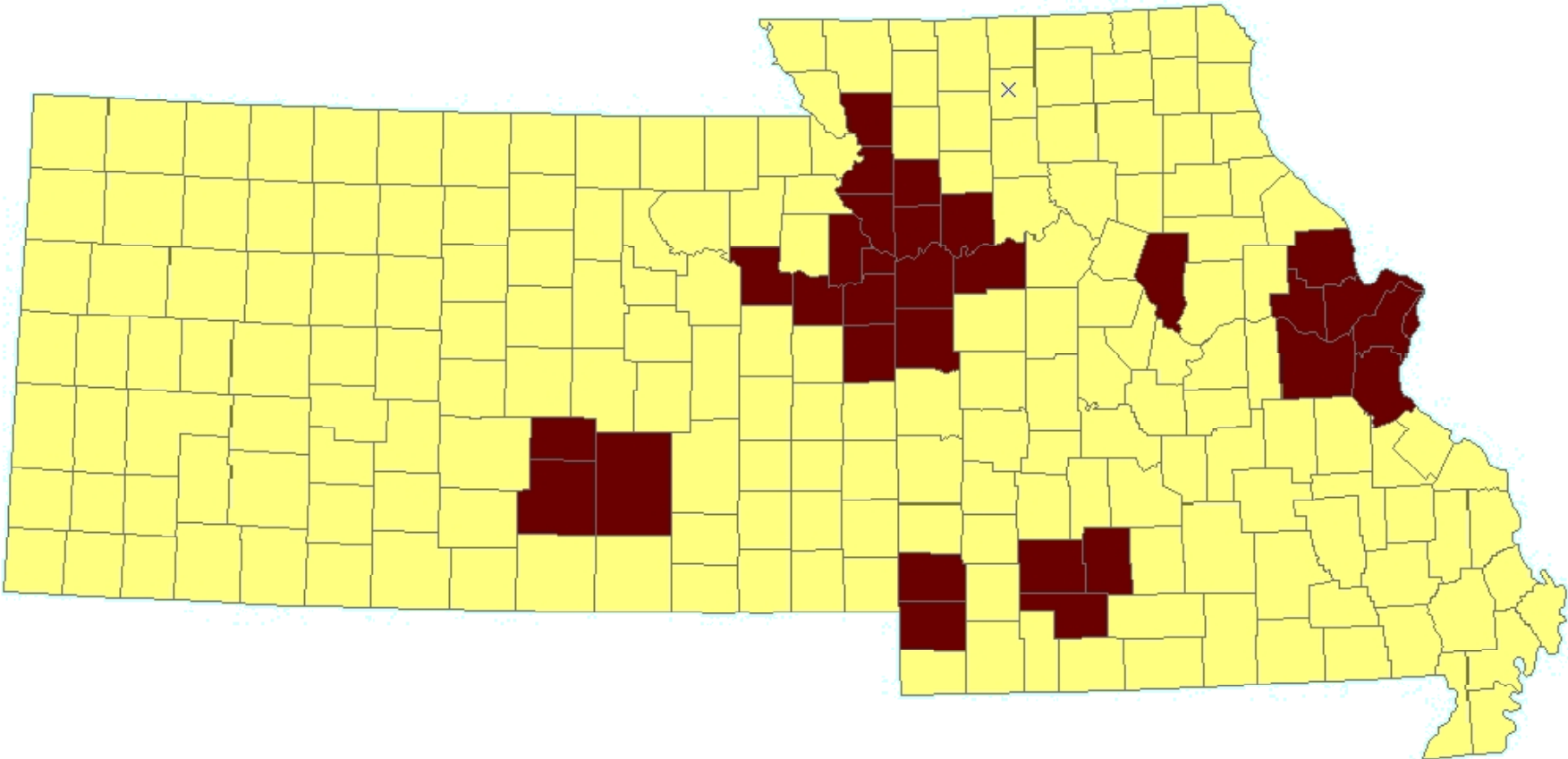
U.S. Wildlife Recreation Expenditures for Land Ownership and Leasing

Billion dollars



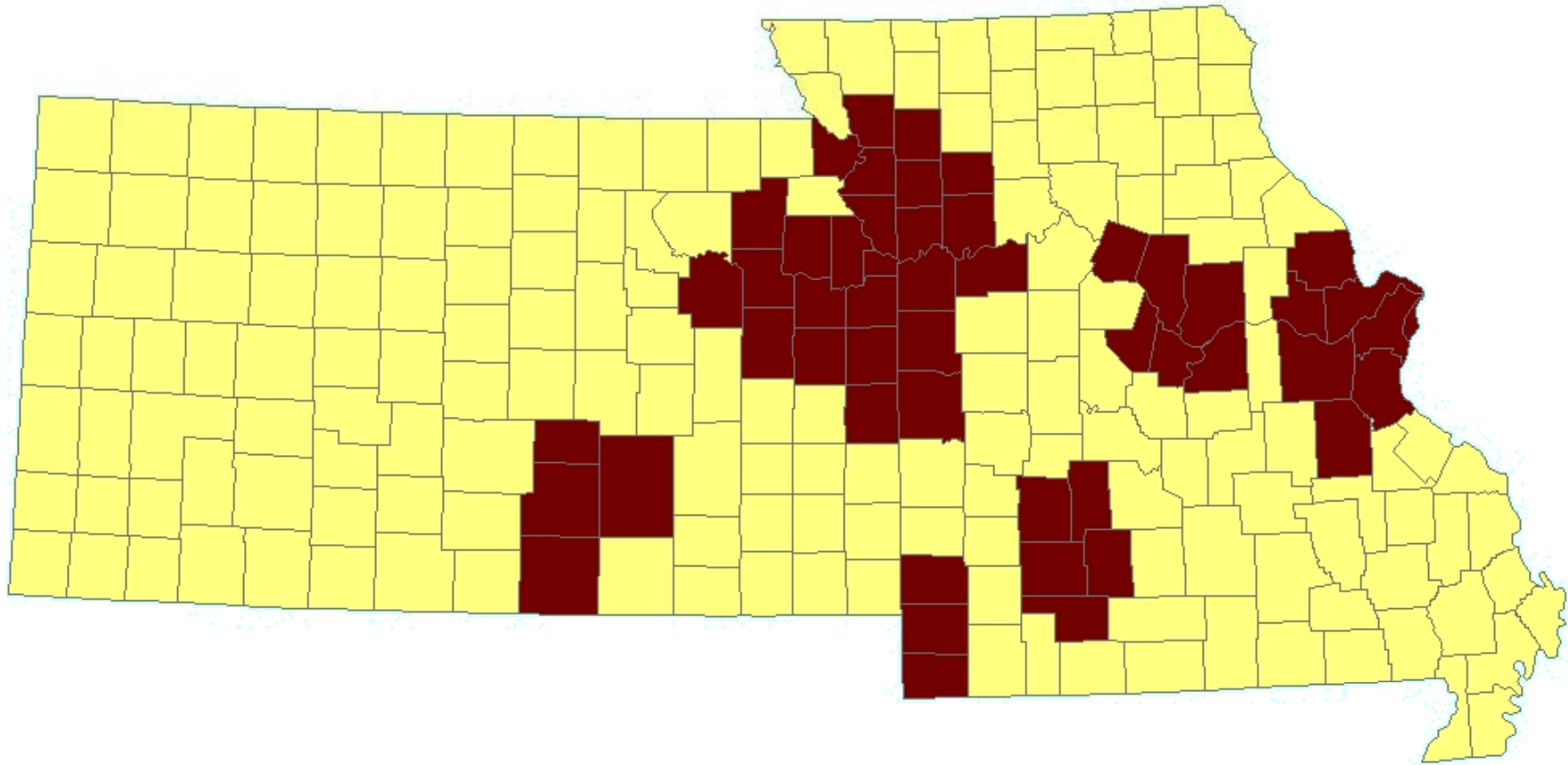
Source: US Fish and Wildlife Service

Kansas Missouri Metropolitan Areas (1999)



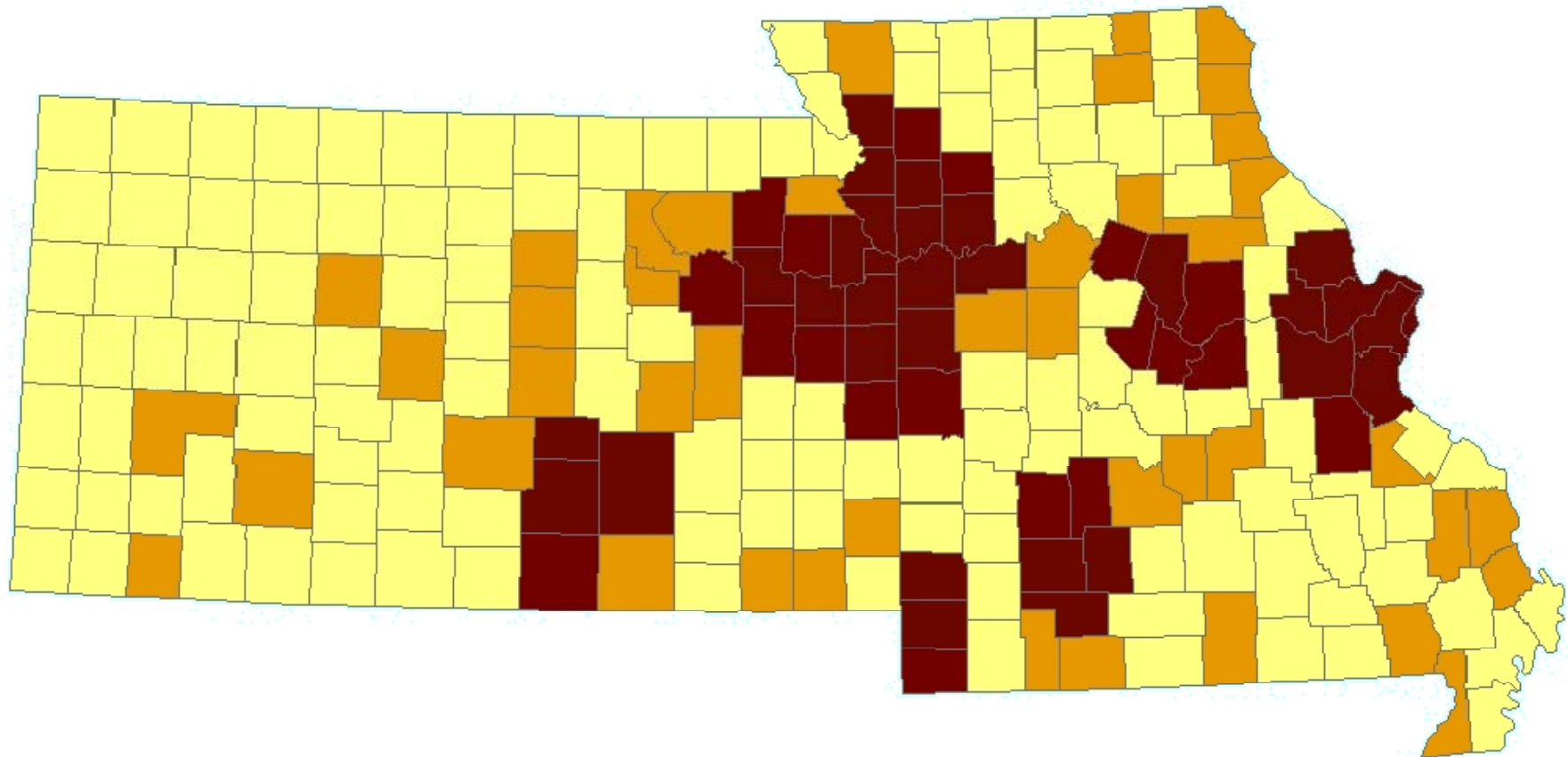
 **Existing
Metro Counties**

Kansas Missouri Metropolitan Areas (2003)



 **Existing
Metro Counties**

Kansas Missouri Metropolitan and Micropolitan Areas (2003)



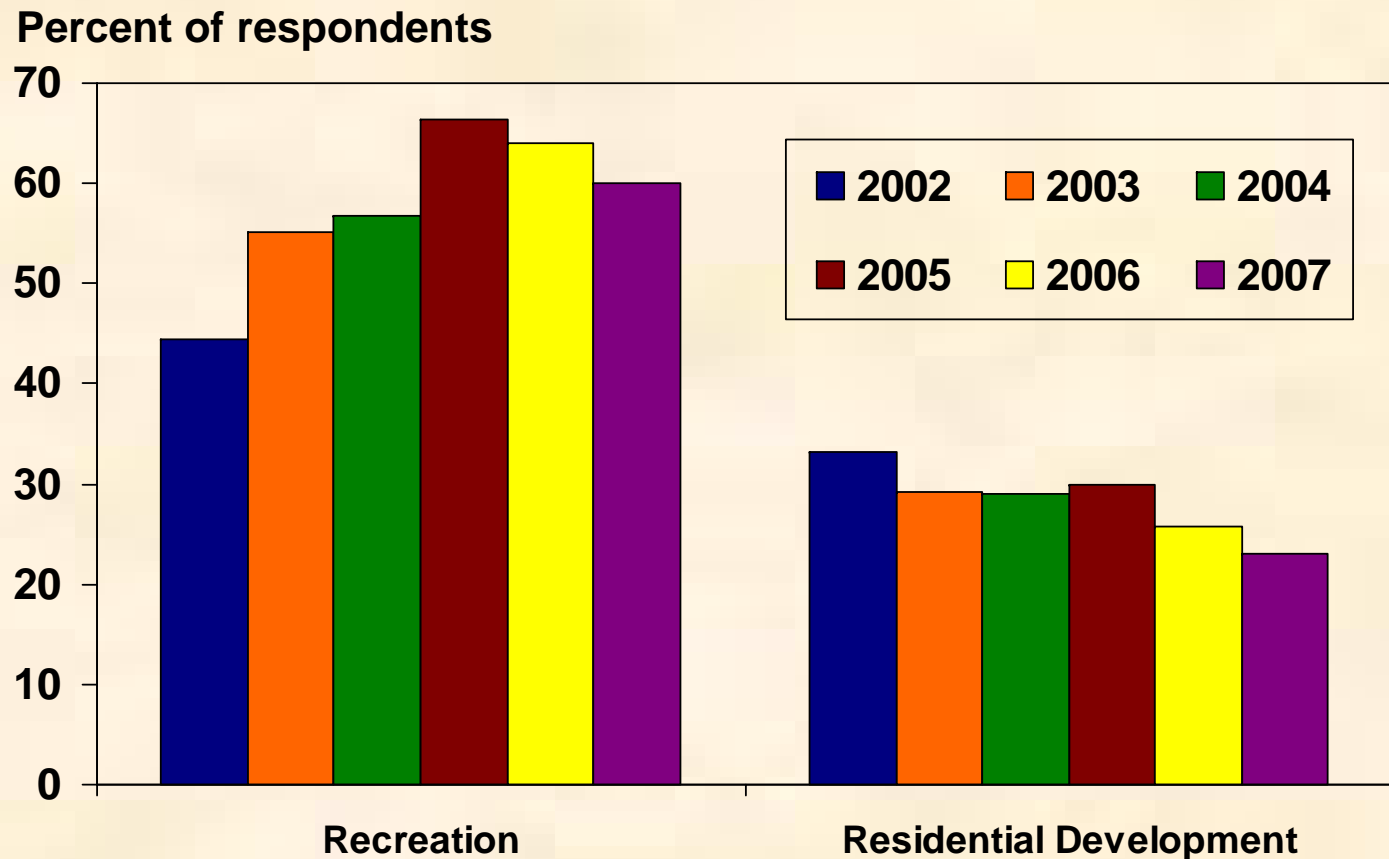
 **Existing
Metro Counties**

 **Micropolitan
Counties**



Recreation and residential demand has slowed

Reasons for Farmland Purchased by Non-farmers



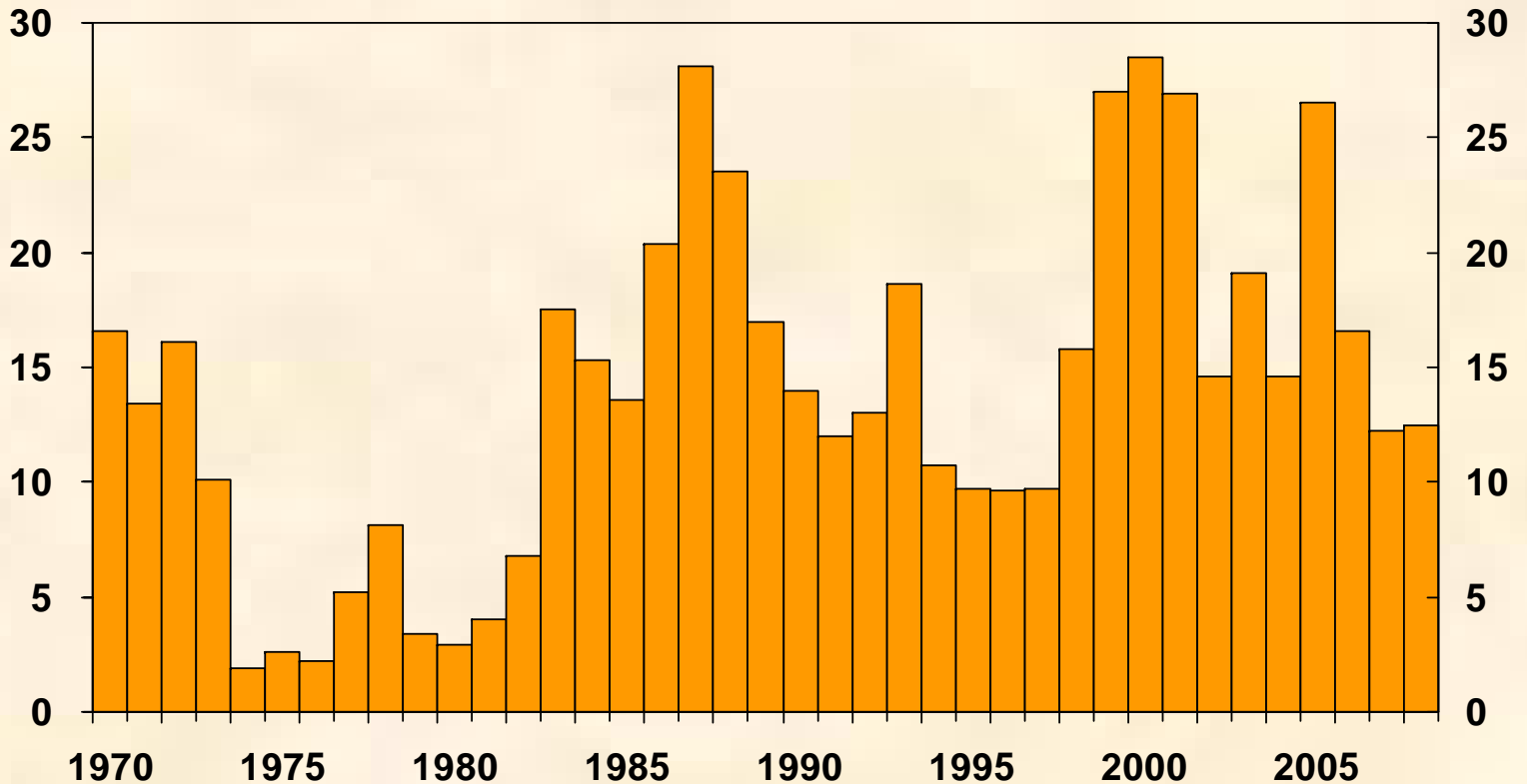
Source: Federal Reserve Bank of Kansas City



Government payments have declined in a booming farm economy

U.S. Farm Subsidy Payments

Billions of Dollars



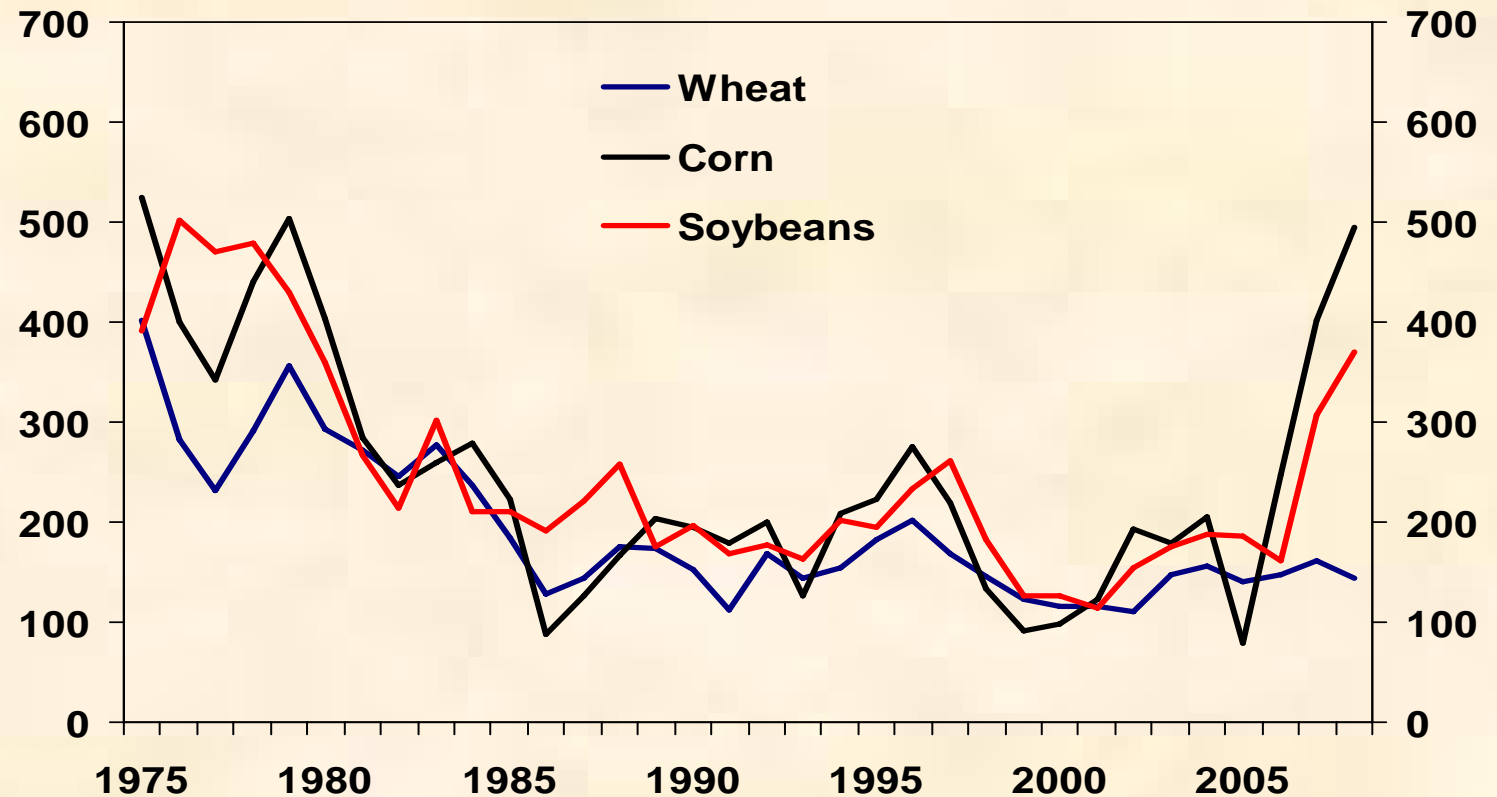
Source: USDA



Market returns have jumped sharply for corn and soybeans

Market returns to Crop Production (less variable or operating costs)

Dollars per acre



Calculations based on USDA cost and returns data.



Farmland Prices, Cash Rents, and Potential Credit Availability

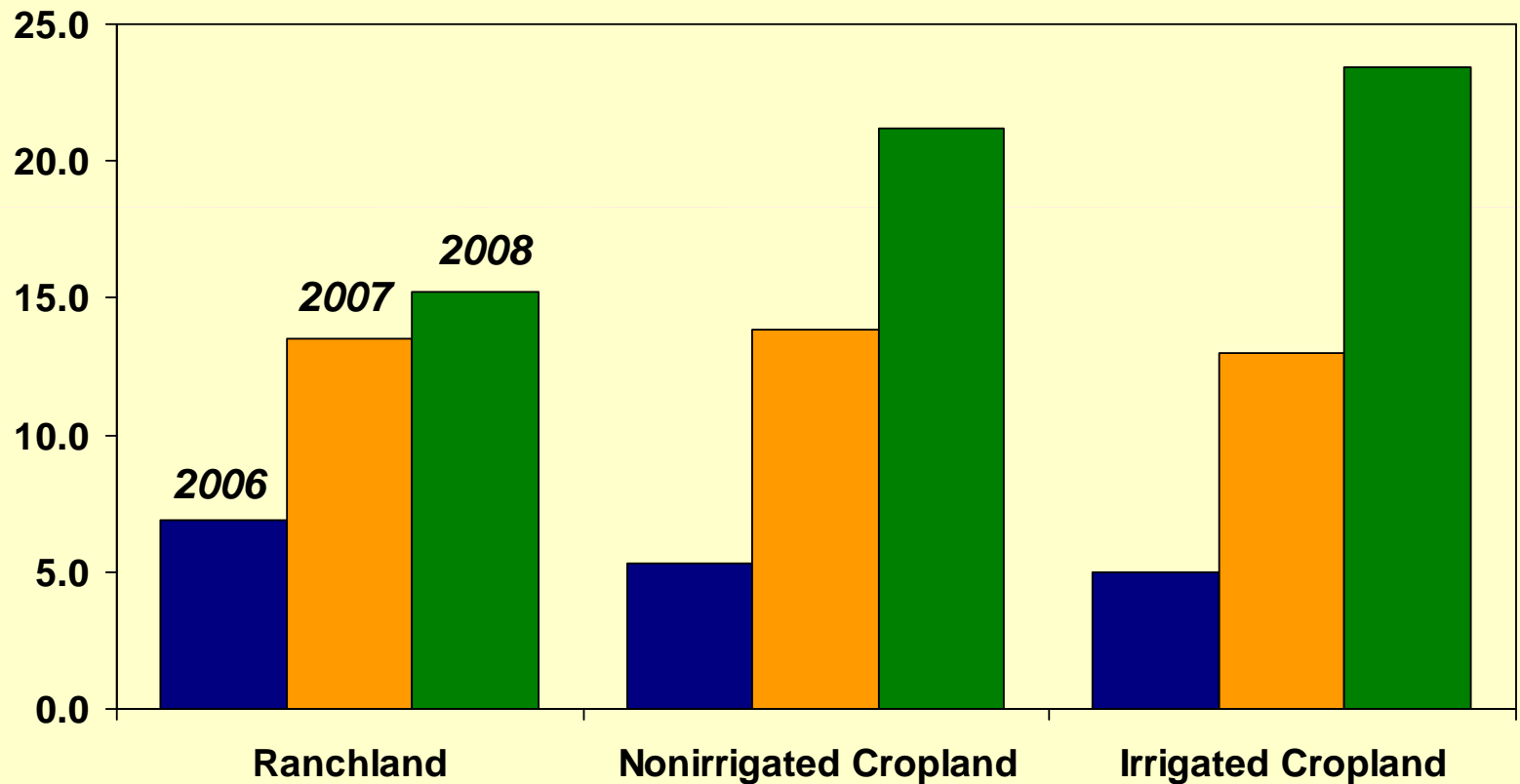
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Tenth District Farmland Values

(Third Quarter)

Percent change from year-to-year



Source: Federal Reserve Bank of Kansas City

**Percent changes are calculated using responses only from those banks reporting in both the past and the current quarter.*



Farmland Value Gains by State

Third Quarter 2007 to Third Quarter 2008

	Nonirrigated	Irrigated	Ranchland
Kansas	21.8	25.1	19.0
Missouri	17.1	18.6	10.9
Nebraska	28.3	25.9	17.1
Oklahoma	16.3	24.0	16.5
Mountain States	7.6	15.6	7.6

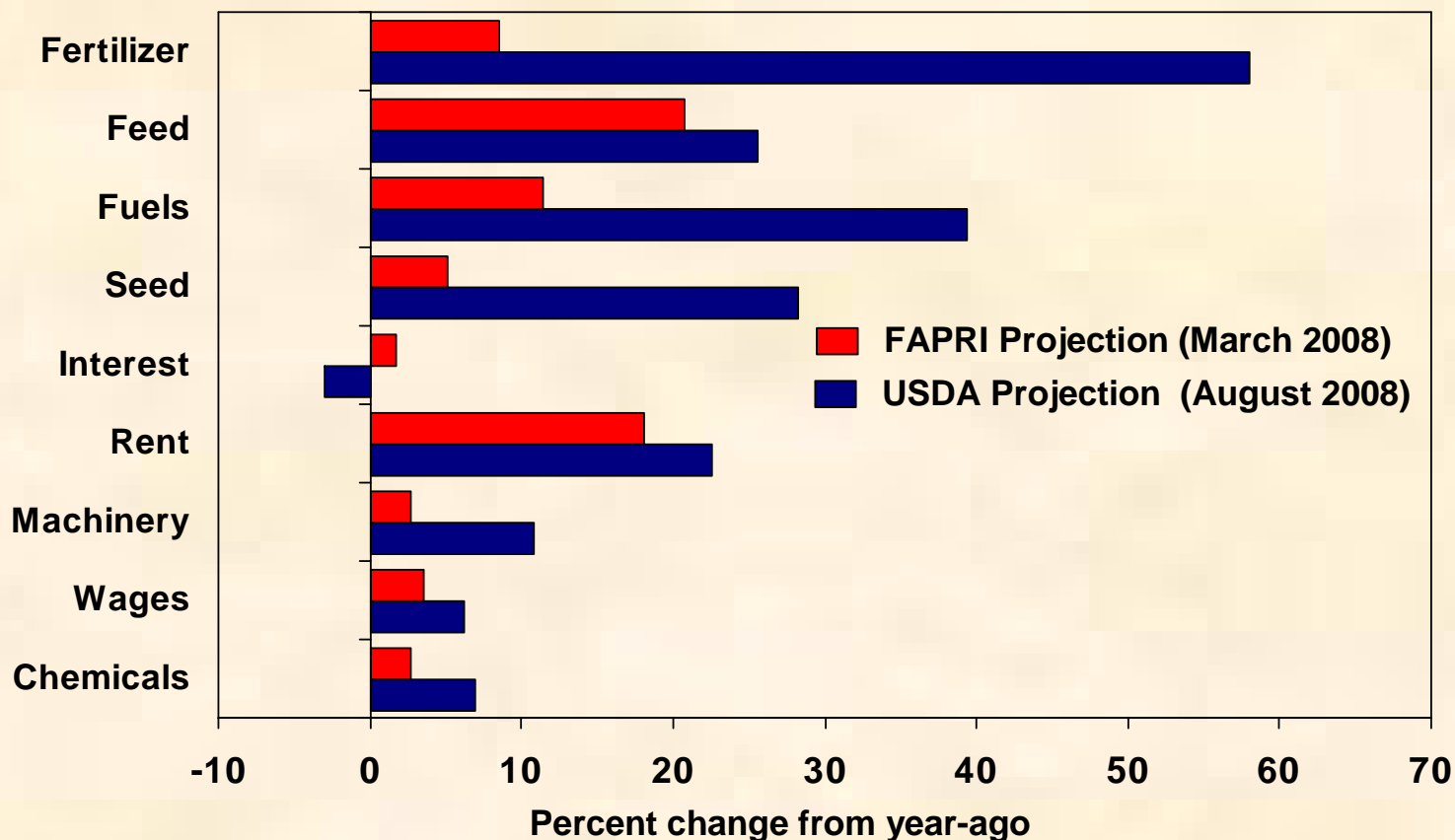
Source: Federal Reserve Bank of Kansas City

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Farm input costs surged beyond expectations

2008 Farm Input Costs

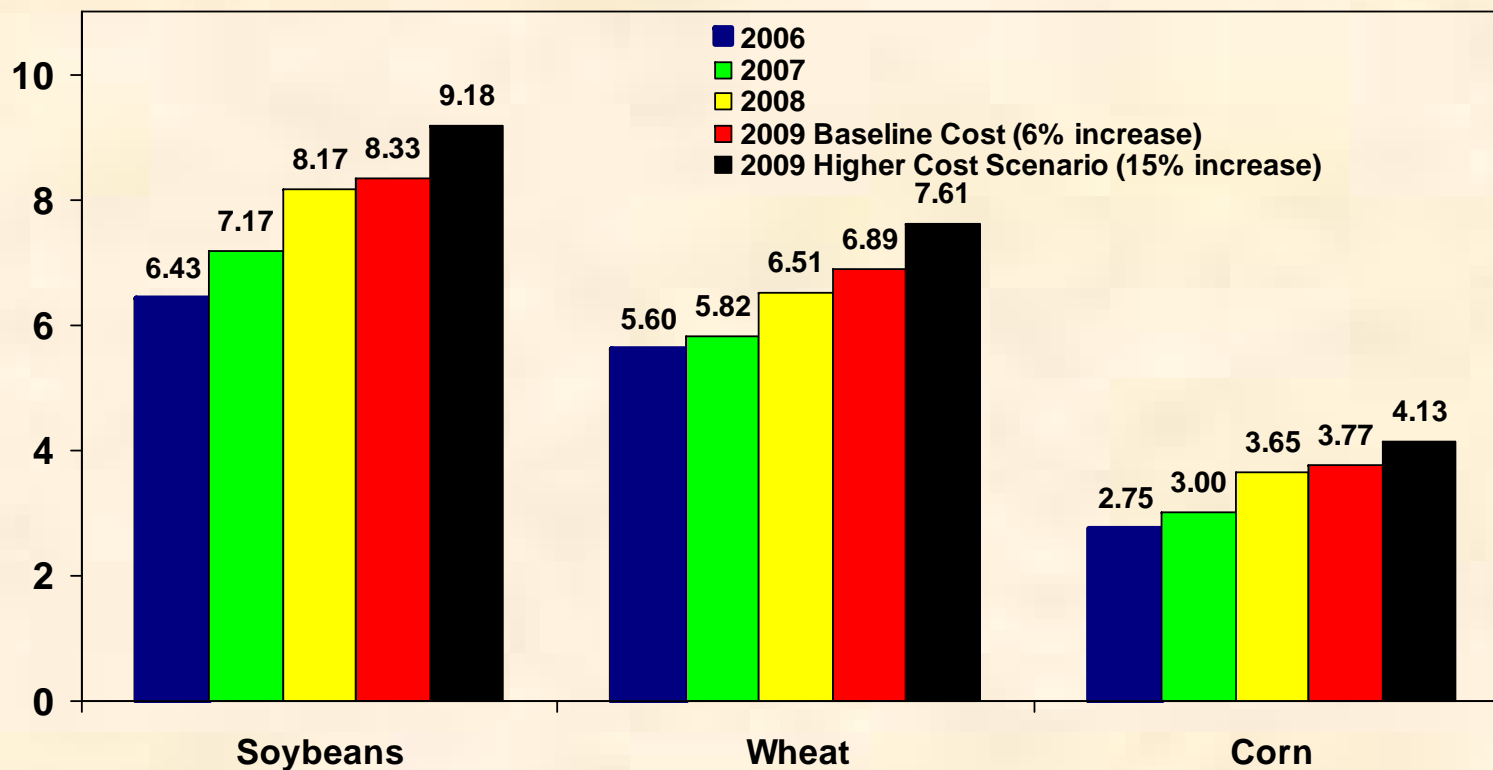


Source: USDA and FAPRI

Production costs could rise further

Crop Breakeven Prices (Variable and Fixed Costs)

Dollars per bushel



Source: Calculations based on USDA cost of production forecasts

Have Farmland Values Peaked?

Historical and Projected Returns to Corn Production

	2007	2008	2009
Total Revenue per acre	\$657	\$837	\$816
<i>Price (dollars per bushel)</i>	<i>\$4.35</i>	<i>\$5.40</i>	<i>\$5.25</i>
<i>Yield (bushel per acre)</i>	<i>151</i>	<i>155</i>	<i>156</i>
Total Costs per acre (excluding land)	\$358	\$462	\$488
Returns to Land (dollars per acre)	\$299	\$375	\$328

Calculations based on USDA and FAPRI

Capitalized value at 5.5% cap rate **\$5440** **\$6811** **\$5970**



Have Farmland Values Peaked?

What If?

Projected Returns to Corn Production

	2009	09a	09b	09c
Total Revenue per acre	\$816	\$624	\$816	\$889
<i>Price (dollars per bushel)</i>	\$5.25	\$4.00	\$5.25	\$5.70
<i>Yield (bushel per acre)</i>	156	156	156	156
Total Costs per acre (excluding land)	\$488	\$488	\$562	\$561
Returns to Land (dollars per acre)	\$328	\$136	\$254	\$328
<i>2009 calculations based on USDA and FAPRI but what if scenarios are arbitrary</i>				
Capitalized value at 5.5% cap rate	\$5970	\$2473	\$4618	\$5970



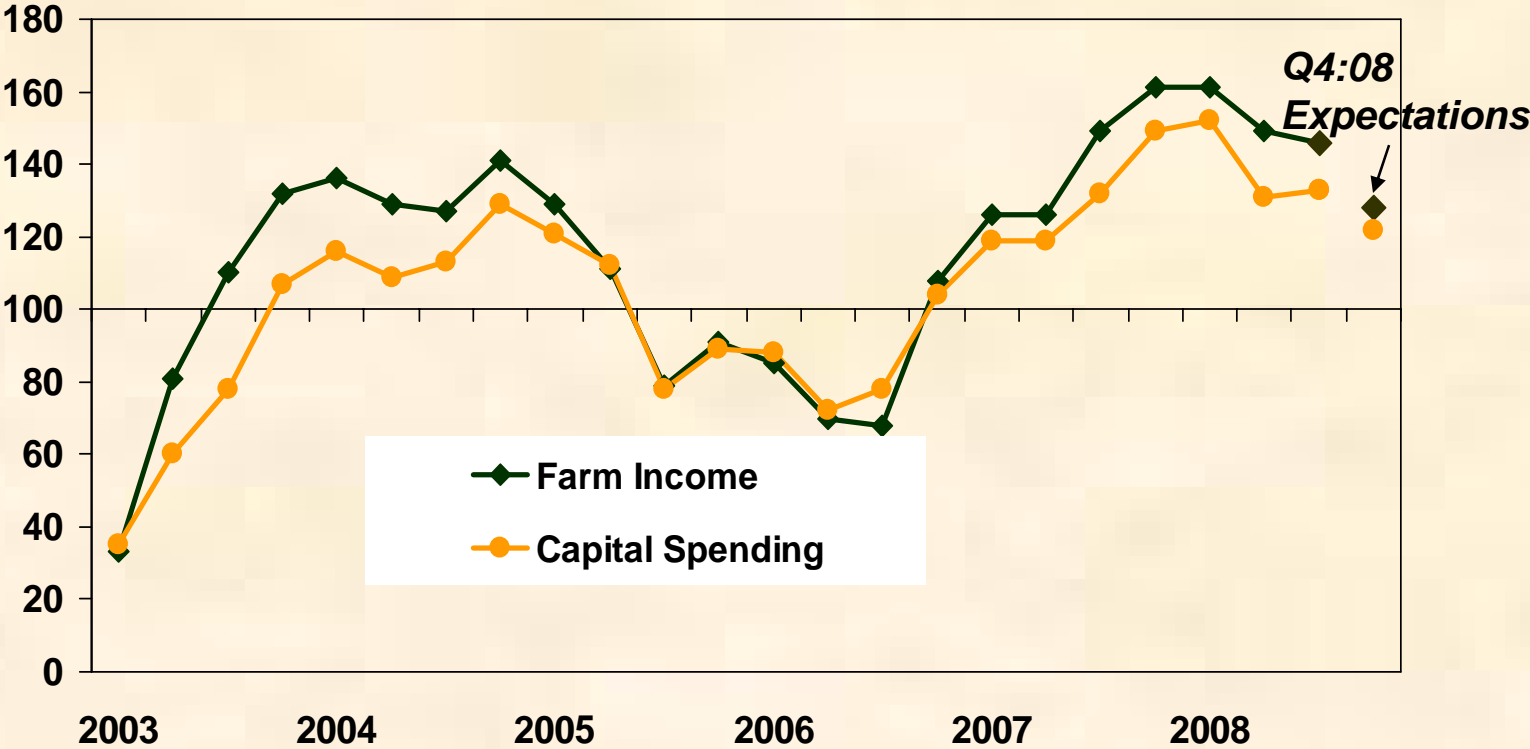
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 - **Based on banker responses to the Agricultural Credit Survey**

Farm Income and Capital Spending

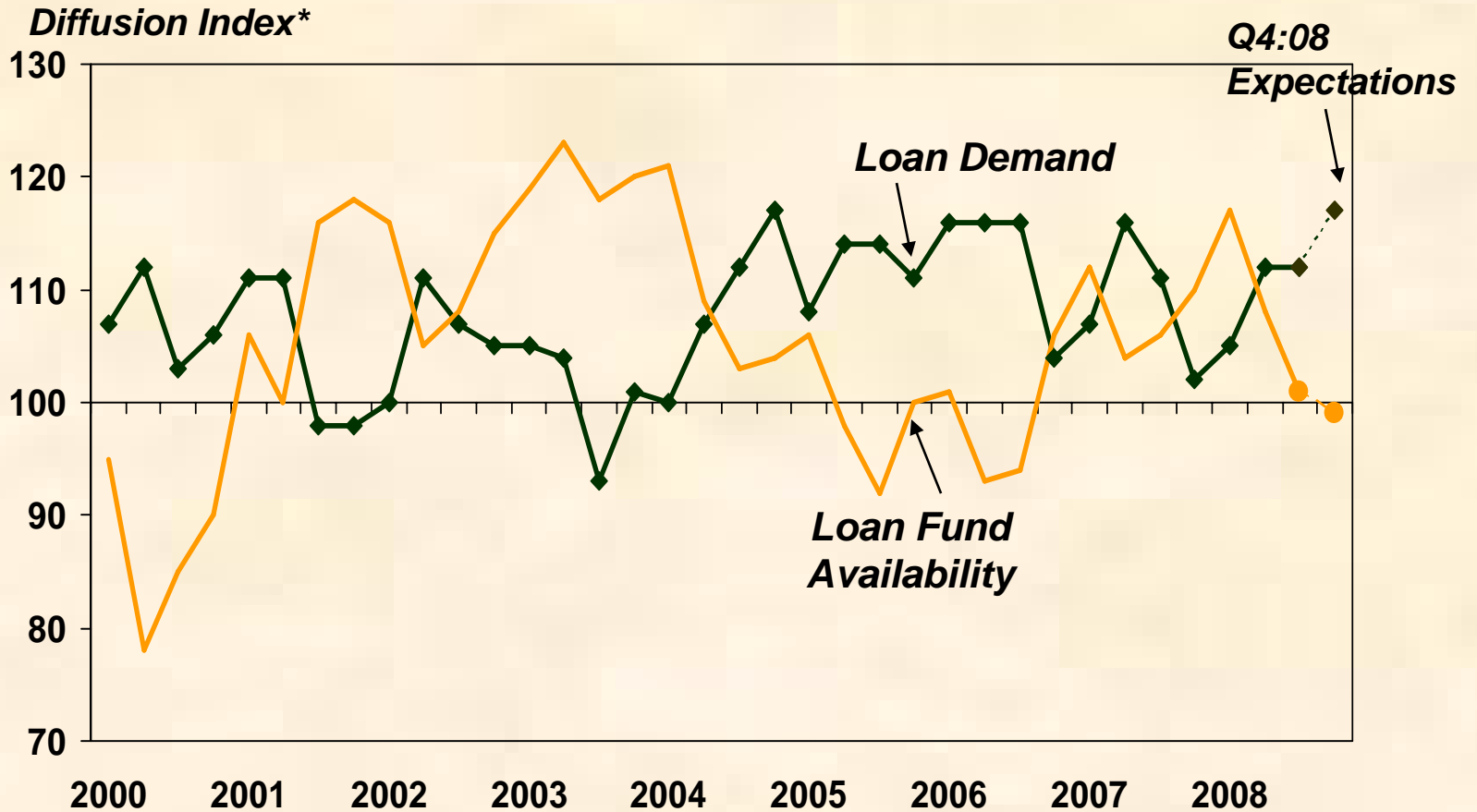


Diffusion Index*



*Bankers responded to each item by indicating whether conditions during the current quarter were higher than, lower than, or the same as in the year-earlier period. The index numbers are computed by subtracting the percent of bankers that responded "lower" from the percent that responded "higher" and adding 100.

Loan Demand and Availability

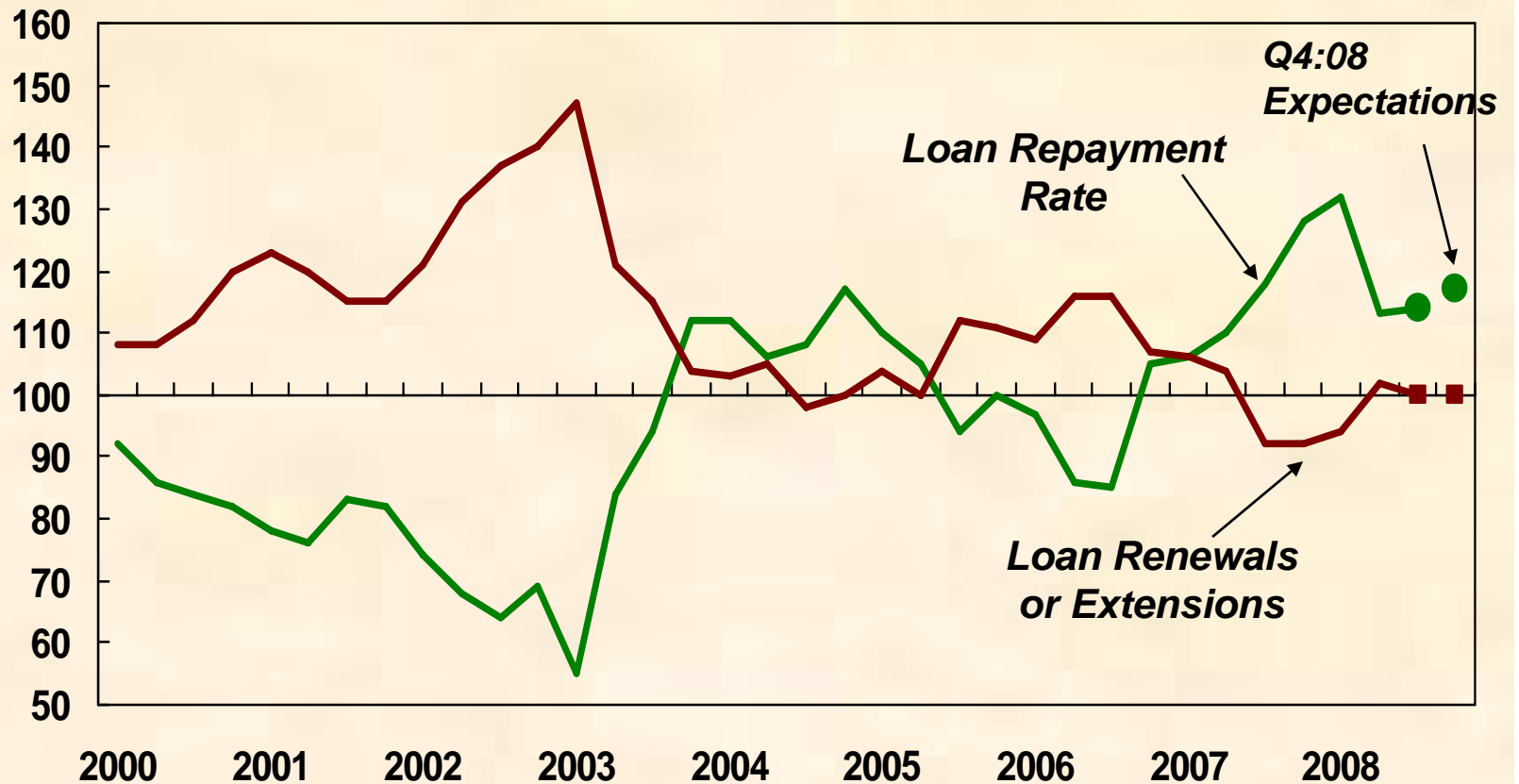


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Farm Credit Conditions

*Diffusion Index**

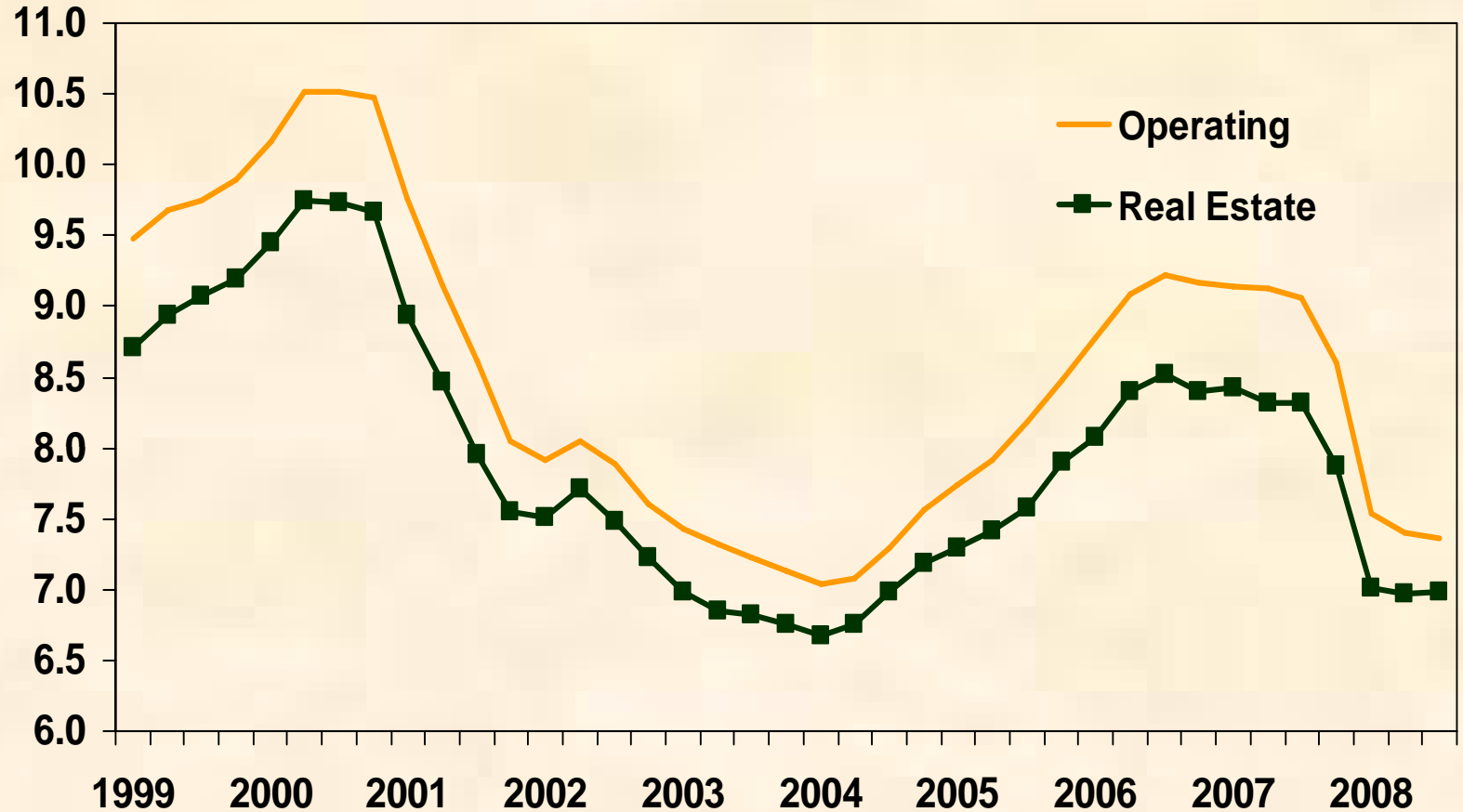


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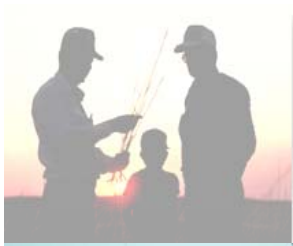


District Farm Interest Rates

Percent



Source: Federal Reserve Bank of Kansas City



Photos courtesy of USDA

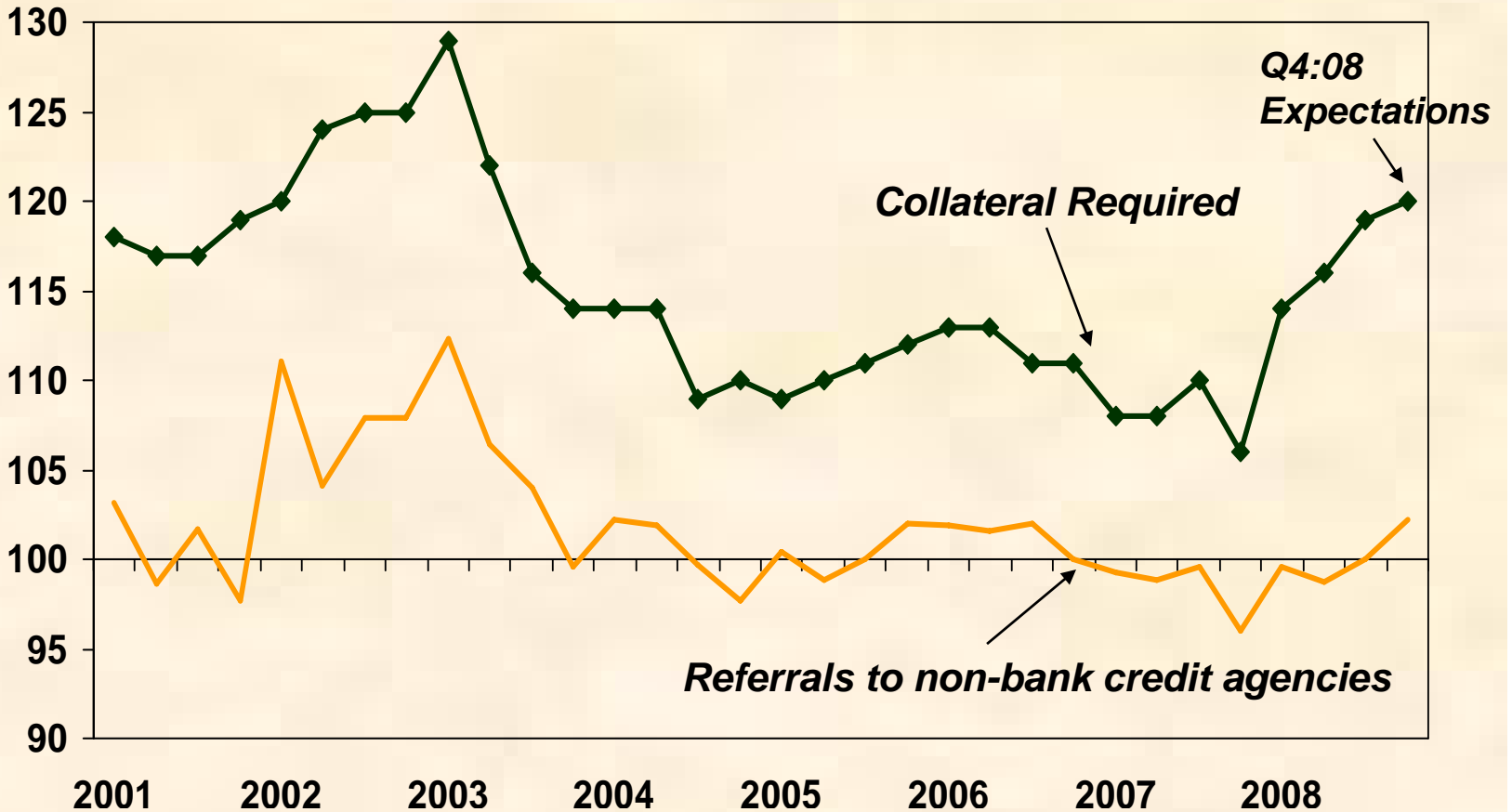
Importance of Operating Credit

- **According to the USDA, most farm loans are a fixed rate loan for real estate**
- **However, operating credit is important given recent input cost increases**
 - **Over the last 5 years 27-30 percent of cash expenses were short-term financed**
 - **Total operating credit has increased from \$47 billion in 2003 to over \$58 billion in 2007**
 - **Source: USDA**
- **Positive correlation between credit use and farm size**
 - **Scope, scale, and collateral availability**

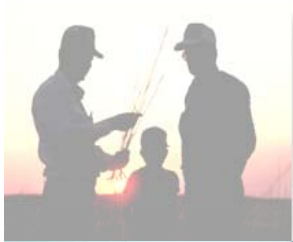


Farm Credit Conditions

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Conclusions

- **Land values boom with rising farm income.**
- **Have farmland values peaked?**
 - Expected decrease in farm income.
 - Uncertainty of ethanol.
 - Global supply in the future.
- **Higher seed costs and other input costs have created operating loan demand.**
 - Agricultural credit supply
- **The state of agriculture was volatile in 2008, what will 2009 hold?**