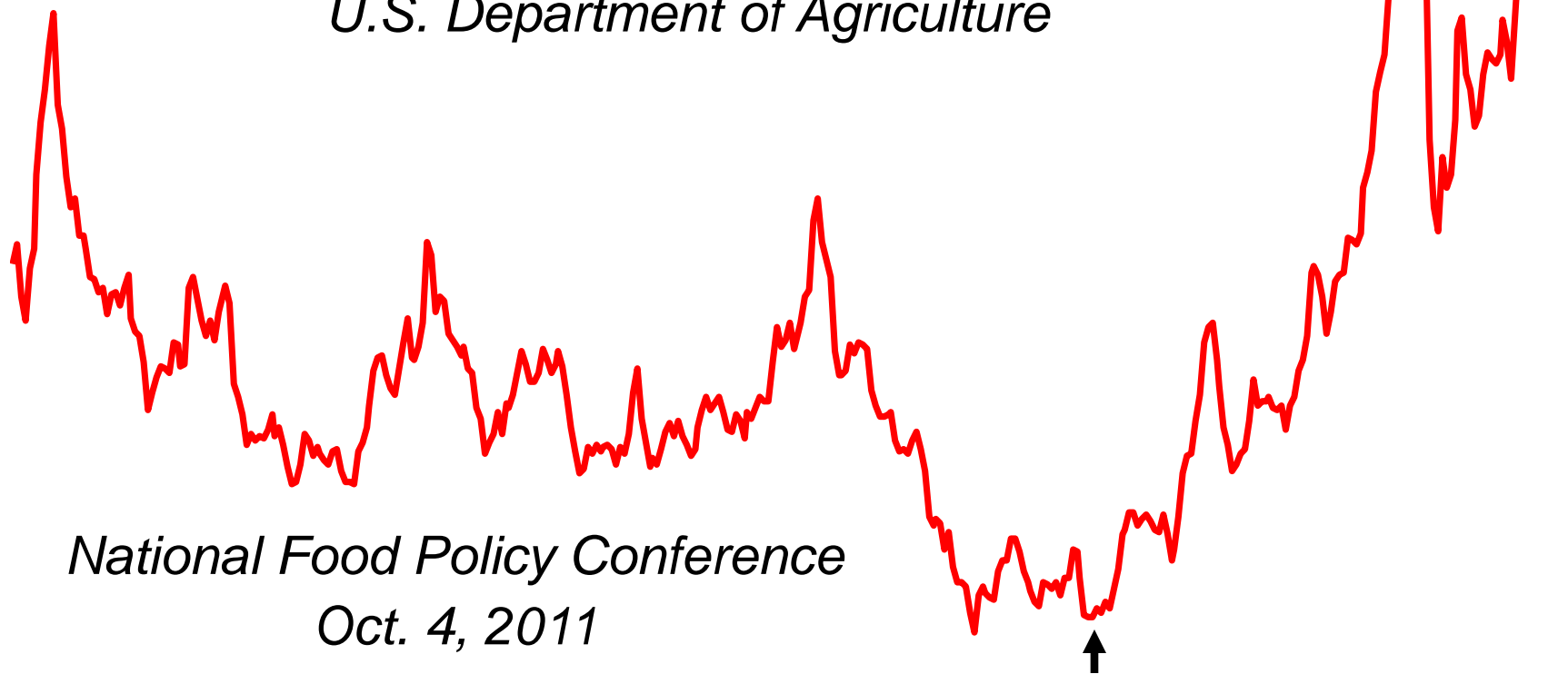


# Factors contributing to higher food commodity prices



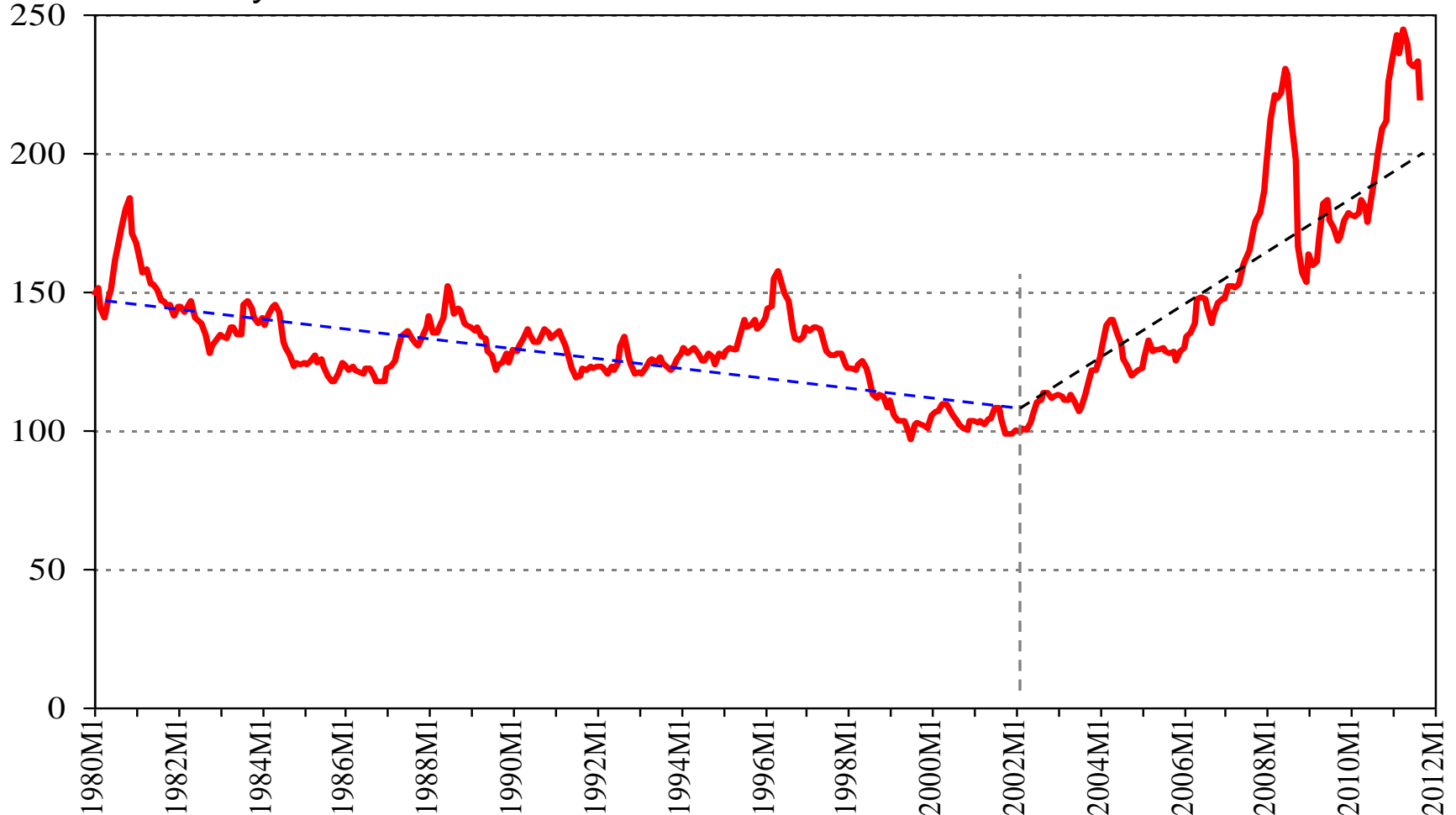
*Ron Trostle  
Economic Research Service  
U.S. Department of Agriculture*



*National Food Policy Conference  
Oct. 4, 2011*

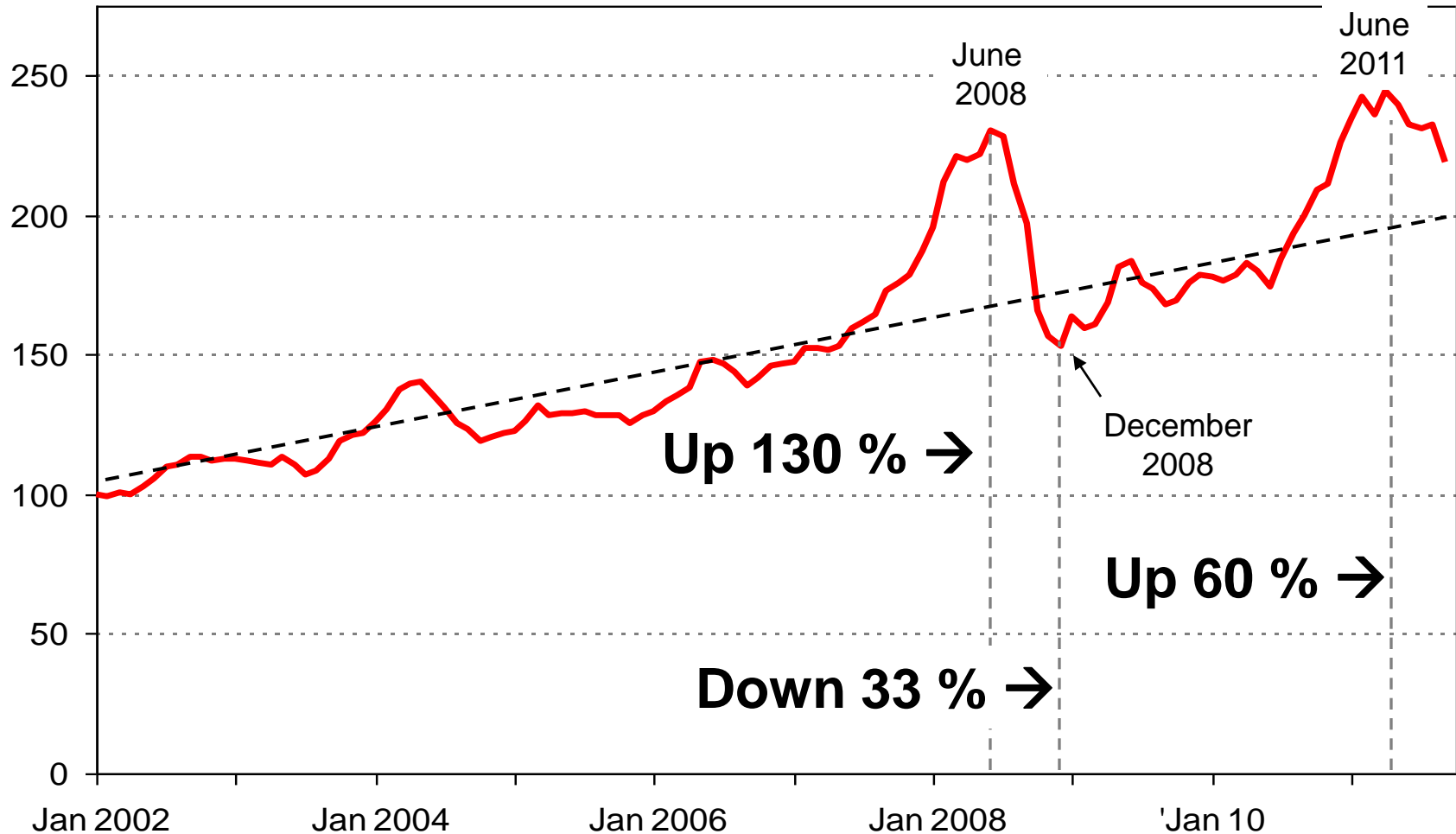
# Food commodity prices since January 1980: Reversal of a 22-year downward trend

Index: January 2002 = 100



# Food-commodity prices since January 2002: an upward trend, plus two spikes

Index: January 2002 = 100



# Factors contributing to higher food commodity prices

## Economy wide

## Ag sector

### Long-term trends

>	Economic growth
>	Increasing population
>	Cost of energy

>	Meat & dairy consumption
>	Productivity growth
>	Global biofuel production
>	Natural resource constraints

### Short-term disruptions

>	Exchange rate (LT & ST)
>	Oil price

>	Weather → production
>	Stock-to-use ratio
>	Exporter behavior
>	Importer behavior

# Shifts in global supply and demand pushed up prices

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Long-term trends & short-term shocks contributed in different ways:

- Long-term trends in supply and demand led to gradually tightening world markets over the last 2 decades –
- – and to upward trending prices since 2002.

The resulting reductions in global stocks and stocks-to-use ratios set the stage for:

- Short-term shocks & disruptions further restricted world food commodity supplies and raised short term demand –
- – and led to price spikes in 2007/08 and 2010/11.

# Evolution of long-term trends contributing to higher prices

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- Developing country economic and population growth led to increased food demand
  - Growing middle class, increased urbanization, diet diversification
- Slower growth in ag productivity
- Depreciating U.S. dollar
- Higher crude oil prices
- Biofuel production: USA, EU, BRA, ARG, CAN, et.al.
- Increased demand for biofuel feedstocks
- Above factors led to rising food commodity prices, but did not directly cause the price spikes

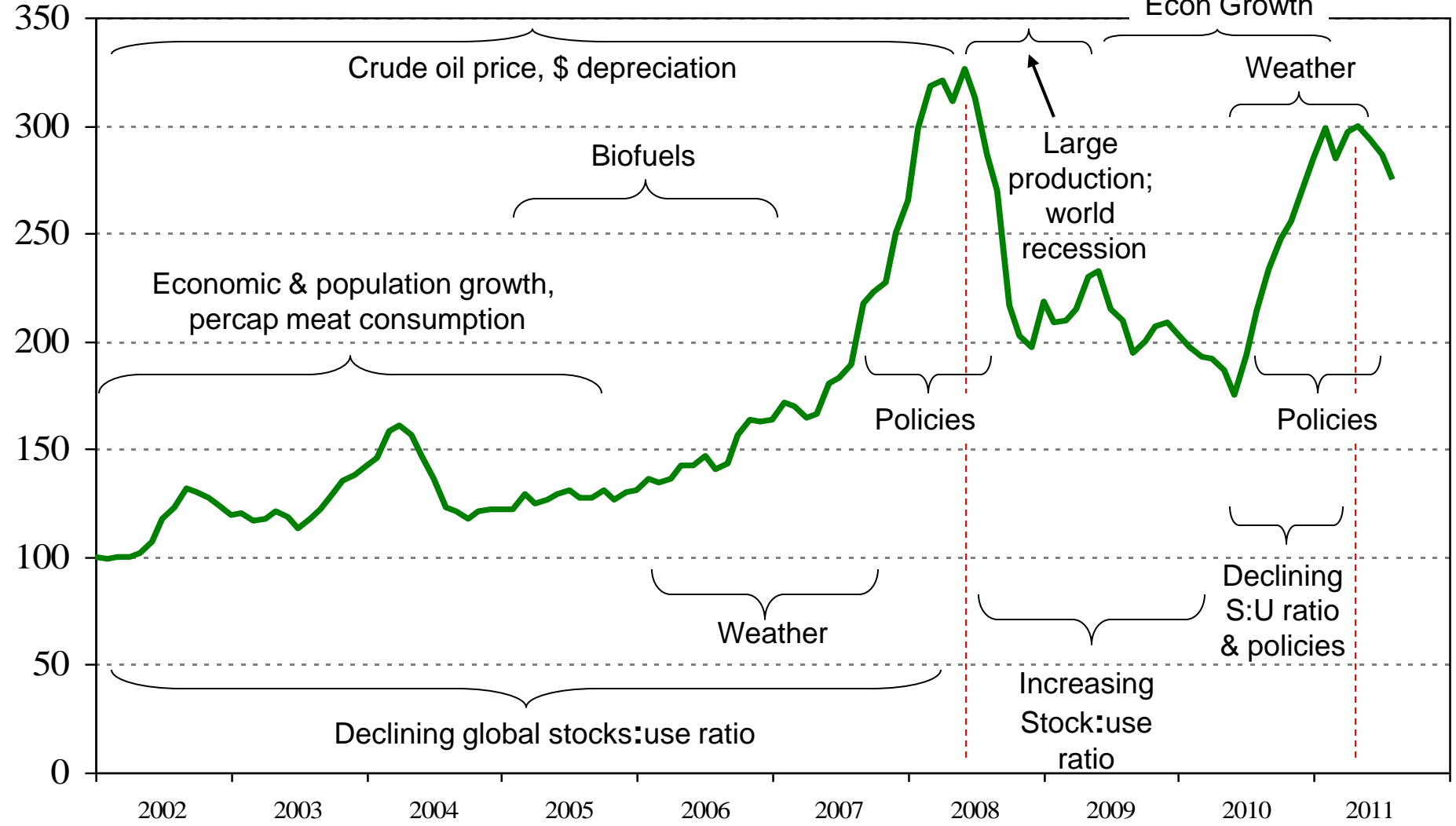
# Evolution of short term shocks that resulted in the price spikes (2007/08 & 2010/11)

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- Adverse weather reduced world crop production – and further reduced world stocks and stocks-to-use ratios
- Sharp changes in macroeconomic factors
  - dollar dropped quickly – then recovered quickly
  - Sharp spike in crude oil prices (up, then down)
- Some exporting countries restricted shipments (export quotas and export bans), further reducing importer's access to food commodities
- Anxious importers facilitated consumption (lowered tariffs, raised food subsidies), and increased forward contracting of their import needs. These actions increased short-term demand.

# Primary factors affecting crop prices<sup>1</sup>

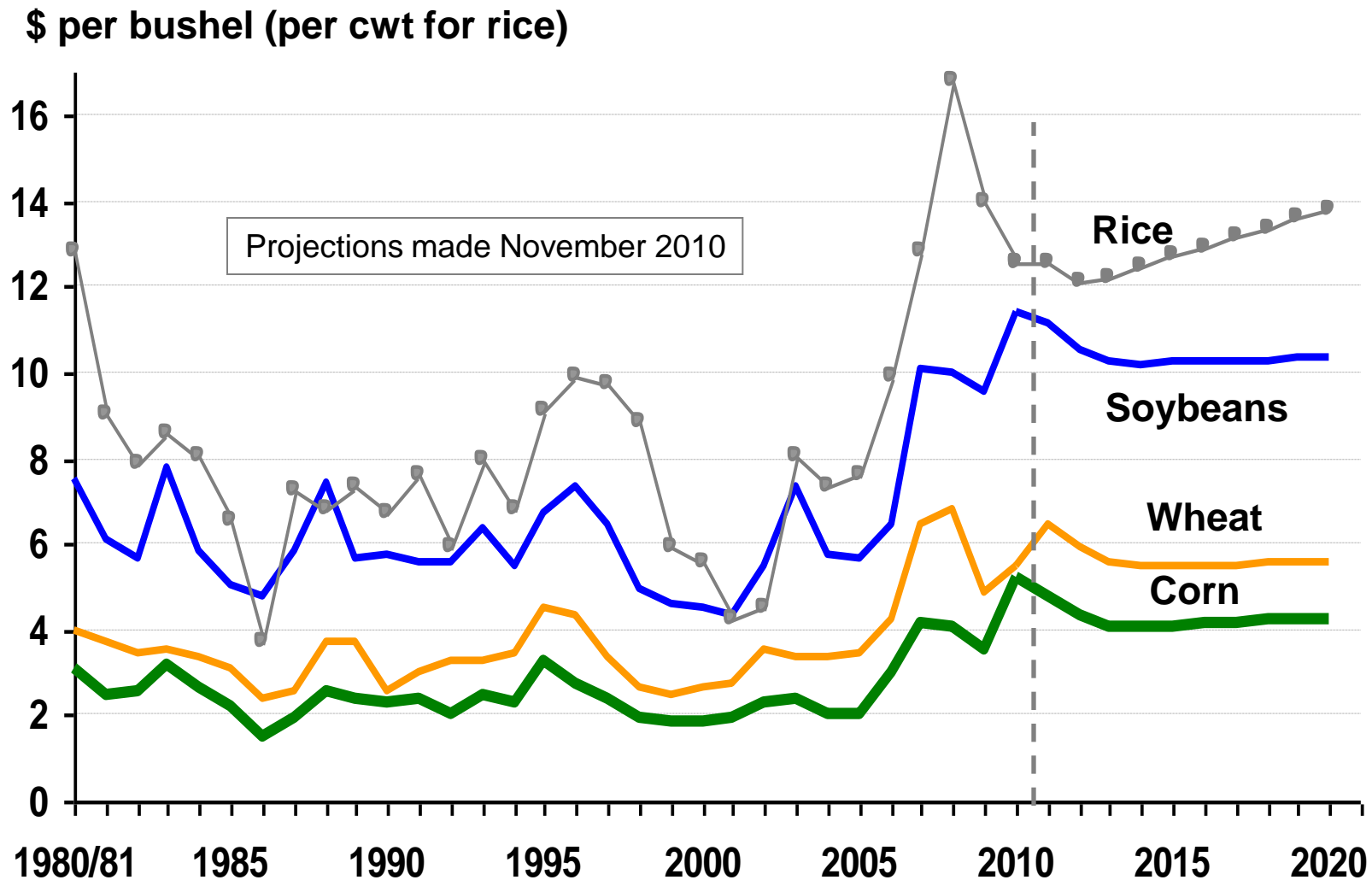
Index: January 2002 = 100



<sup>1</sup>4-crop monthly price index: Wheat, rice, corn, & soybean prices, weighted by trade shares.



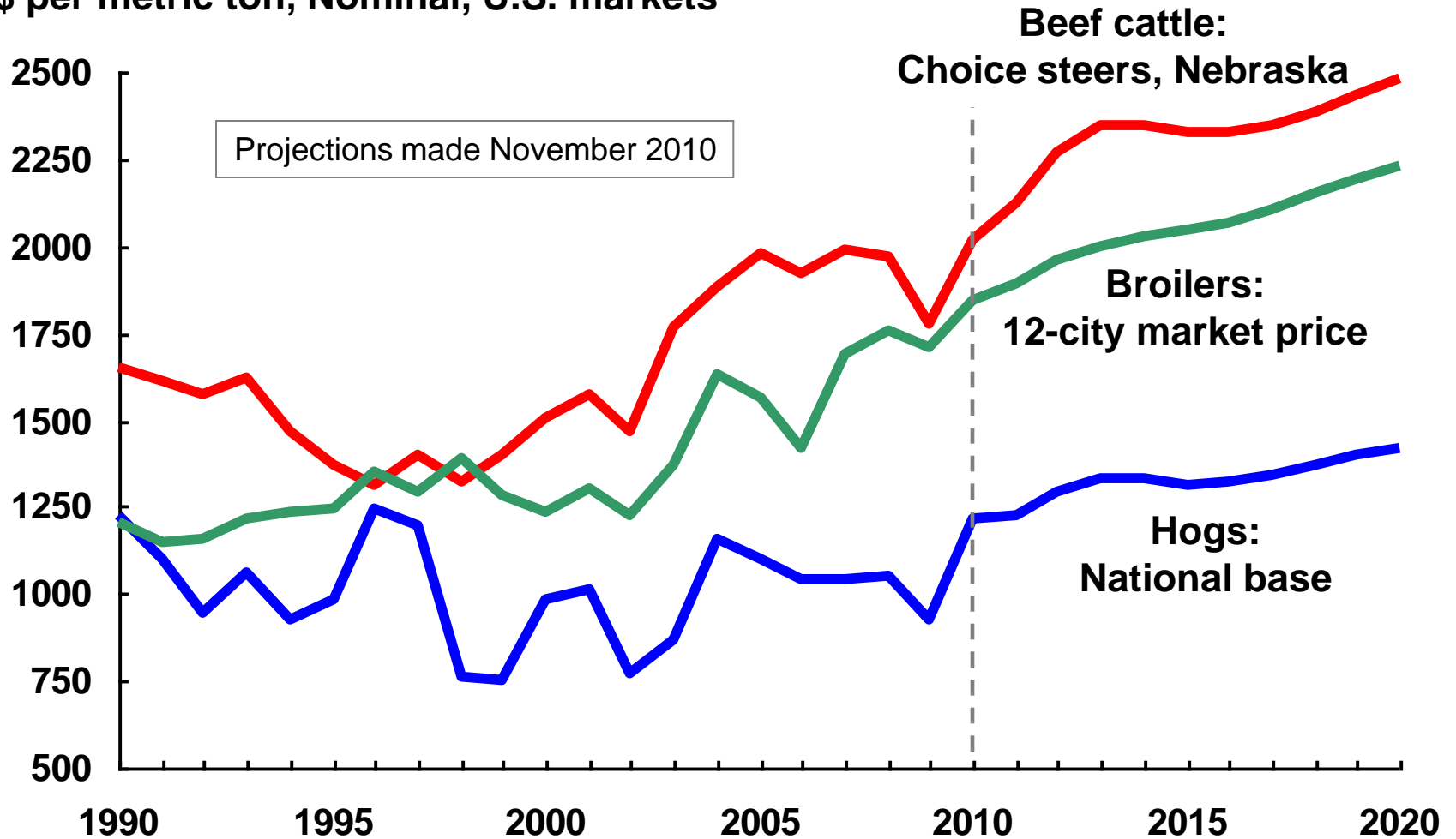
# Corn, wheat, rice, and soybean prices projected to remain historically high



Source: *USDA Agricultural Baseline Projections to 2020*, February 2011.

# Livestock Prices

\$ per metric ton, Nominal, U.S. markets



Source: USDA Agricultural Baseline Projections to 2020, February 2011.

# Near-term factors that may influence future ag prices

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- Weather
- Global ag production
- Stock levels (Supply & demand balances; stocks policies; self-sufficiency policies)
- Policy changes by food commodity exporters & importers
- Exchange rates (Esp. for commodities denominated in dollars)
- Energy & other non ag prices / Ag production costs
- Economic growth
- Import demand: Who will be the importers? (Role of foreign exchange reserves)

# Related reports and contacts

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## **Why Have Food Commodity Prices Risen Again?**

<http://www.ers.usda.gov/publications/WRS1103/>

## **USDA Agricultural Projections to 2020**

<http://www.ers.usda.gov/publications/oce111/>

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