

# Biofuels, food prices, and agricultural commodity markets

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Patrick Westhoff ([westhoffp@missouri.edu](mailto:westhoffp@missouri.edu))

Food and Agricultural Policy Research Institute

([www.fapri.missouri.edu](http://www.fapri.missouri.edu))

NABE teleconference

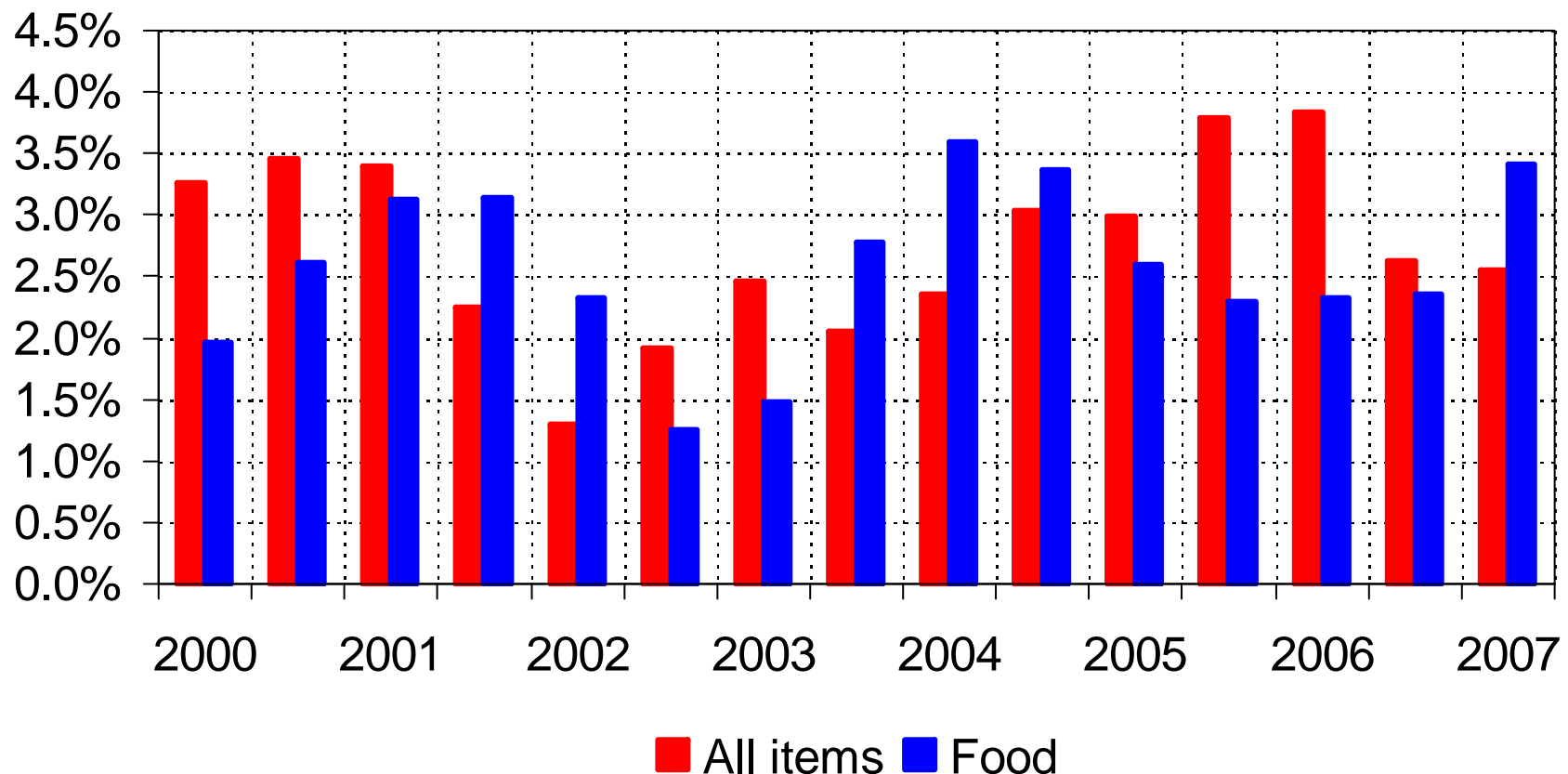
Columbia, November 8, 2007

Food and Agricultural  
Policy Research Institute



# Annual change in US consumer prices

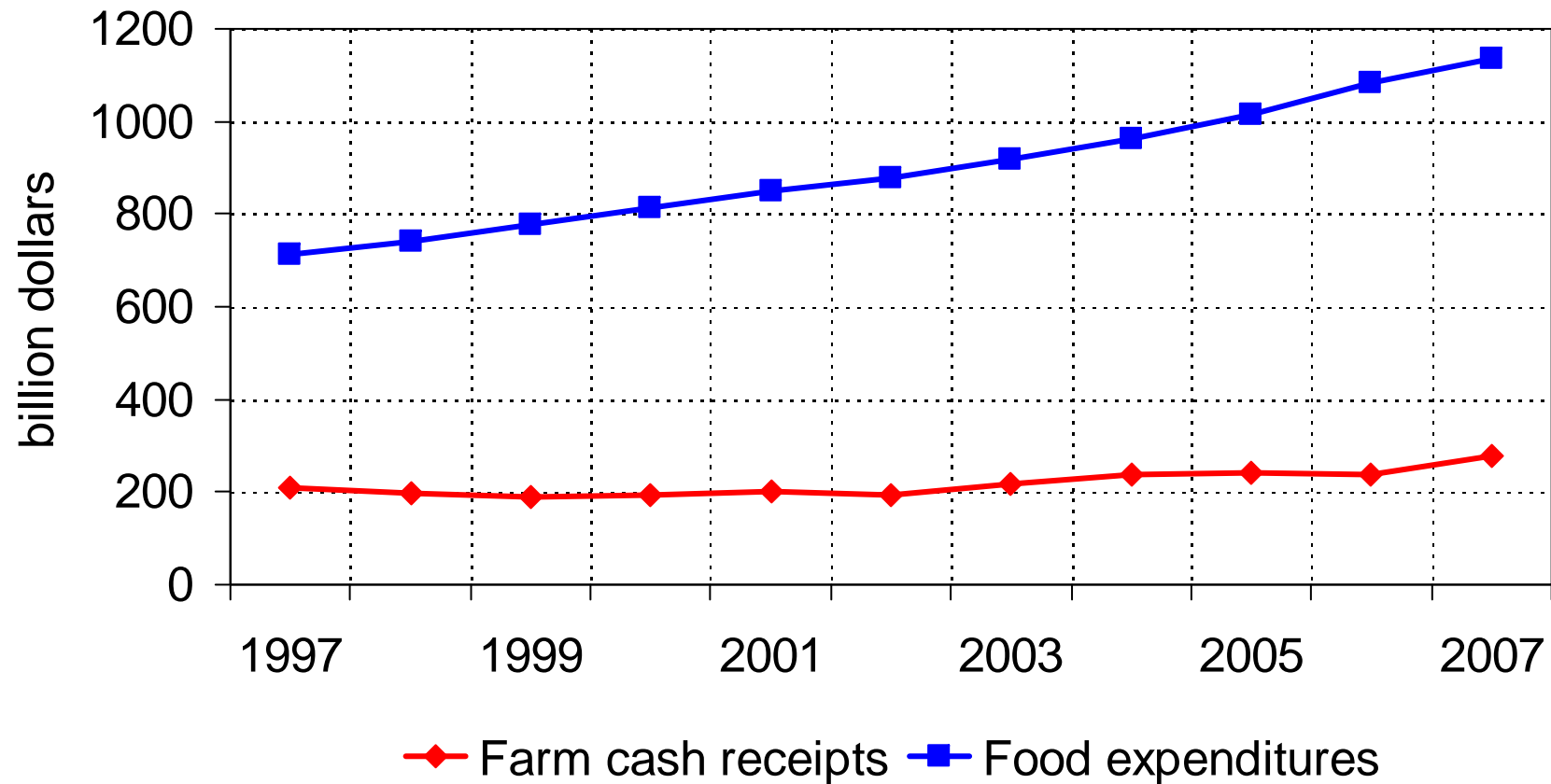
(Semiannual data, change from previous year)



Source: U.S. Bureau of Labor Statistics, <http://www.bls.gov/data/>, October 2007.

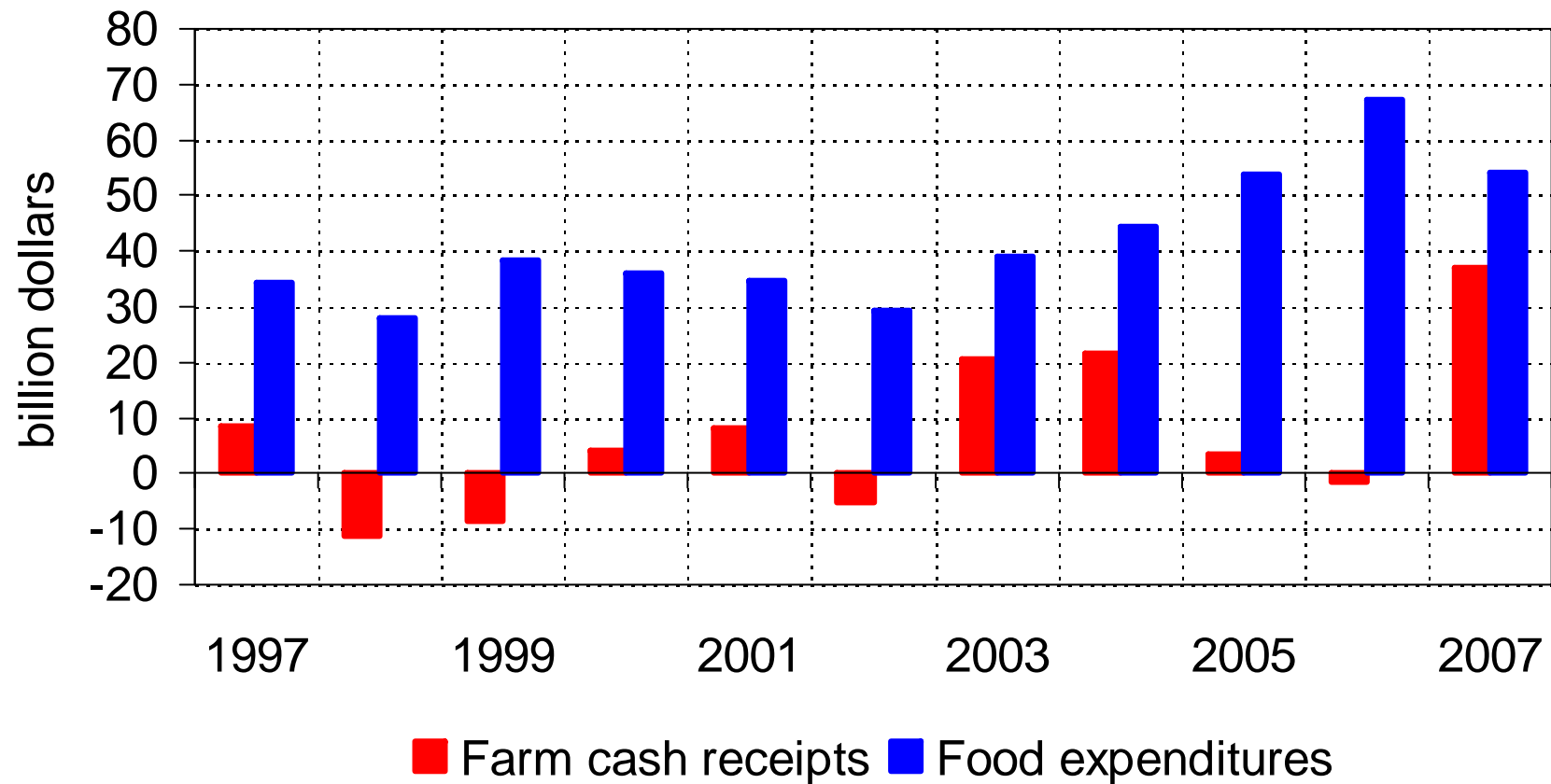
Notes: Average 2000-2007 inflation rate: 2.75% for all items, 2.57% for food. In the 3<sup>rd</sup> quarter of 2007, food prices were up 4.3% from a year ago; the overall CPI was up 2.4%.

# US farm cash receipts and food expenditures



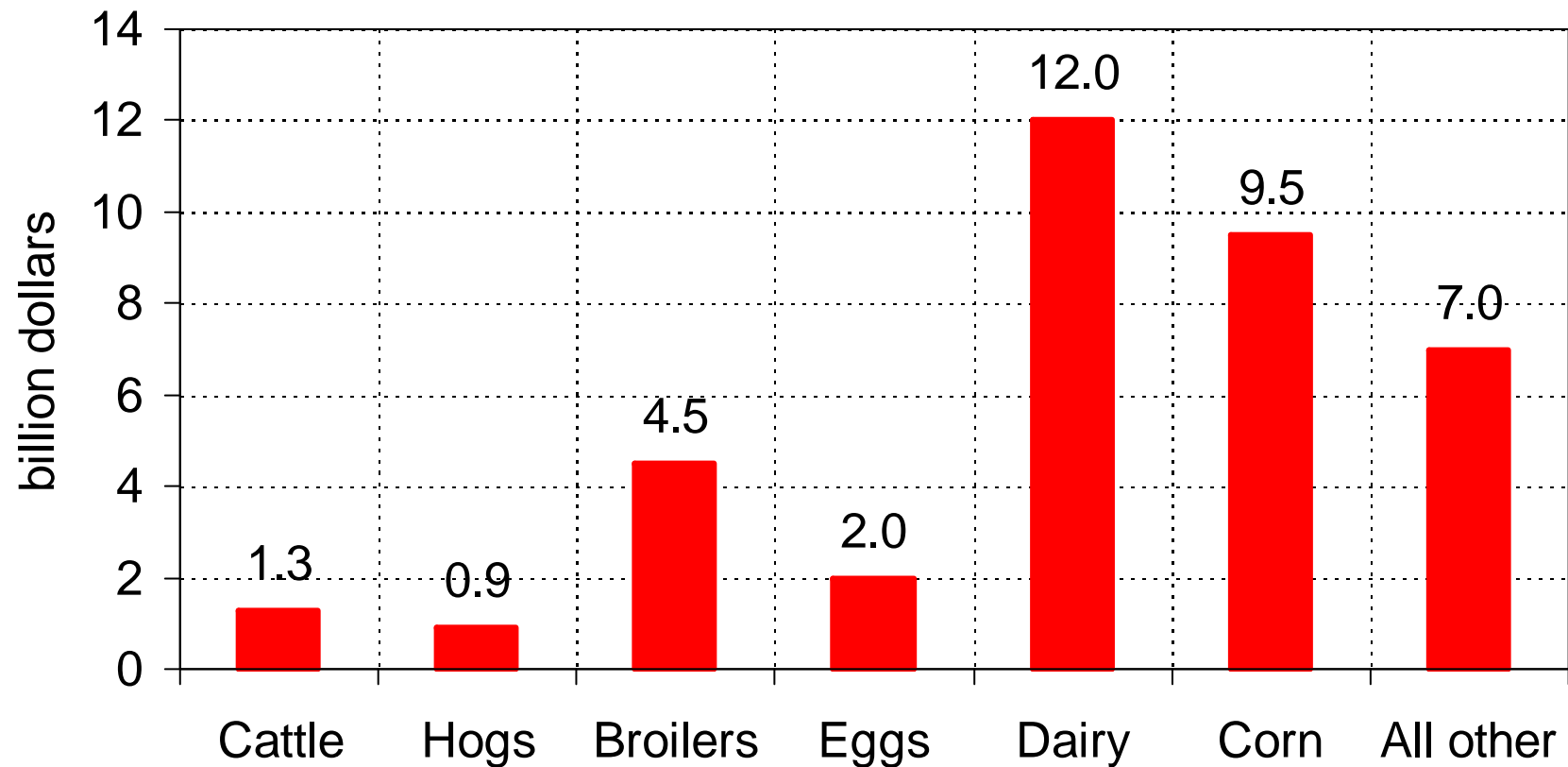
Source: August 2007 USDA Economic Research Service estimates of farm cash receipts through 2007 and food expenditures through 2006. Estimate of 2007 food expenditures based on year-to-date change in food sales reported by ERS in August 2007.

# Annual change in US farm cash receipts and food expenditures



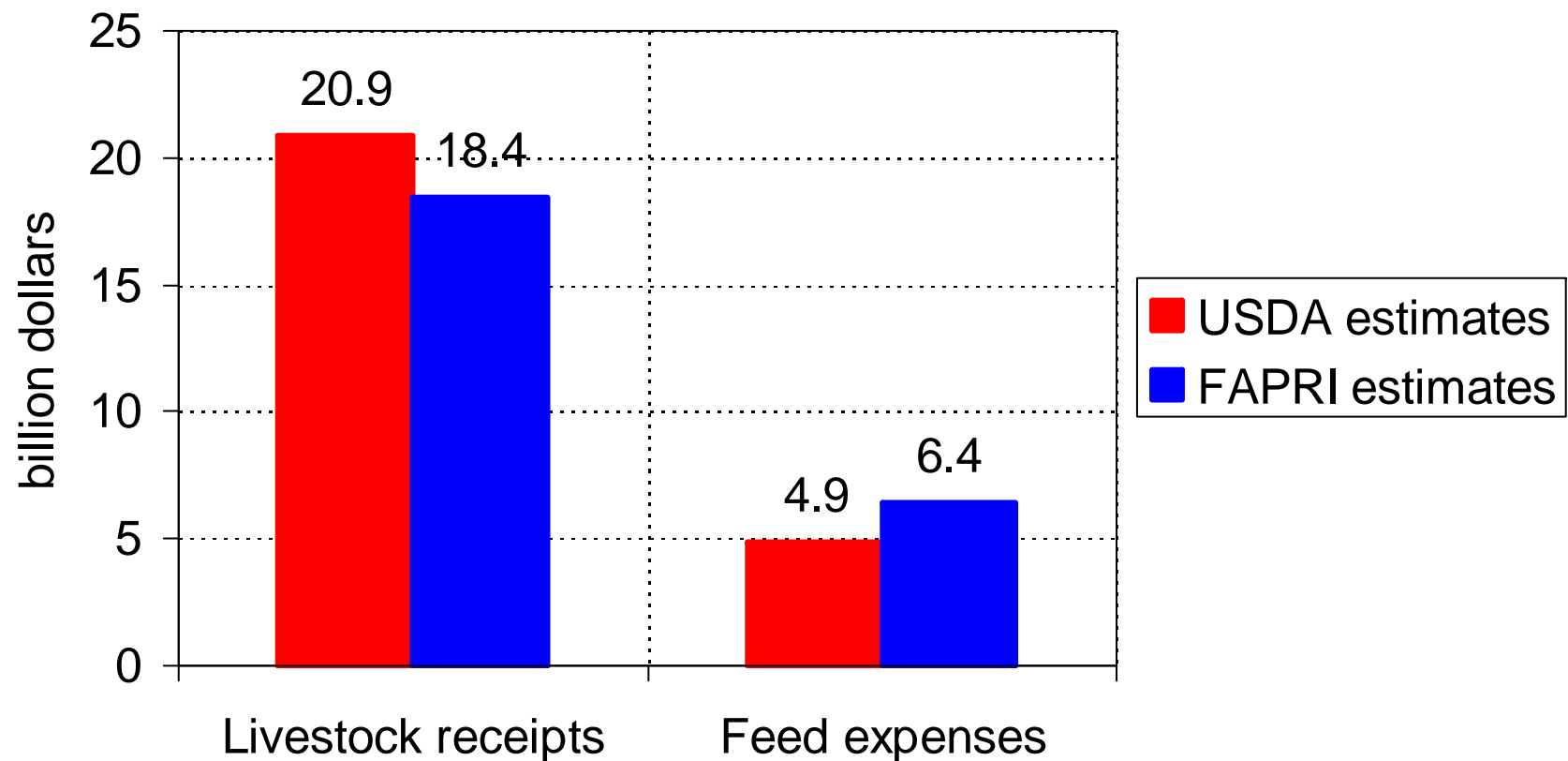
Source: August 2007 USDA Economic Research Service estimates of farm cash receipts through 2007 and food expenditures through 2006. Estimate of 2007 food expenditures based on year-to-date change in food sales reported by ERS in August 2007.

# Change in farm cash receipts 2007 vs. 2006



Source: August 2007 USDA Economic Research Service estimates of farm cash receipts.  
Total increase in cash receipts between 2006 and 2007: \$37.2 billion.

# Change in cash receipts and feed expenses, 2007 vs. 2006



USDA: August 2007 USDA Economic Research Service estimates

FAPRI: Unpublished estimates based on FAPRI August 2007 *Baseline Update for US Agricultural Markets*



# Behind the figures

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- Ethanol-induced higher corn prices do cause higher feed costs
- These contribute to higher livestock prices
- Livestock prices have increased for many reasons beyond feed costs
  - For dairy, strong demand in international markets
  - For poultry, rebound after low returns in 2006 slowed production growth
  - Feed cost effects on livestock take time to play out—what we've seen this year is probably due mostly to factors other than feed costs

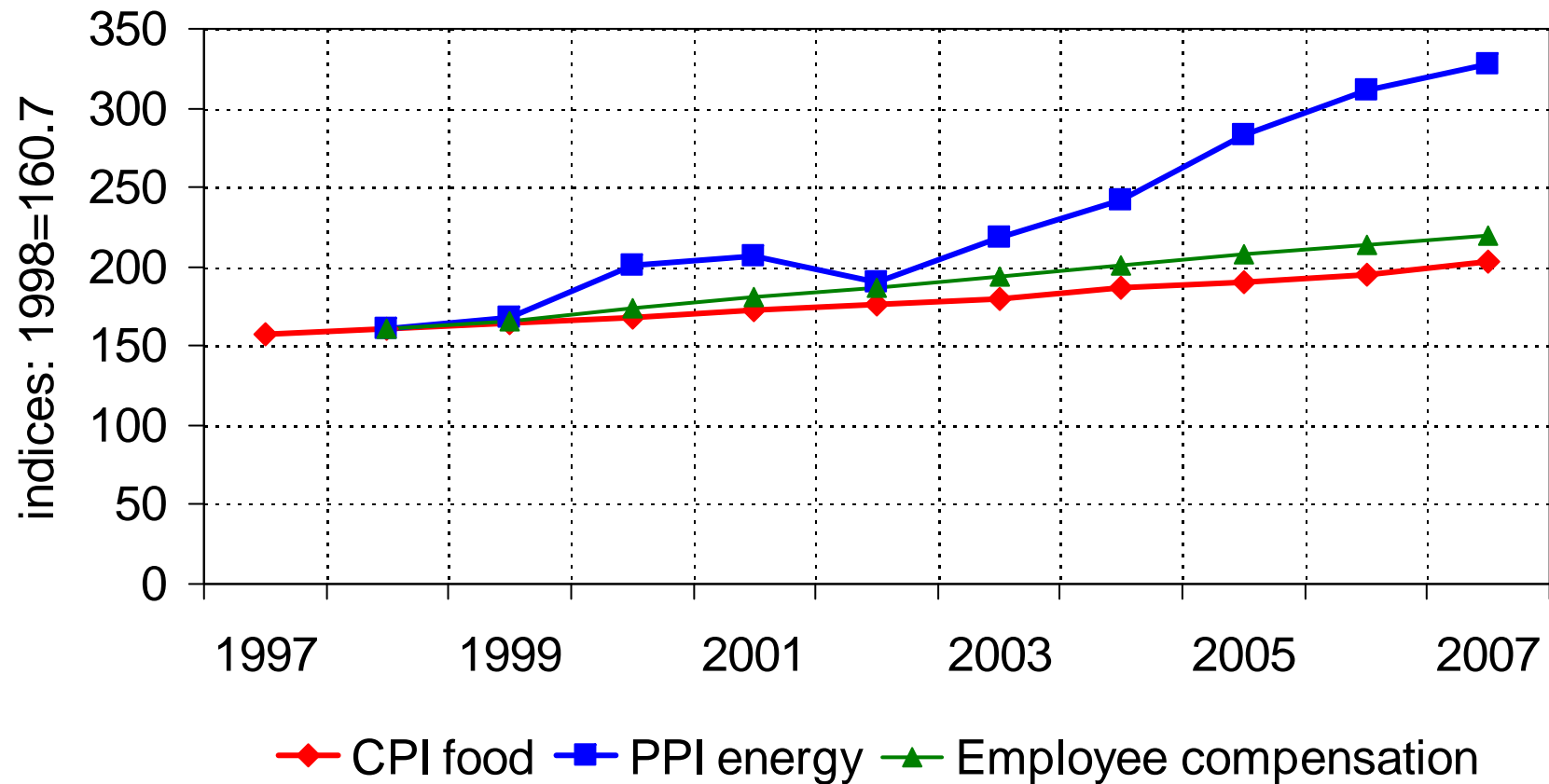


# Behind the figures, continued

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- Higher farm product prices contribute to higher food prices
  - Consumer prices for meats, dairy products have increased in 2007
  - Higher grain, vegetable oil prices contribute to higher costs for products from breakfast cereal to corn chips to soft drinks to salad oil
- But food prices are also affected by other factors
  - Higher fuel, energy costs have increased cost of manufacturing and transporting food
  - Wages, retailer margins, changes in what people buy and where, other factors all affect food prices

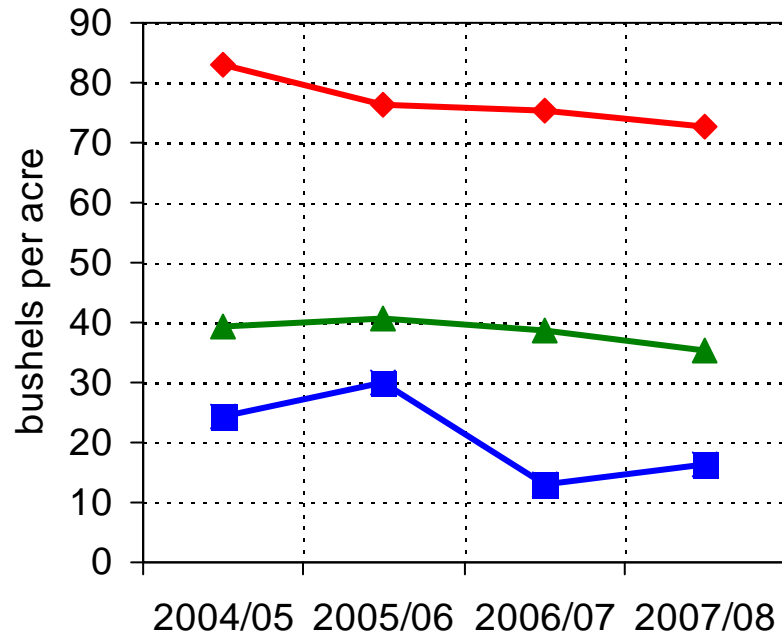
# Food price, fuel price, and employee compensation indices



Source: Global Insight, August 2007.

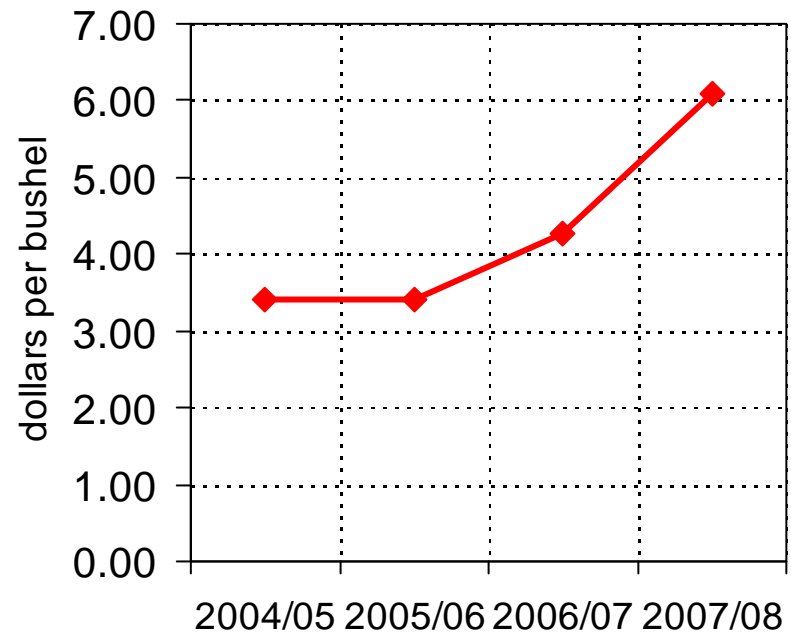
# Wheat yields and prices

## Wheat yields



◆ EU-25 ▲ Canada ■ Australia

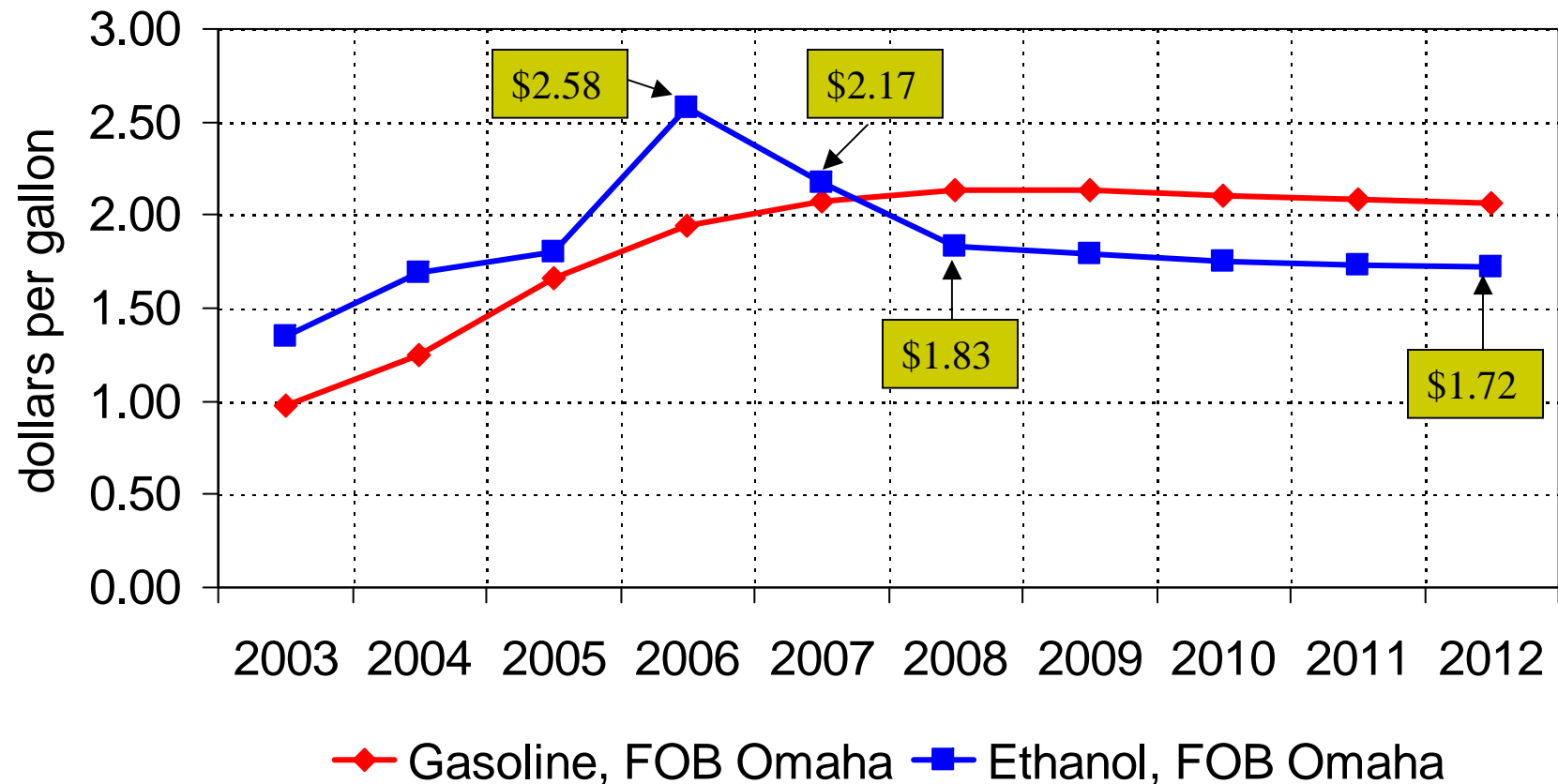
## Wheat price



◆ U.S. farm price

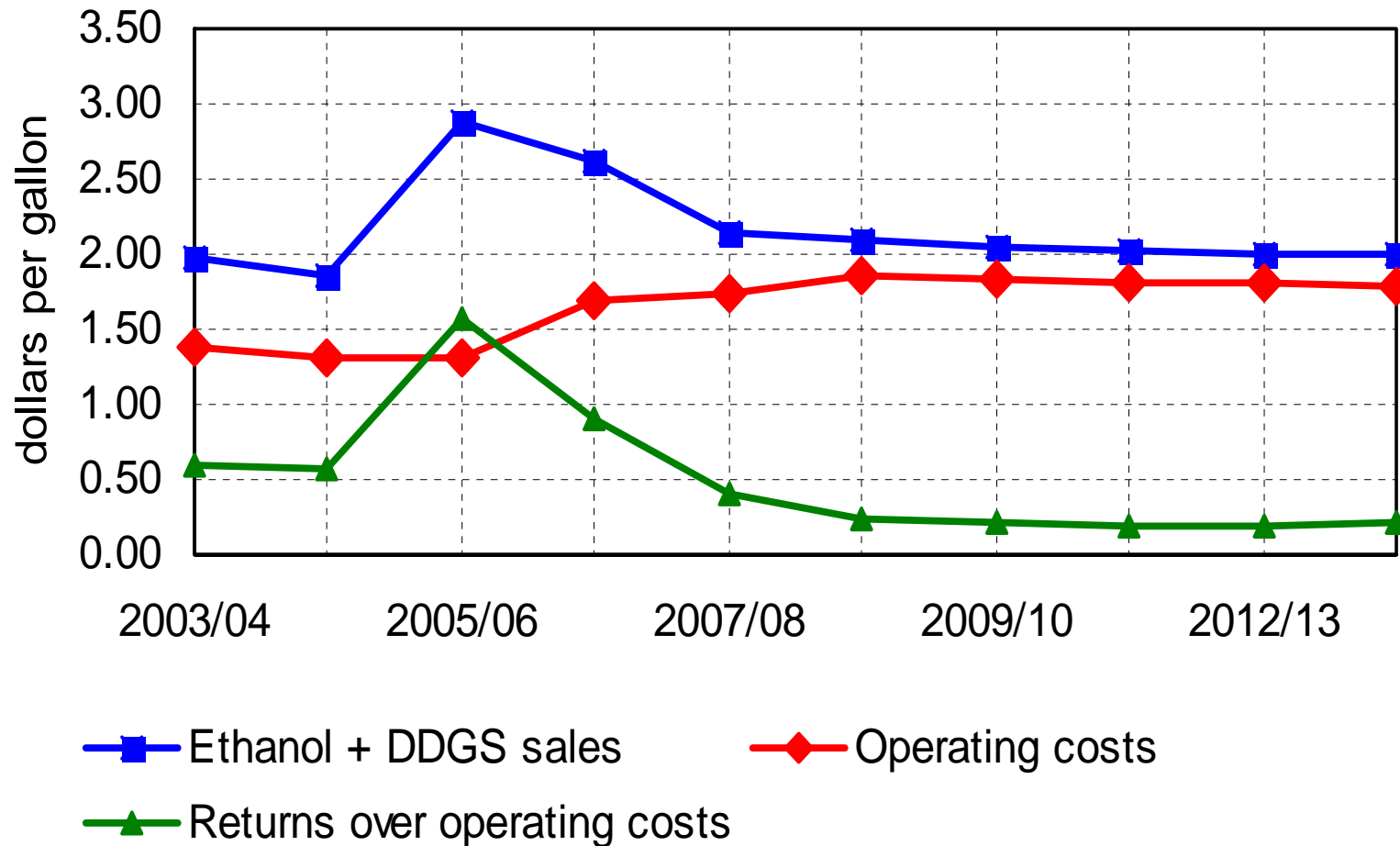
Source: USDA, October World Agricultural Supply and Demand Estimates

# FAPRI projections of wholesale gasoline and ethanol prices



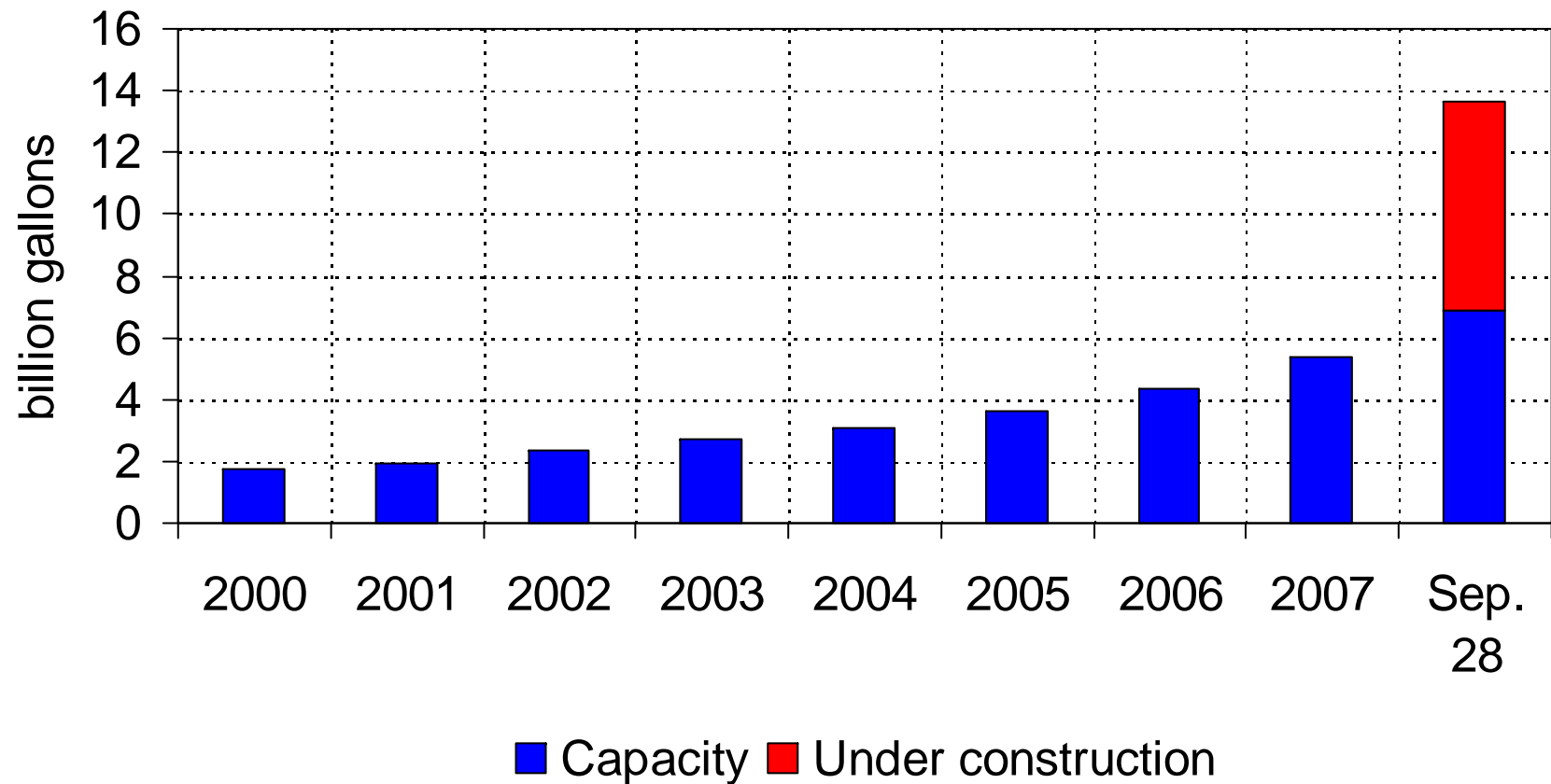
Source: FAPRI baseline update, August 2007

# Ethanol dry mill costs and returns



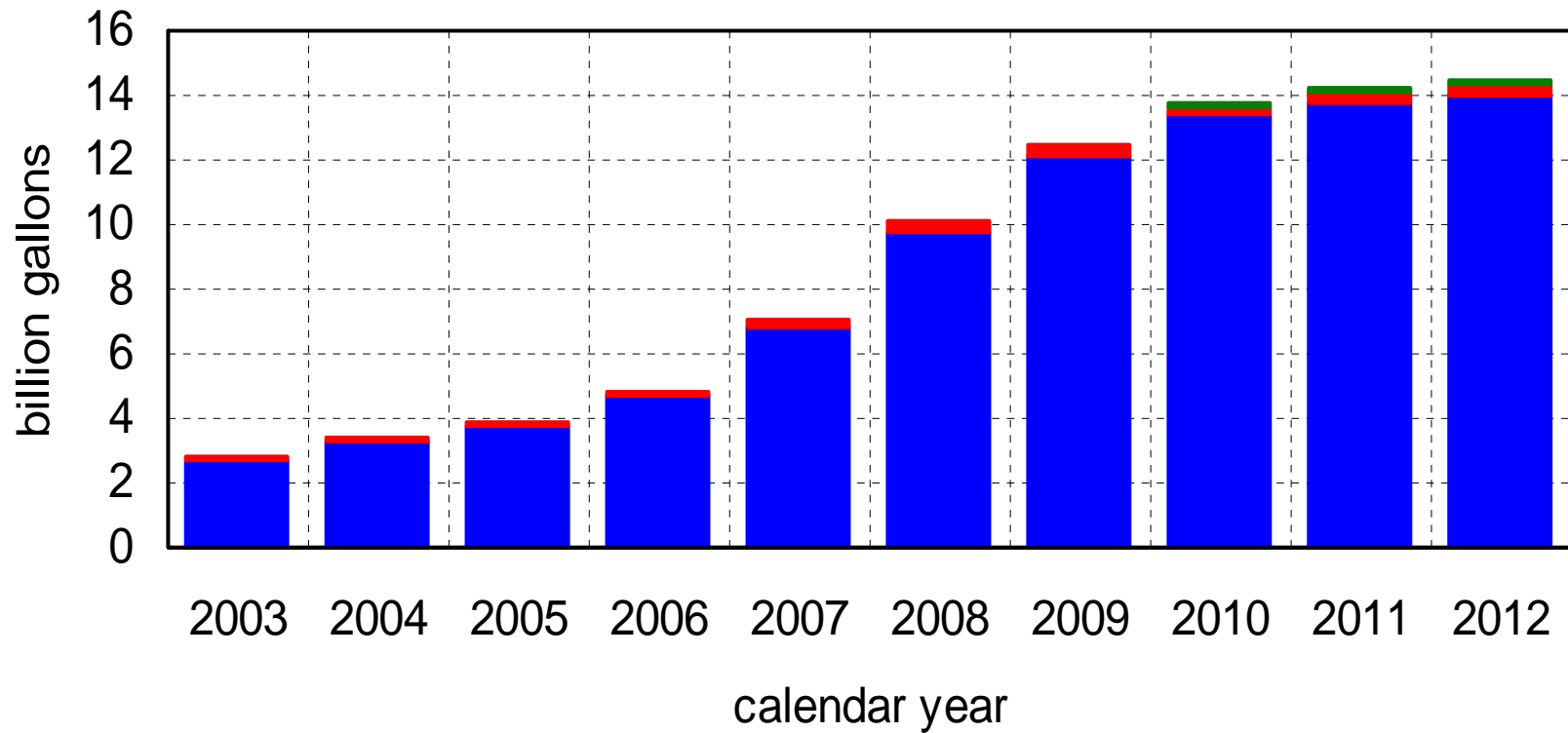
Source: FAPRI baseline update, August 2007

# US ethanol plant capacity, Jan. 1



Source: Renewable Fuel Association. Sep. 28, 2007 totals: 129 plants with 6.9 bil. gal. of capacity; 6.8 bil. gal. under construction (76 plants) or expansion (10 plants)

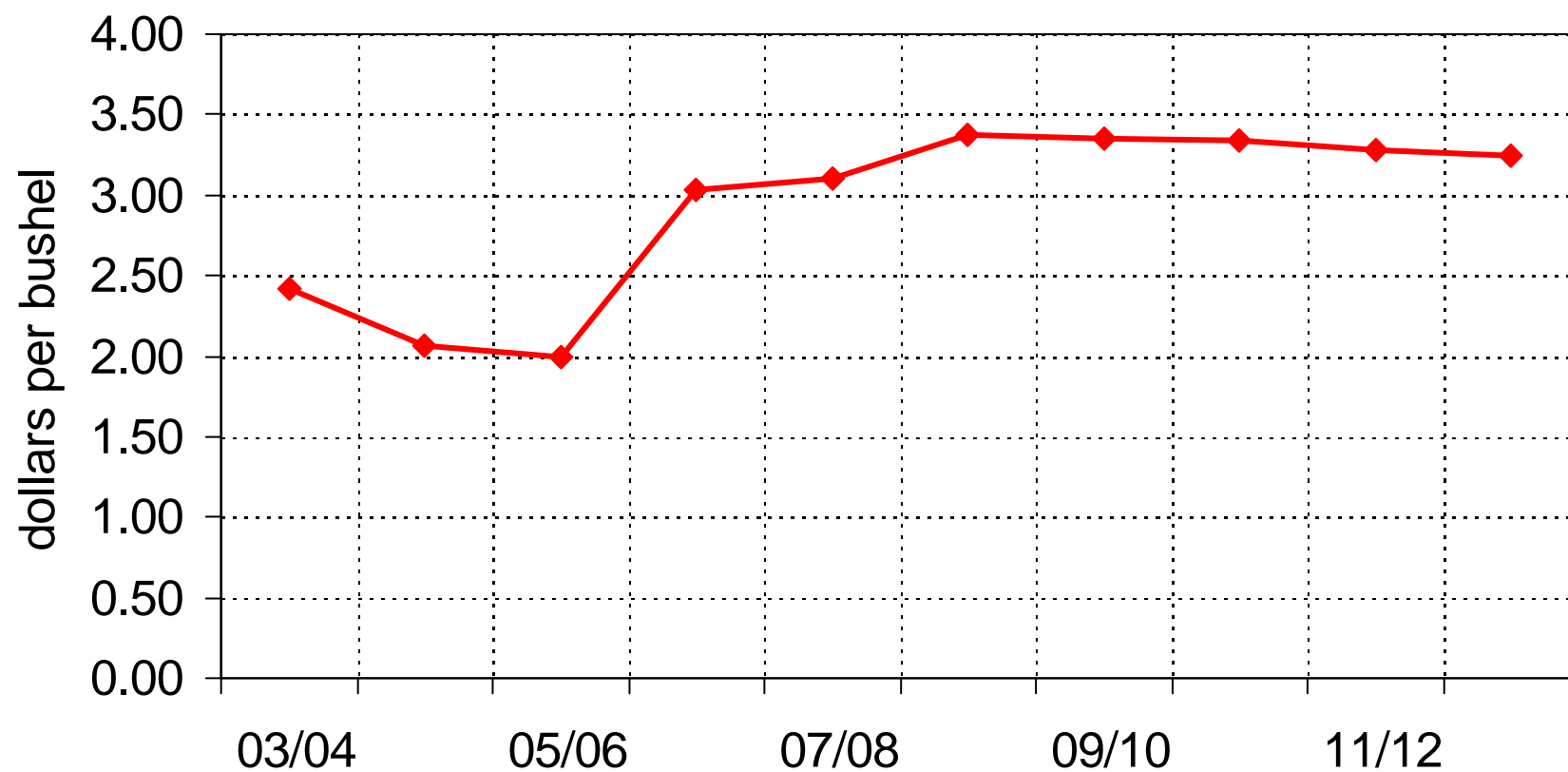
# U.S. ethanol production



■ From corn ■ From other feedstocks ■ Cellulosic

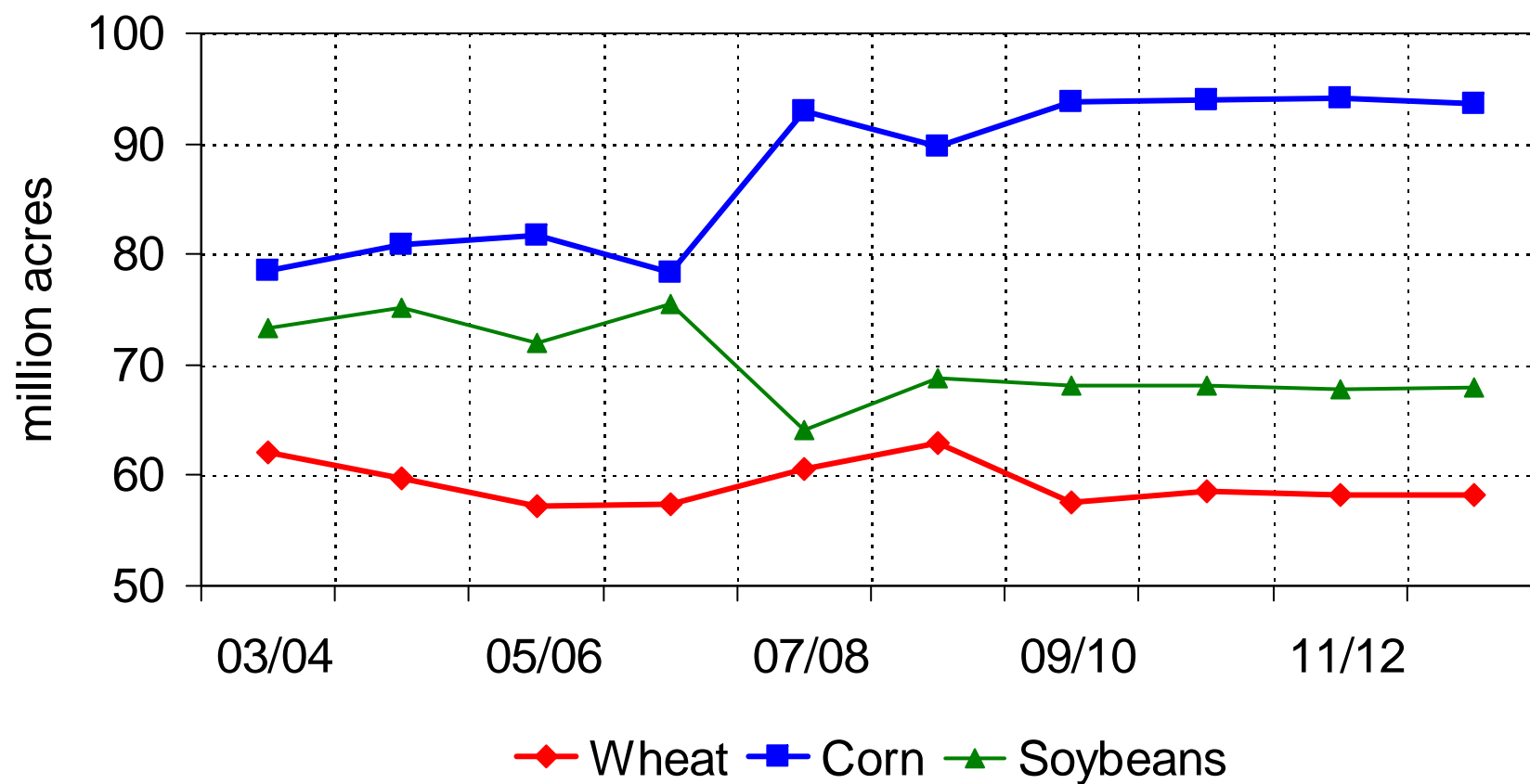
Source: FAPRI baseline update, August 2007

# Corn prices



Source: FAPRI baseline update, August 2007

# Wheat, corn & soybean area planted



Source: FAPRI baseline update, August 2007



# Concluding remarks

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- Ethanol has contributed to higher feed and food prices, but other factors also are important
- Without poor weather or other shocks, we do not expect further large increases in farm-level prices—and some could moderate
- Ethanol industry at critical stage
  - High profits of previous two years are gone
  - How will markets and policies evolve?