

# *Outlook for U.S. Retail Food Prices and Inflation in 2009*

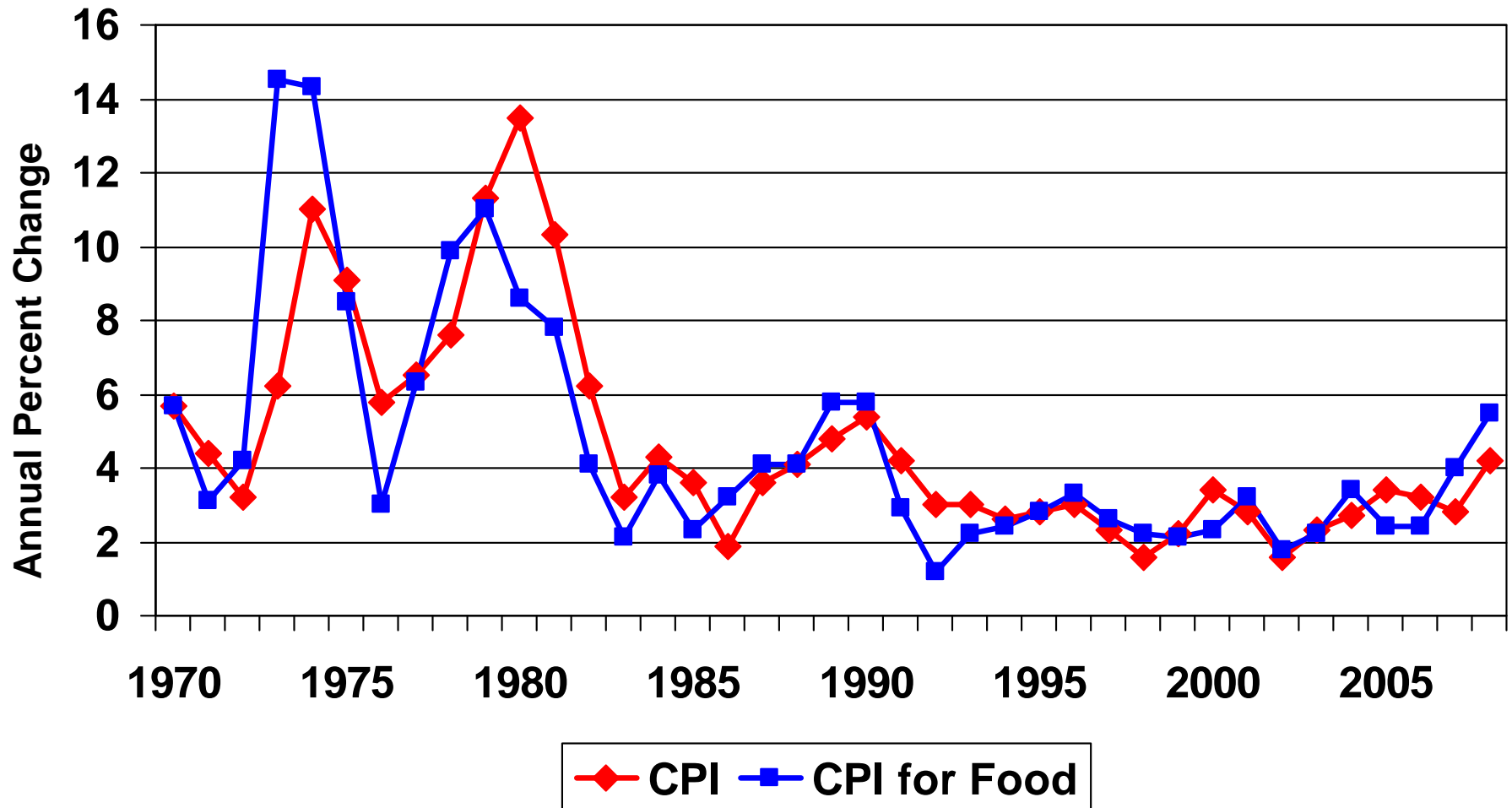
**Ephraim Leibtag, PhD**

Food Markets Branch, Food Economics Division  
ERS-USDA

**Presented at the 2009 Agricultural Outlook Forum  
*Global Agriculture & Rural America in Transition***

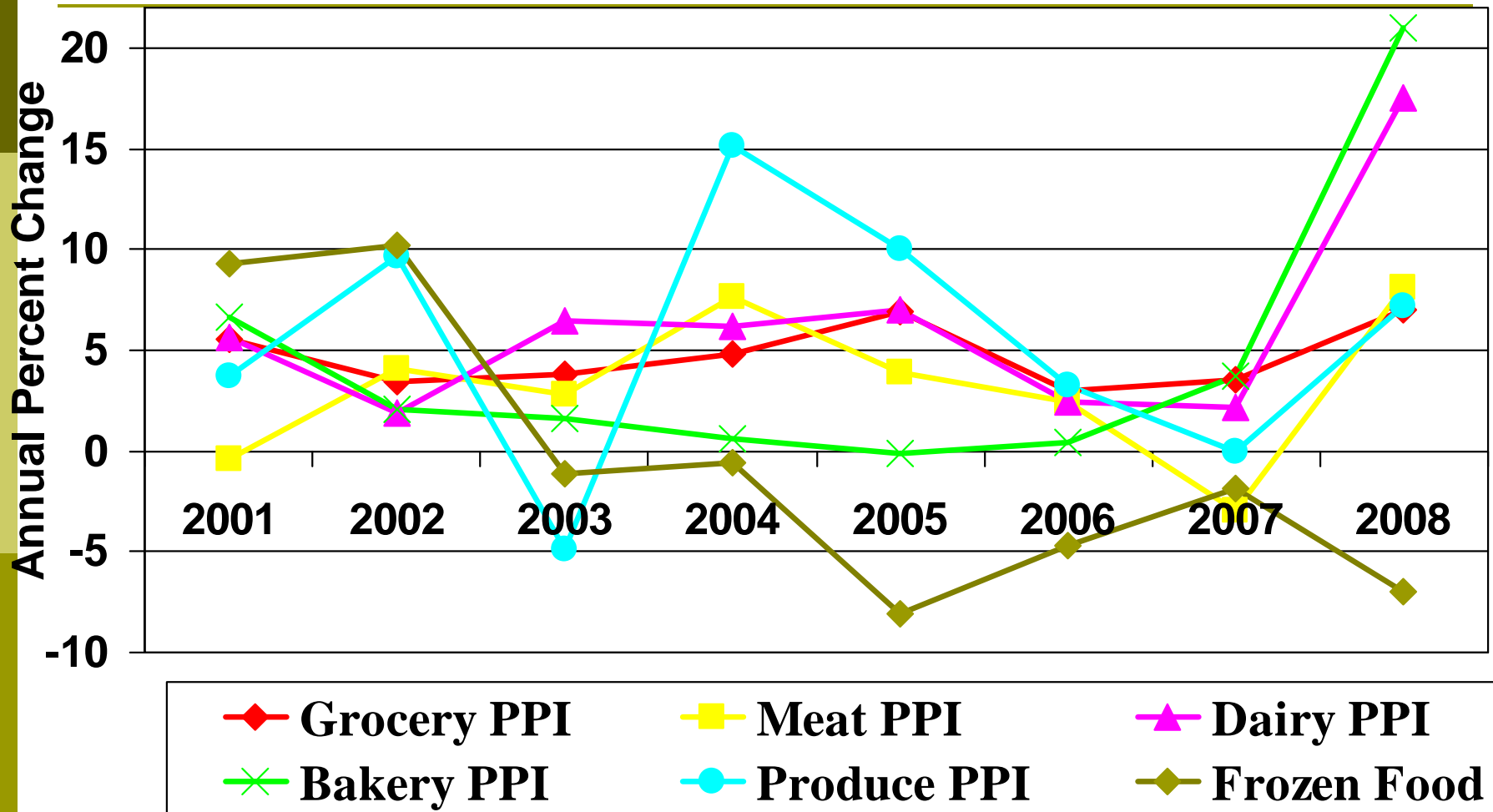
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# CPI vs. CPI for Food 1970-2008



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# PPI for Retail Grocery Department Margins

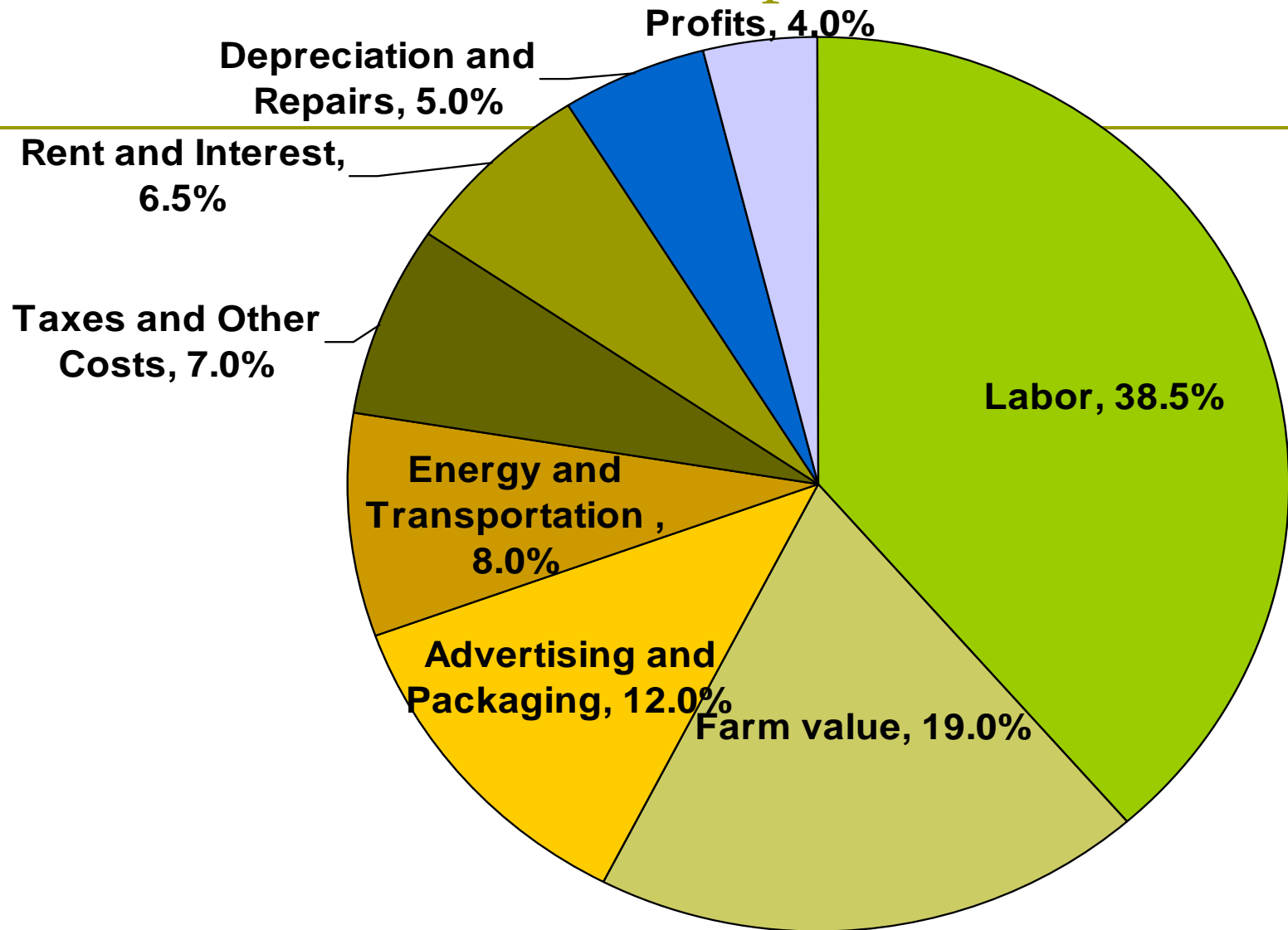


# Sources of Retail Price Changes

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- Changes in Costs
  - Cost of Goods Sold
  - Operating Costs
- Changes in Retail Market Competition
  - Number of retailers in a market
  - Type of retailers
    - Specialization
    - Differentiation
- Changes in Consumer Demand

# Where a Consumer Dollar Spent on Food Goes



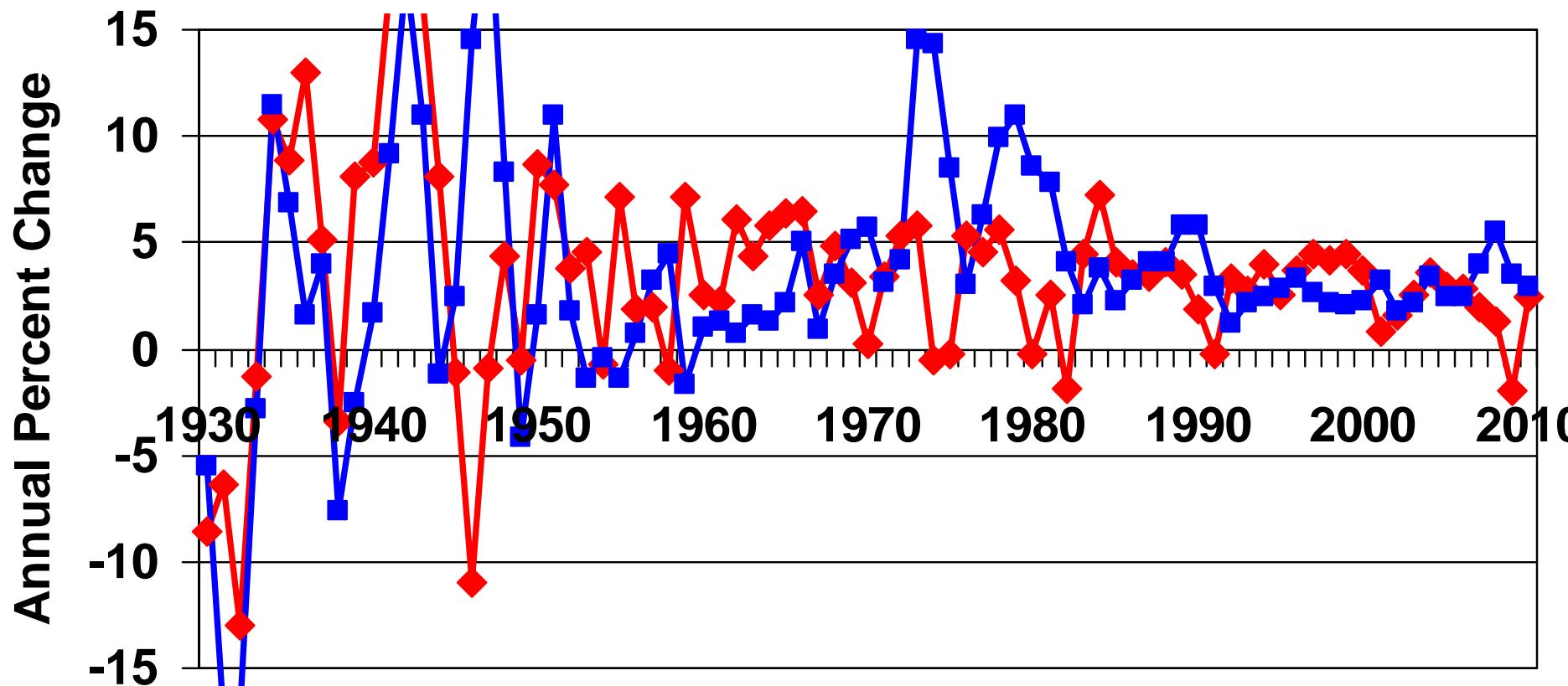
Source: Economic Research Service Calculations  
using 2006 Data  
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# Trends in Retail Food Markets

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- ❑ Impact of the Recession
- ❑ Volatility in food commodity markets
- ❑ Transportation and energy costs
- ❑ Competition from a variety of formats
  - Supercenter/Warehouse Club/Dollar/Limited Assortment/Upscale/Gourmet
- ❑ Food Safety
- ❑ Location and size of store
- ❑ Lowfat/Sugar Free/Natural/Organic /Fresh/NoTransFat/Local...

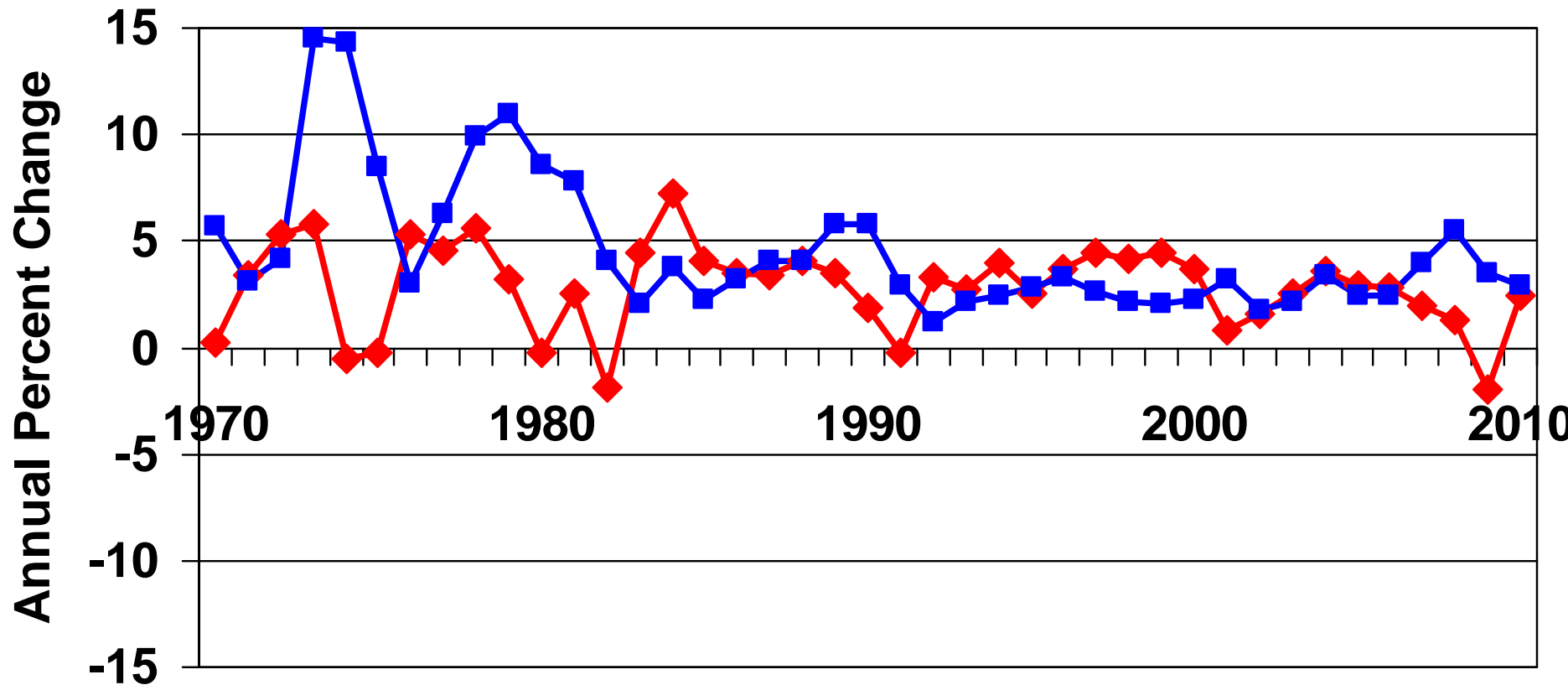
# GDP Growth and Food Inflation, 1930-2010\*



\*2009, 2010 forecasts

◆ Real GDP Percent Change    ■ Food CPI Percent Change

# GDP Growth and Food Inflation, 1970-2010\*

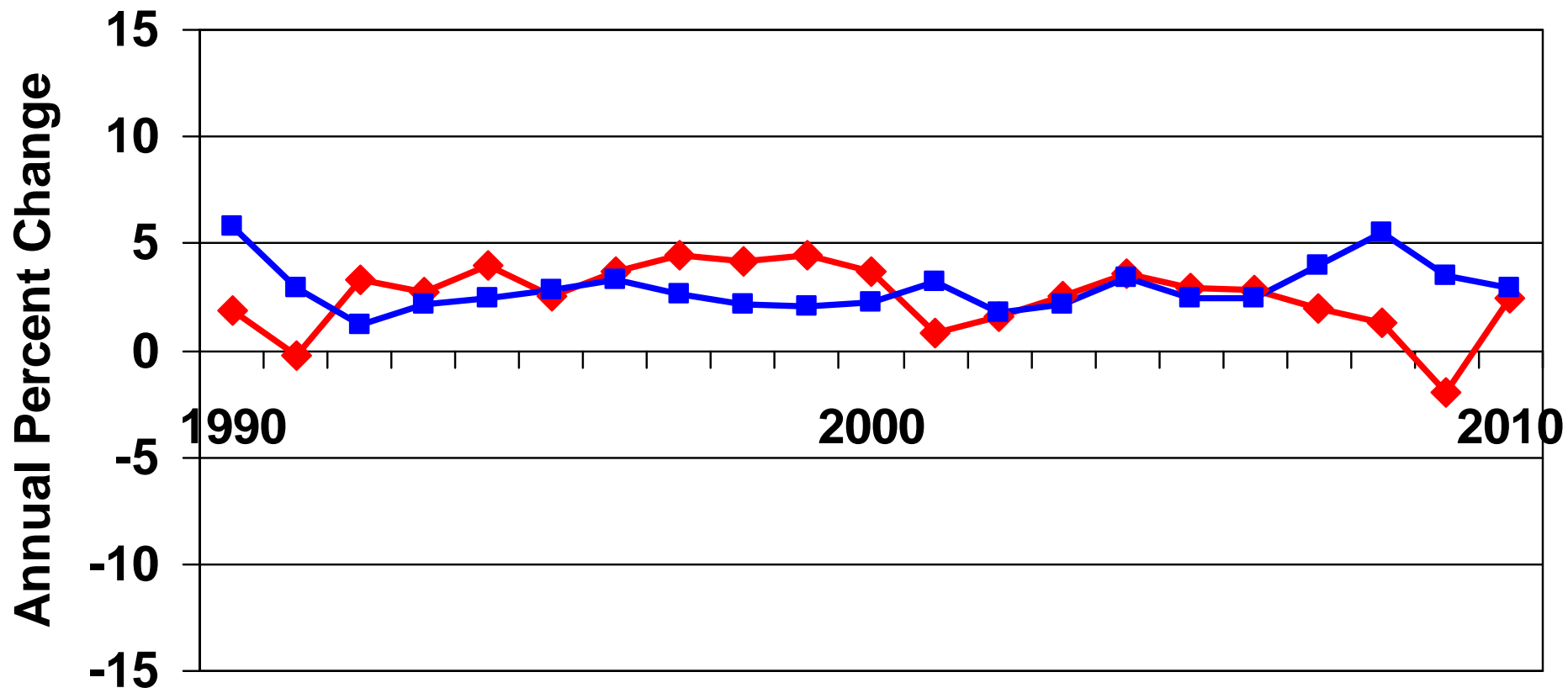


\*2009, 2010 forecasts

◆ Real GDP Percent Change    ■ Food CPI Percent Change



# GDP Growth and Food Inflation, 1990-2010\*



\*2009, 2010 forecasts

◆ Real GDP Percent Change    ■ Food CPI Percent Change

# GDP Growth and Food Inflation Trends

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## □ Mean Growth Rate

- 1930-2008: GDP 3.5, Food CPI 3.5
  - 1930-1949: GDP 3.7, Food CPI 2.6
  - 1950-1969: GDP 4.3, Food CPI 2.0
  - 1970-1989: GDP 3.2, Food CPI 6.3
  - 1990-2008: GDP 2.8, Food CPI 2.9

## □ Same Year Correlation Patterns

- 1930-2008: 0.37
  - 1930-1949: 0.51
  - 1950-1969: 0.09
  - 1970-1989: -0.21
  - 1990-2008: -0.39

# GDP Growth and Food Inflation Lags

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## □ 1-Year Lag Correlation Patterns

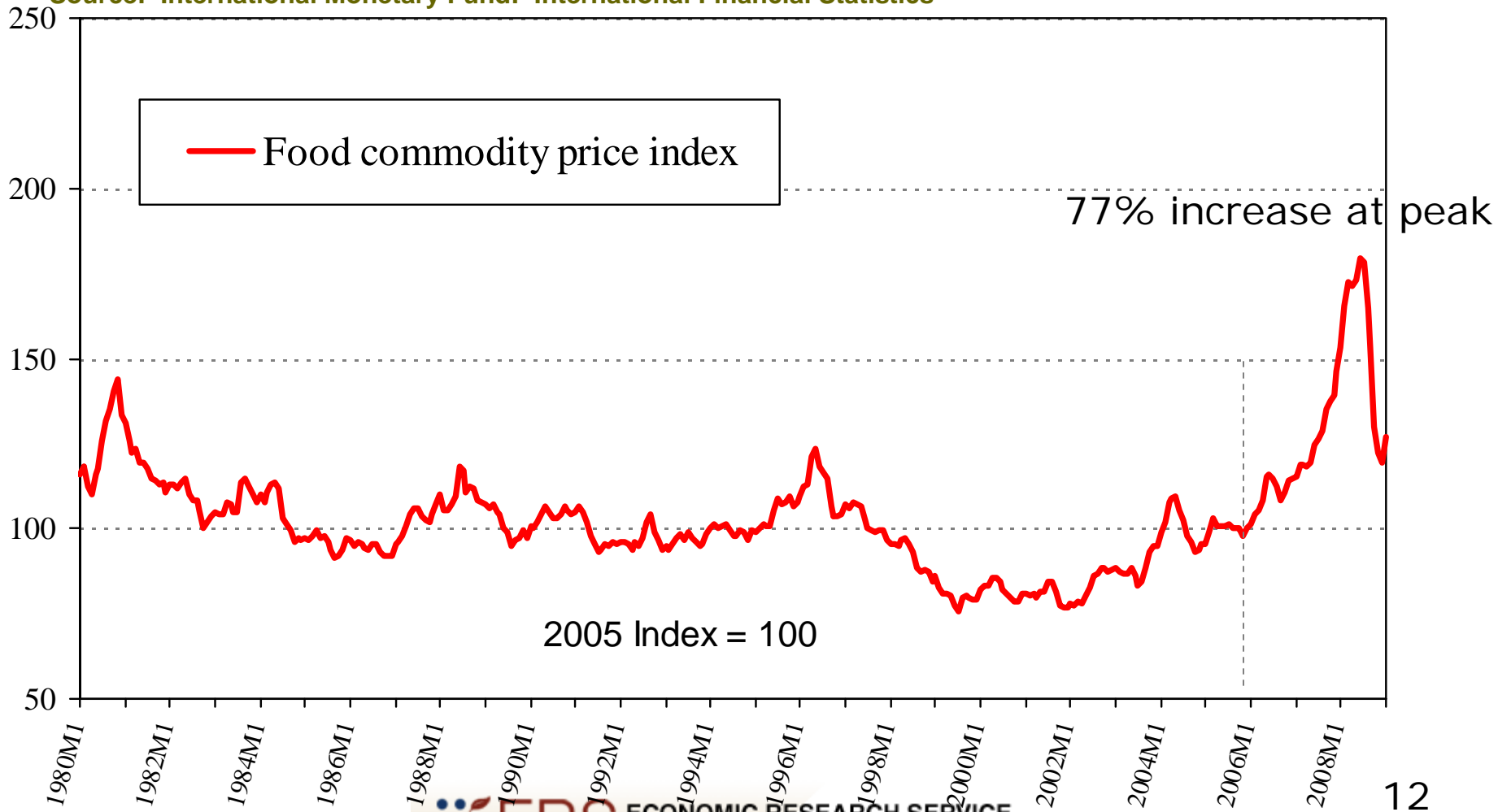
- 1930-2008: 0.26
  - 1930-1949: 0.27
  - 1950-1969: 0.41
  - 1970-1989: 0.35
  - 1990-2007: 0.08

## □ 2-year Lag Correlation Patterns

- 1930-2008: 0.05
  - 1930-1949: 0.04
  - 1950-1969: 0.05
  - 1970-1989: 0.36
  - 1990-2006: 0.08

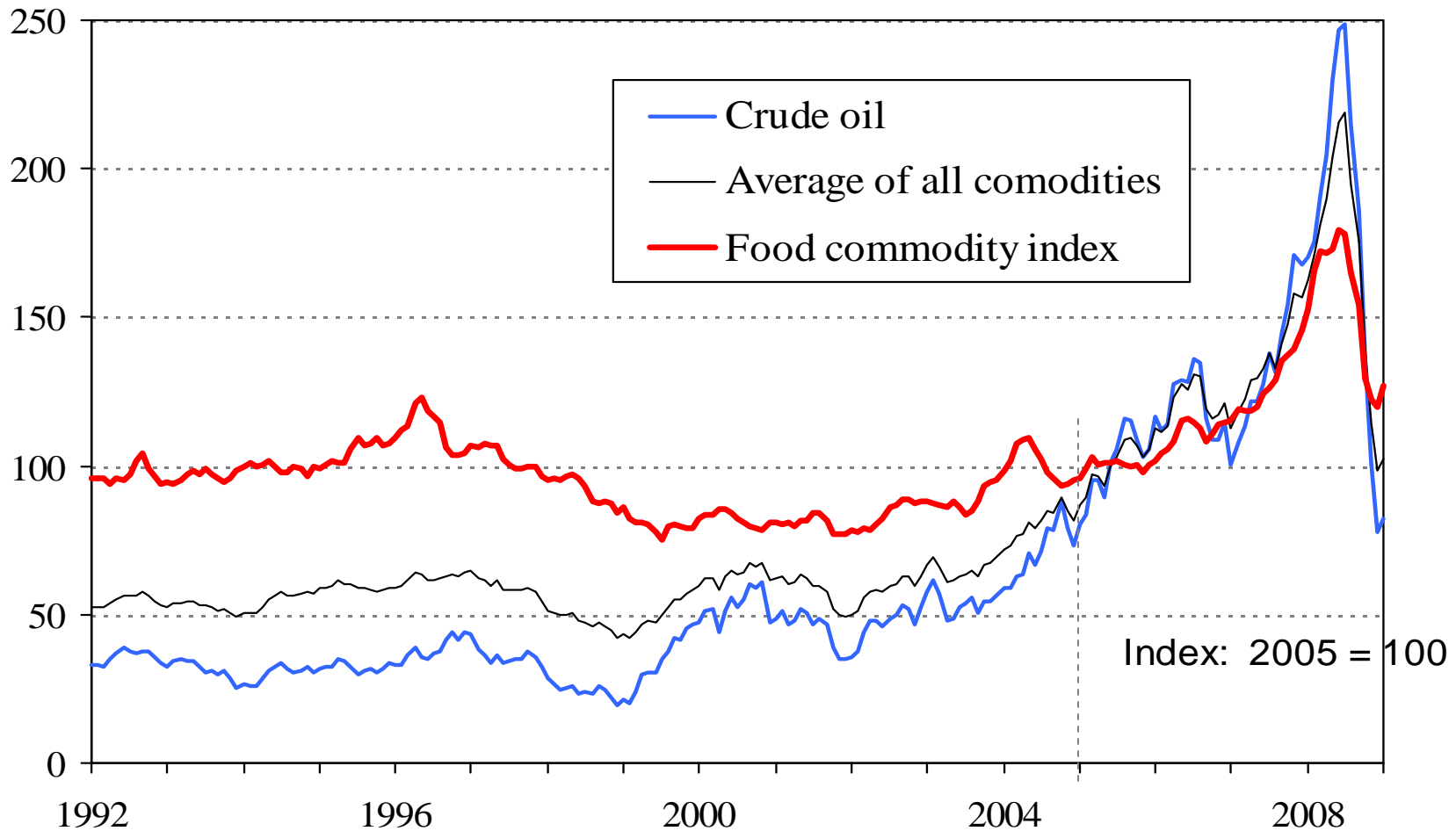
# Food commodity prices down 30% from the summer, but still up 25% since January 2006

Source: International Monetary Fund: International Financial Statistics



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# Prices of Many Commodities Rose Even More

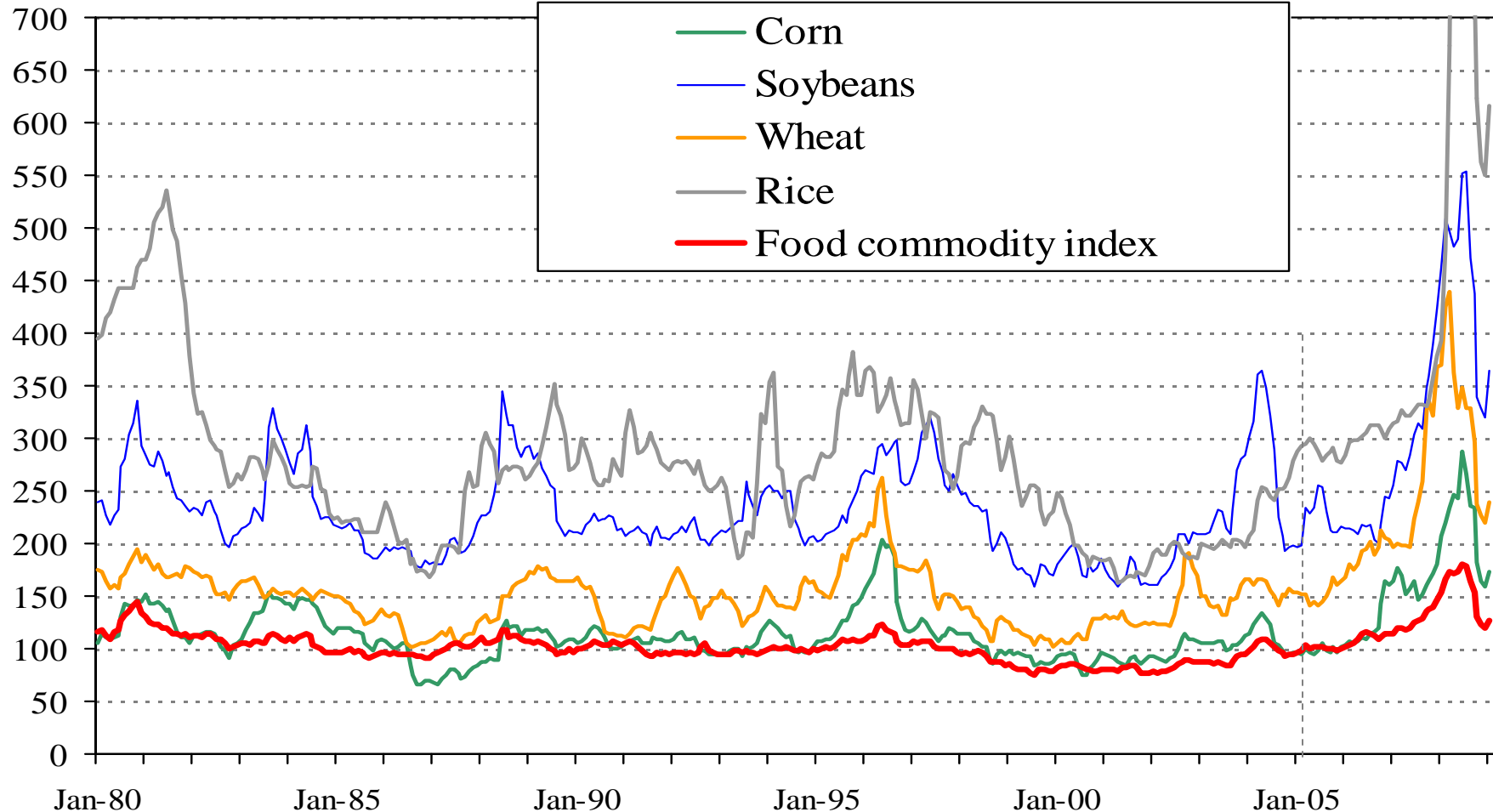


Source: International Monetary Fund: International Financial Statistics

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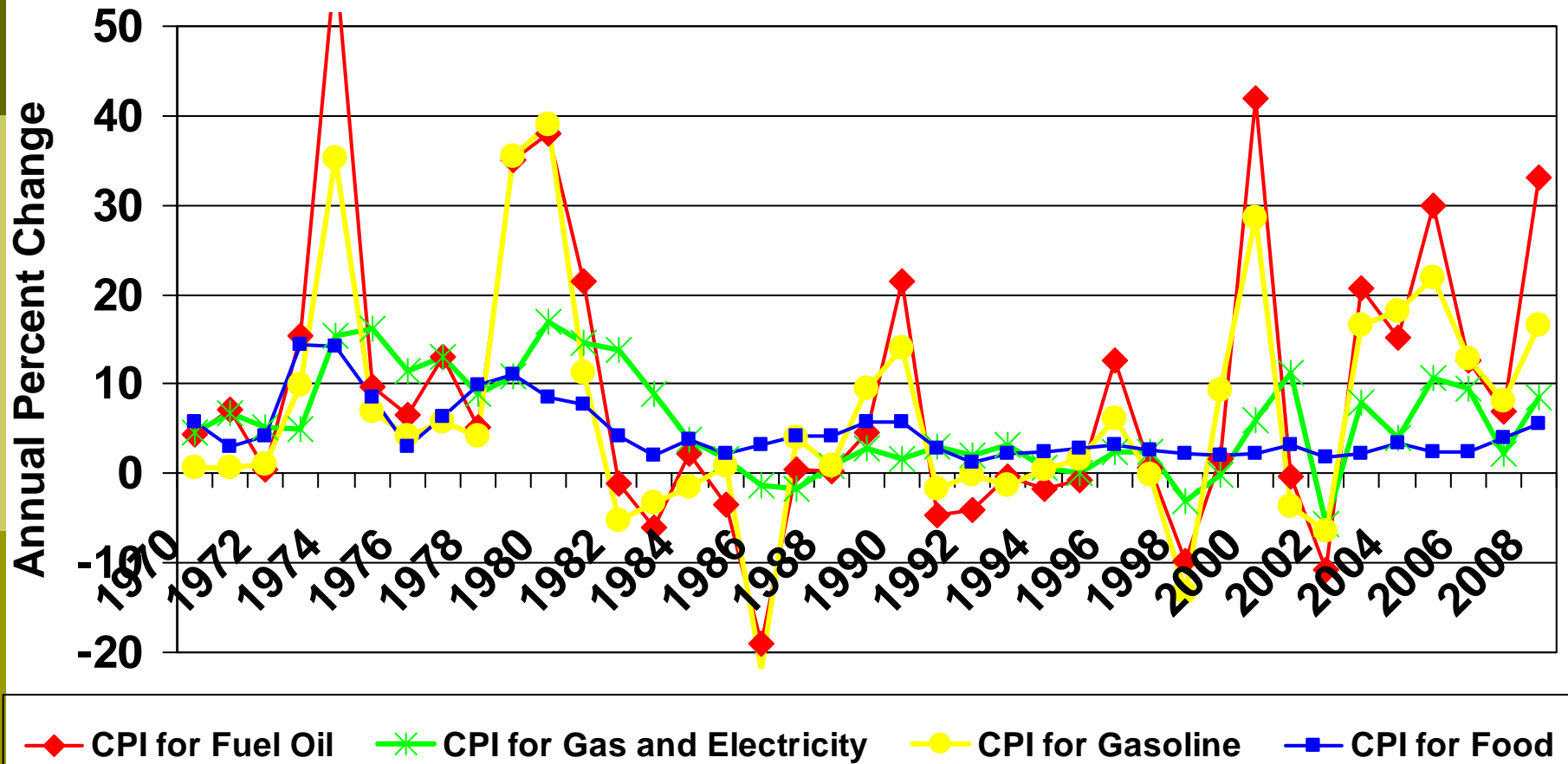
# Spikes in food commodity prices: Will this time be any different?

Index: 2005 = 100

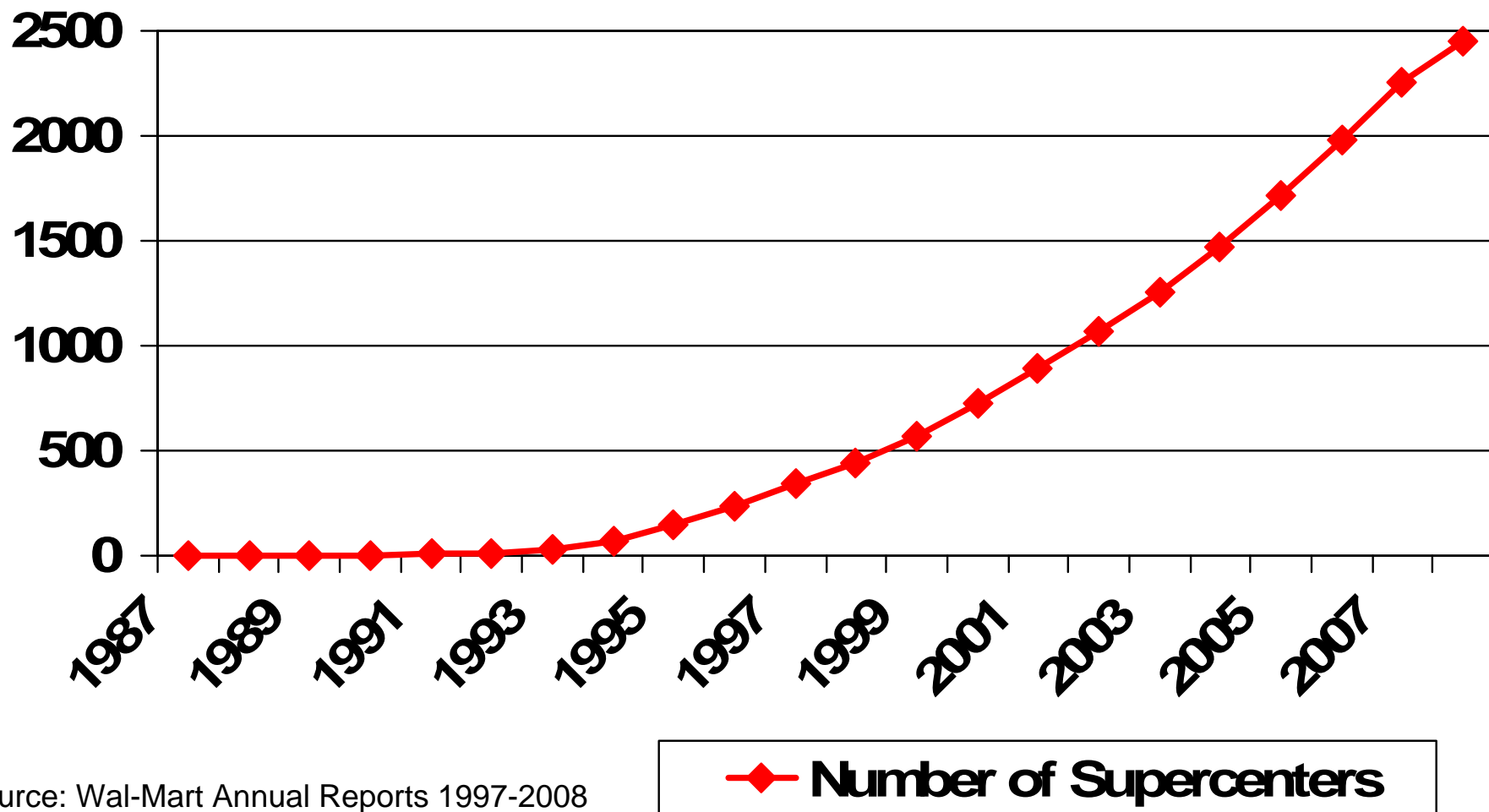


Source: International Monetary Fund: International Financial Statistics

# Food vs. Energy, 1970-2008



# Wal-Mart Supercenter Store Count

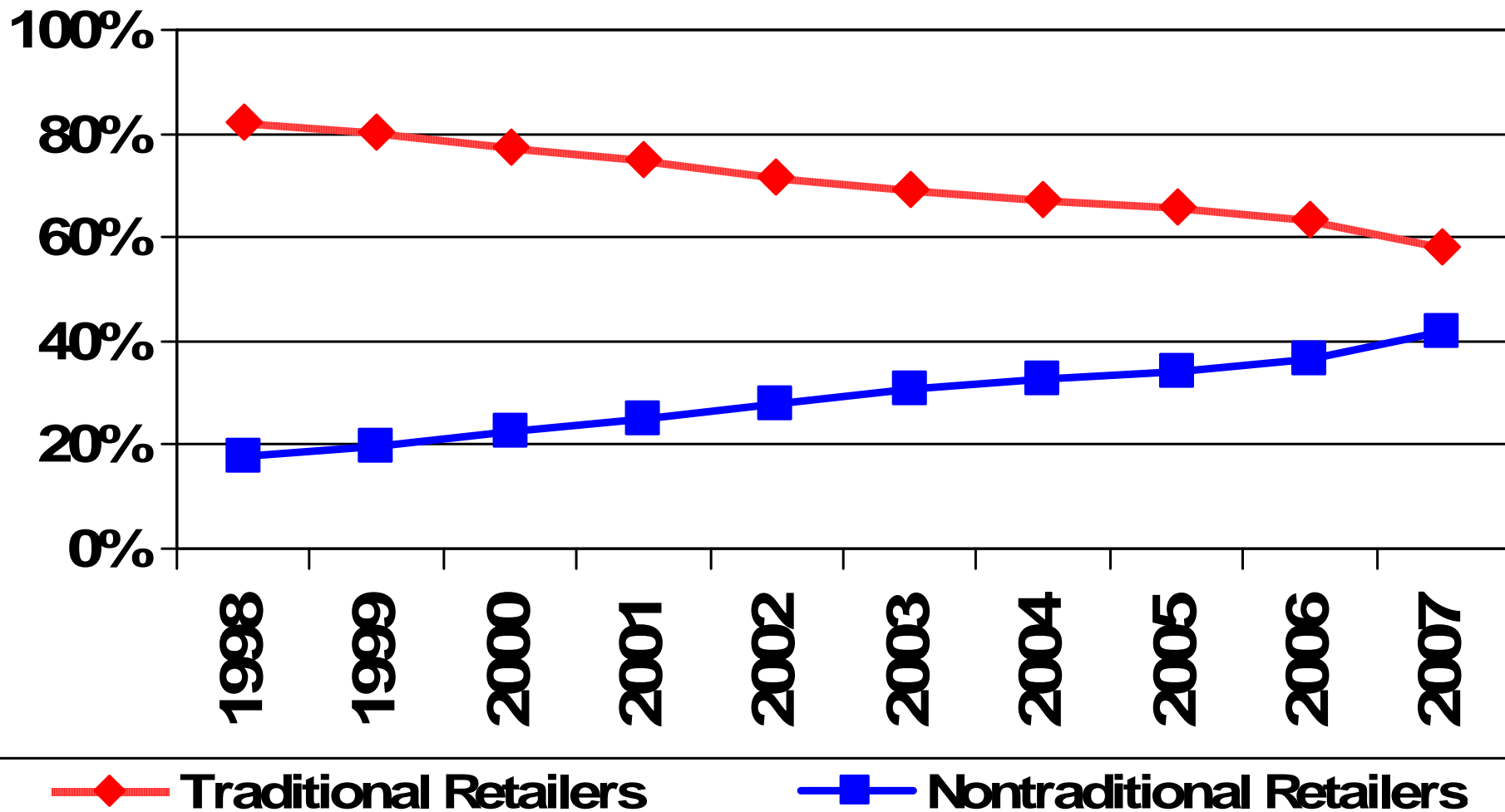


Source: Wal-Mart Annual Reports 1997-2008

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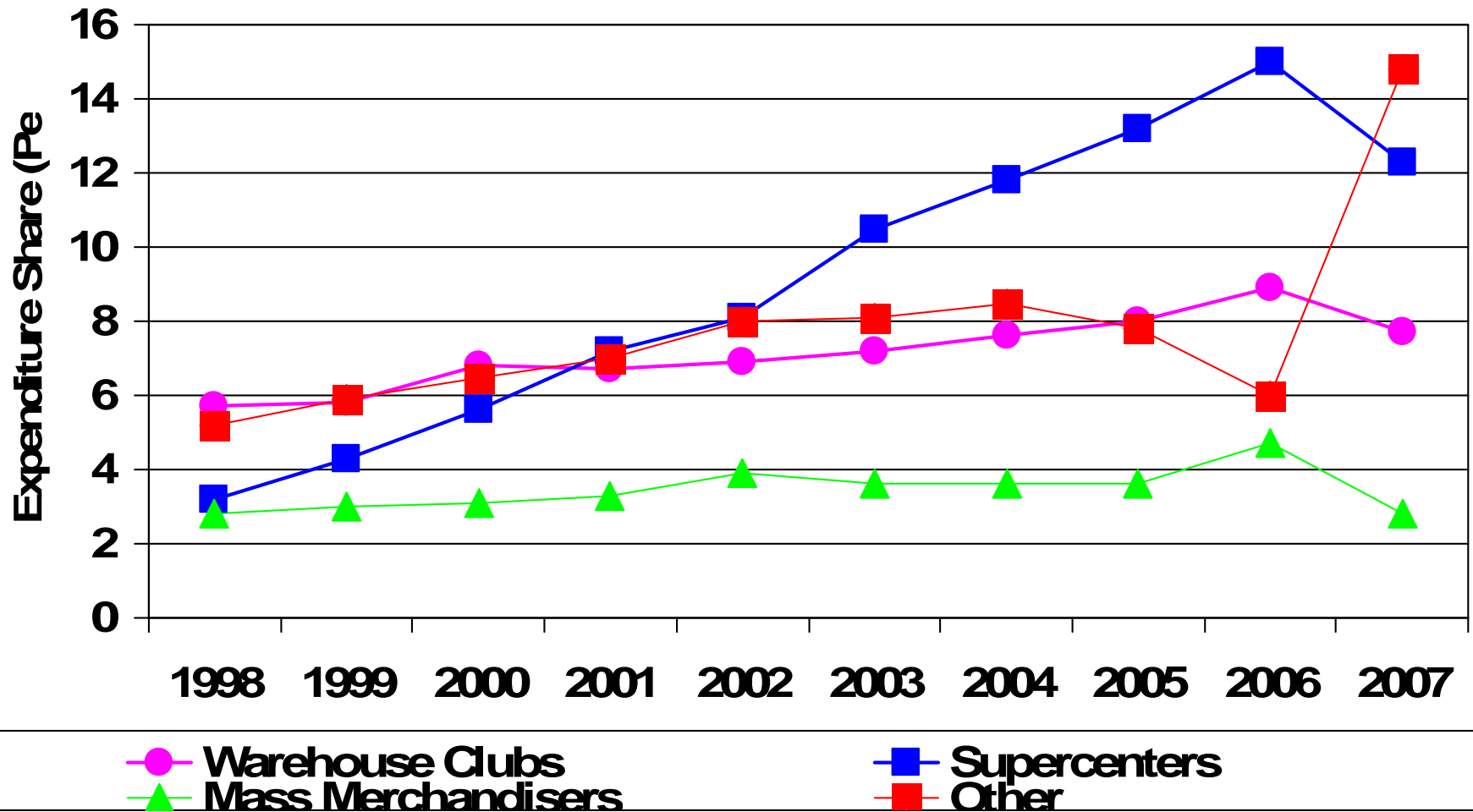
# Expenditure Shares for Nontraditional Food Stores Continue to Rise



Source: ERS Calculations of ACNielsen Homescan Data

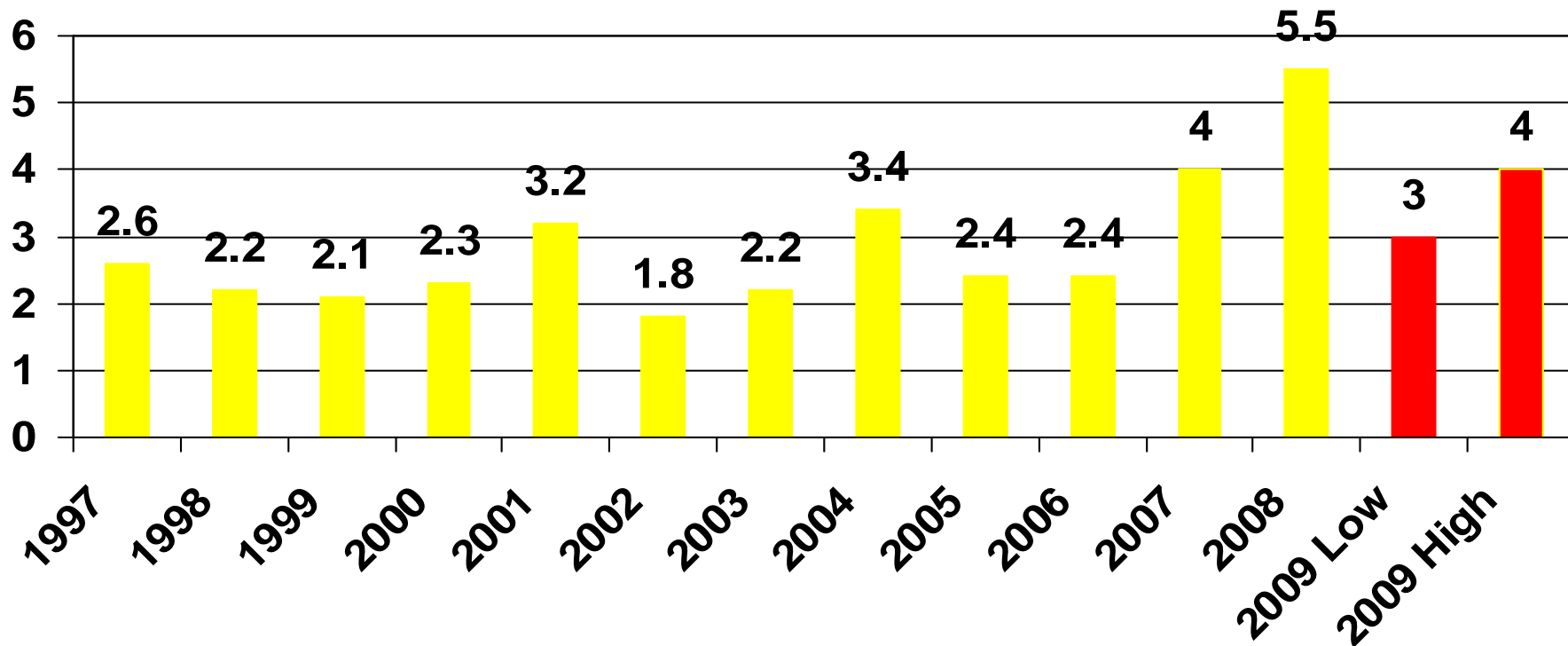
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# Expenditure Shares for Nontraditional Formats 1998-2007



# Food CPI Well Above Historical Average in 2008, Lower in 2009

## Annual Percent Change in CPI for Food



# Why?

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## □ 2008

- Higher commodity costs (corn, wheat, soybeans, etc.)
- Higher energy and transportation costs
- Increased U.S. exports due to weaker dollar/growing global demand

## □ 2009

- Food commodity costs down from summer highs
- Energy prices down
- Domestic and global demand weakens

# Caveats

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- Food commodity volatility
  - Commodities safe or...
  - Nothing is safe
  
- Food ~ Energy Connection
  
- Global demand for U.S. exports
  
- Duration and depth of recession
  - Consumer demand for food

# Percent Change in Food CPI (a)

| Items               | 2006 | 2007 | <b>2008</b> | <b>Forecast<br/>2009</b> |
|---------------------|------|------|-------------|--------------------------|
| All Food            | 2.4  | 4.0  | 5.5         | 3.0 to 4.0               |
| Food Away from Home | 3.1  | 3.6  | 4.4         | 3.5 to 4.5               |
| Food at Home        | 1.7  | 4.2  | 6.4         | 2.5 to 3.5               |
| Beef                | 0.8  | 4.4  | 4.5         | 1.5 to 2.5               |
| Pork                | -0.2 | 2.0  | 2.3         | 1.5 to 2.5               |
| Other Meats         | 1.8  | 2.3  | 3.1         | 0.0 to 1.0               |
| Poultry             | -1.8 | 5.2  | 5.0         | 2.0 to 3.0               |

# Percent Change in Food CPI (b)

| Items            | 2006 | 2007 | <b>2008</b> | <b>Forecast<br/>2009</b> |
|------------------|------|------|-------------|--------------------------|
| All Food         | 2.3  | 4.0  | 5.5         | 3.0 to 4.0               |
| Food at Home     | 1.7  | 4.2  | 6.4         | 2.5 to 3.5               |
| Fish and Seafood | 4.7  | 4.6  | 6.0         | 4.0 to 5.0               |
| Dairy            | -0.6 | 7.4  | 8.0         | -4.0 to -3.0             |
| Fats and Oils    | 0.2  | 2.9  | <b>13.8</b> | 3.0 to 4.0               |
| Sugar + Sweets   | 3.8  | 3.1  | 5.5         | 3.0 to 4.0               |
| Eggs             | 4.9  | 29.2 | 14.0        | -5.0 to -4.0             |

# Percent Change in Food CPI (c)

| Items             | 2006 | 2007 | 2008        | Forecast<br>2009 |
|-------------------|------|------|-------------|------------------|
| All Food          | 2.3  | 4.0  | 5.5         | 3.0 to 4.0       |
| Food at Home      | 1.7  | 4.2  | 6.4         | 2.5 to 3.5       |
| Fresh Fruits      | 6.0  | 4.5  | 4.8         | 4.0 to 5.0       |
| Fresh Vegetables  | 4.6  | 3.2  | 5.6         | 3.5 to 4.5       |
| Processed F + V   | 2.9  | 3.6  | 9.5         | 3.0 to 4.0       |
| Cereals + Bakery  | 1.8  | 4.4  | <b>10.2</b> | 2.5 to 3.5       |
| Nonalcoholic Bev. | 2.0  | 4.1  | 4.3         | 3.0 to 4.0       |



# Contact Information

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Ephraim Leibtag, PhD

[eleibtag@ers.usda.gov](mailto:eleibtag@ers.usda.gov)

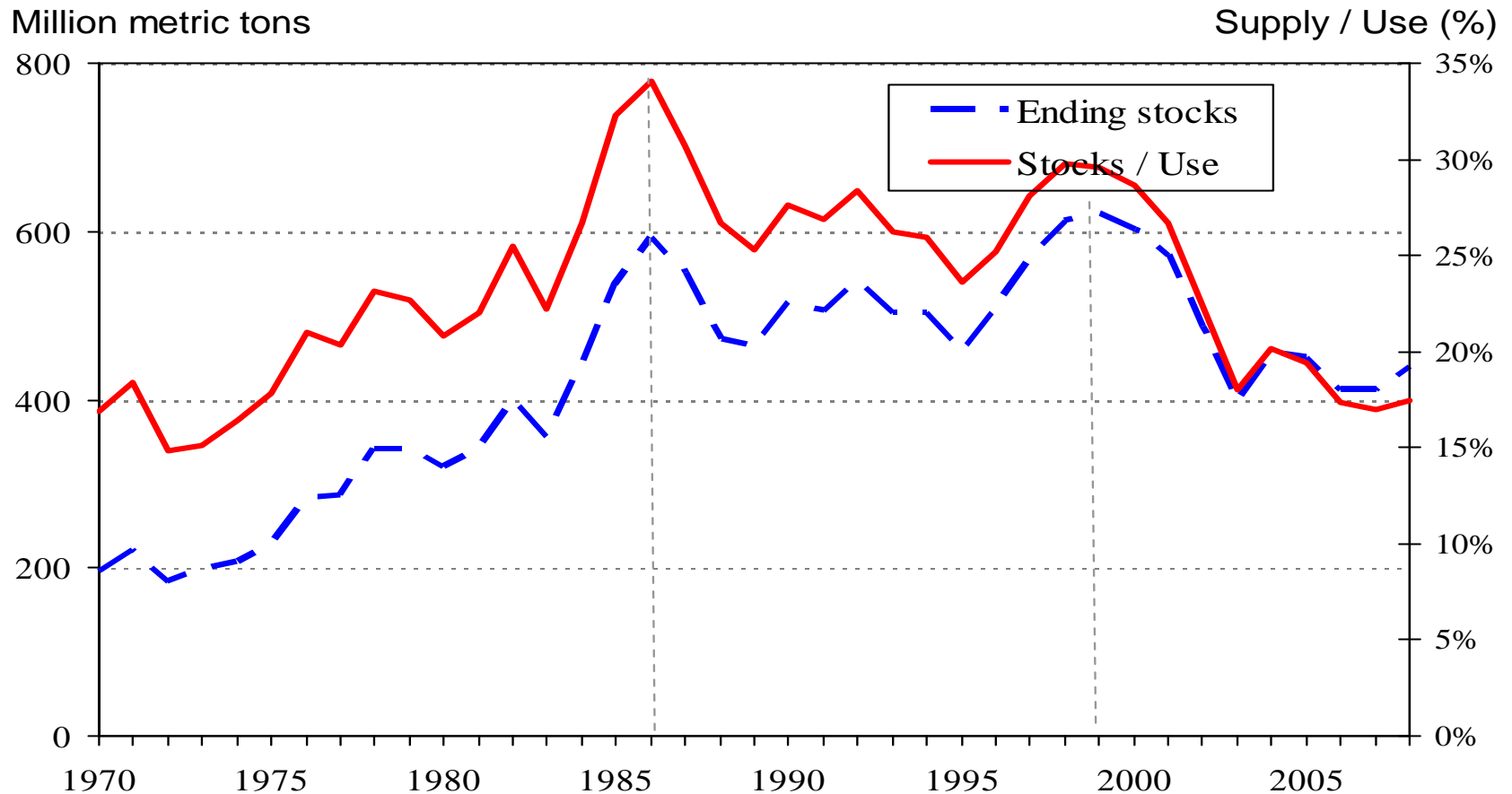
202-694-5349

For more information, see

<http://www.ers.usda.gov/Briefing/CPIFoodAndExpenditures/>

# Total world grain & oilseeds

## Stocks and stocks-to-use ratio



Source: USDA PS&D Database

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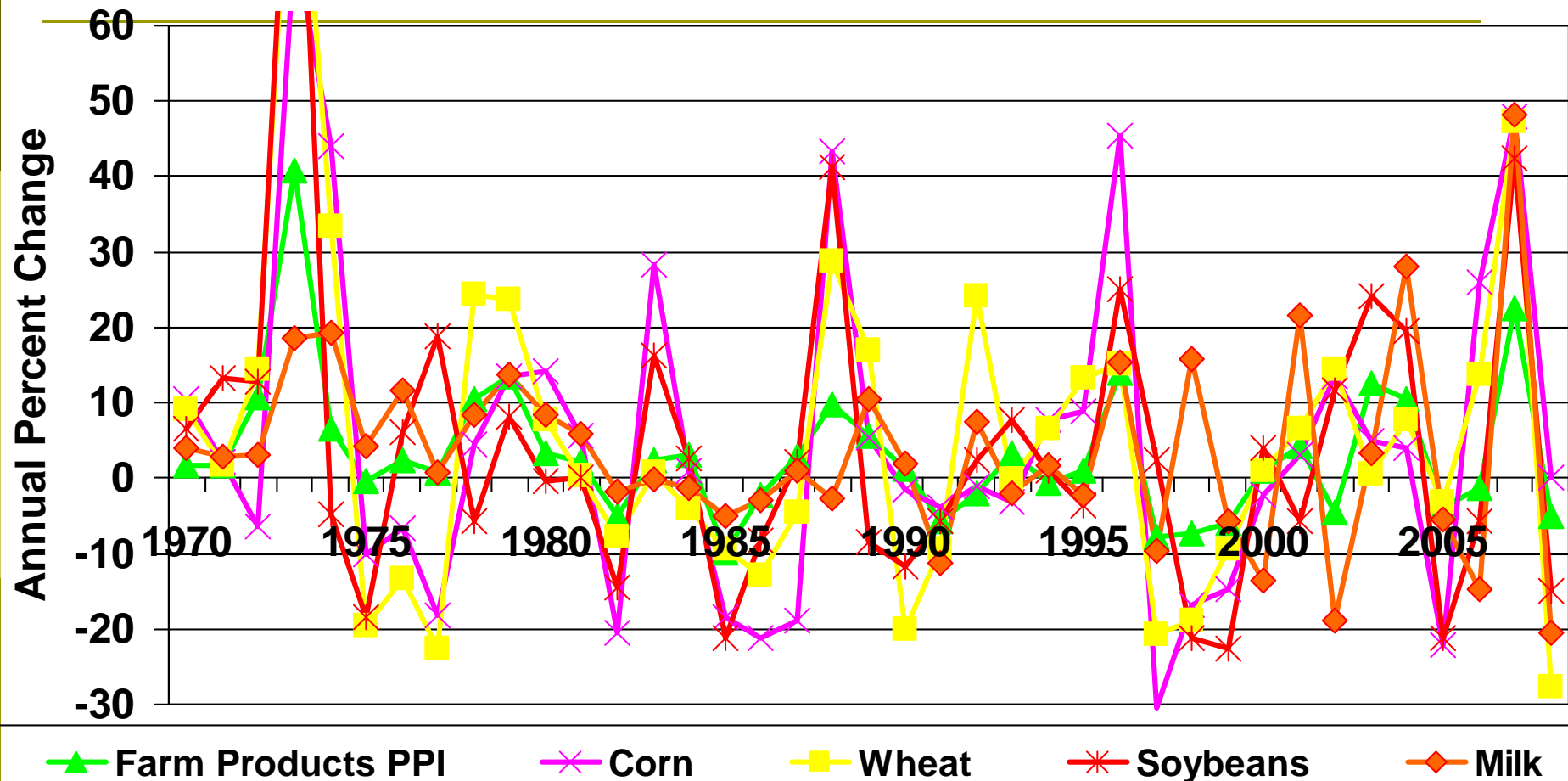
# Nontraditional Expenditure Shares

|             | Warehouse Clubs | Supercenters | Mass Merchandisers | Other |
|-------------|-----------------|--------------|--------------------|-------|
| <b>1998</b> | 5.7%            | 3.2%         | 2.8%               | 5.2%  |
| <b>1999</b> | 5.8%            | 4.3%         | 3.0%               | 5.9%  |
| <b>2000</b> | 6.8%            | 5.6%         | 3.1%               | 6.5%  |
| <b>2001</b> | 6.7%            | 7.2%         | 3.3%               | 7.0%  |
| <b>2002</b> | 6.9%            | 8.1%         | 3.9%               | 8.0%  |
| <b>2003</b> | 7.2%            | 10.5%        | 3.6%               | 8.1%  |
| 2004        | 7.6%            | 11.8%        | 3.6%               | 8.5%  |
| 2005        | 8.0%            | 13.2%        | 3.6%               | 7.8%  |
| 2006        | 8.9%            | 15.0%        | 4.7%               | 6.0%  |

Source: ERS Calculations using Nielsen Homescan Data

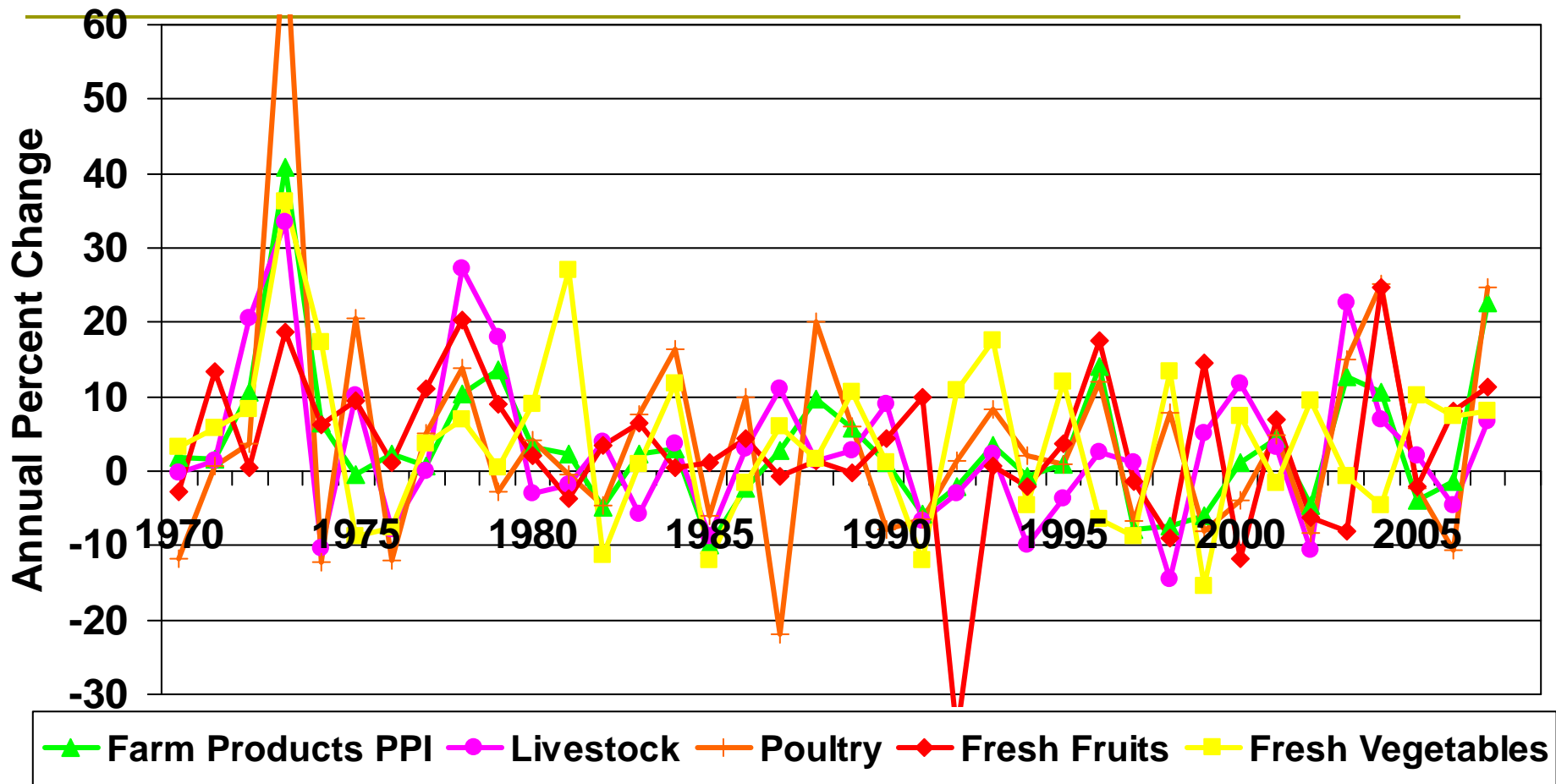
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# Volatile Farm Product PPI Components



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# Farm Product PPI Components (b)



# Food at Home vs Food Away from Home, 1997-2007

## Annual Percent Change

