

# Situation and Outlook for the U.S. Dairy Industry

Jerry Cessna  
Senior Agricultural Economist  
USDA Agricultural Marketing Service, Dairy  
Programs

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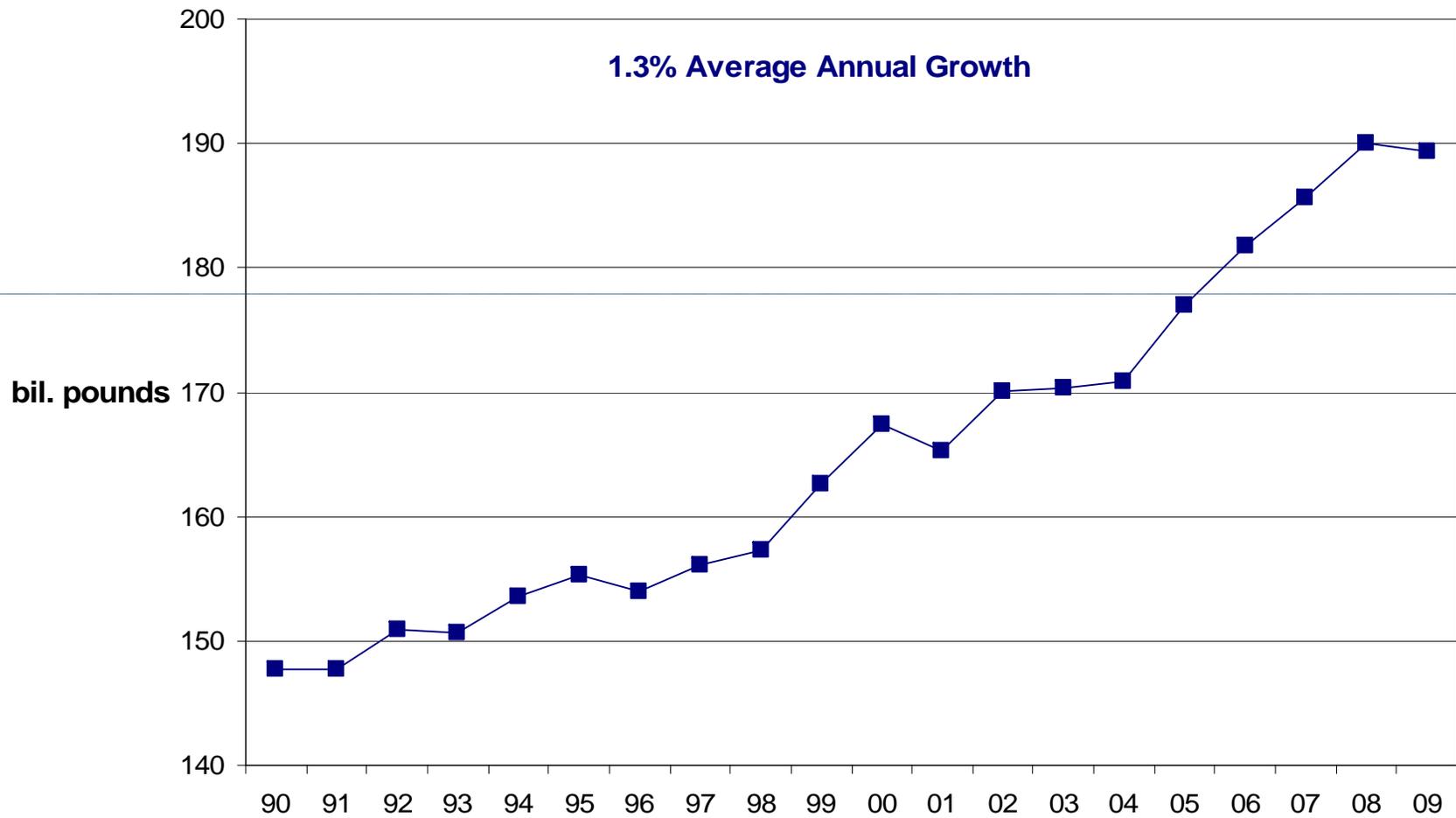
# Ice Breaker



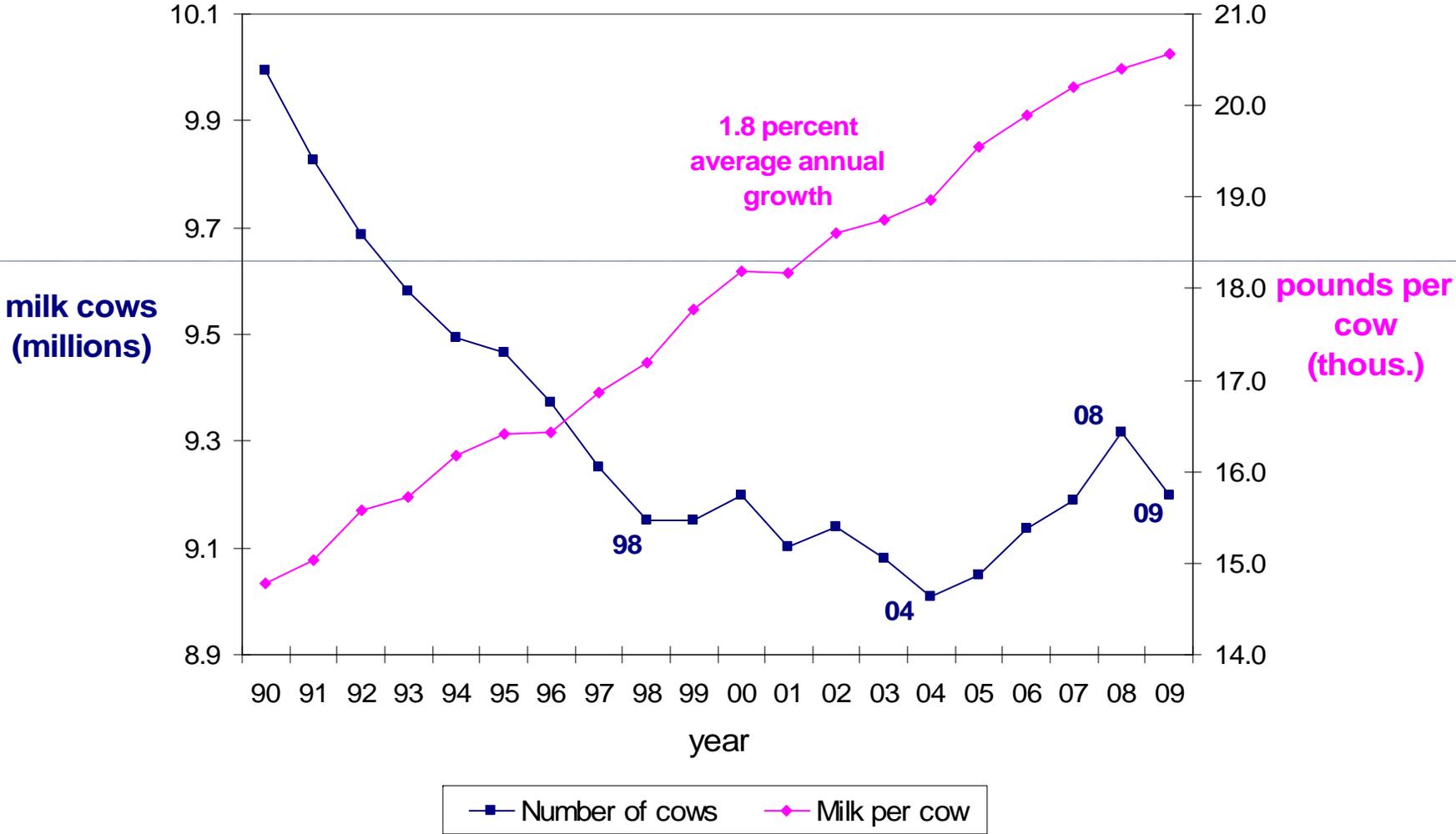
NASA photograph

# A Look Back Over Two Decades

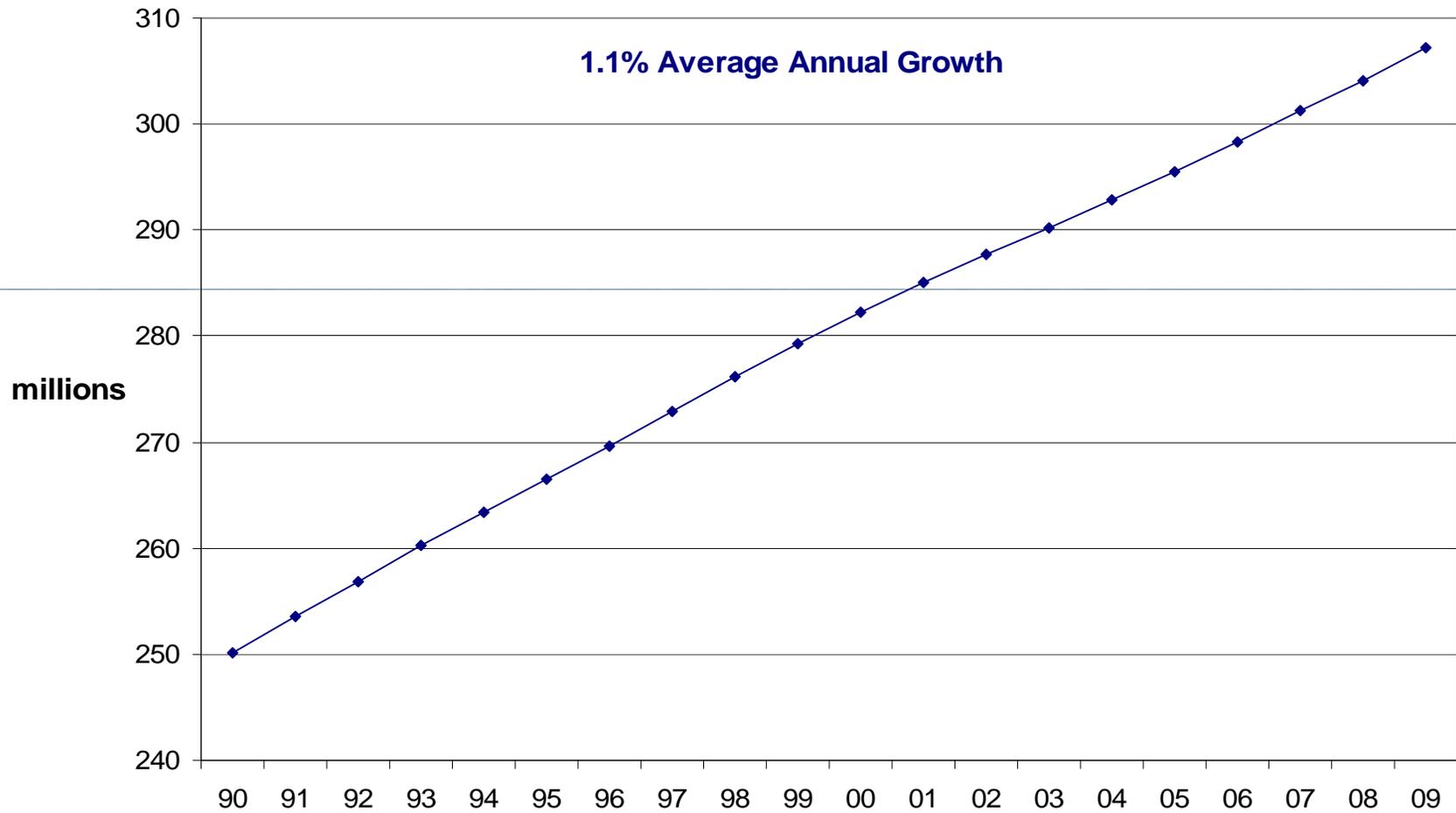
# Milk Production



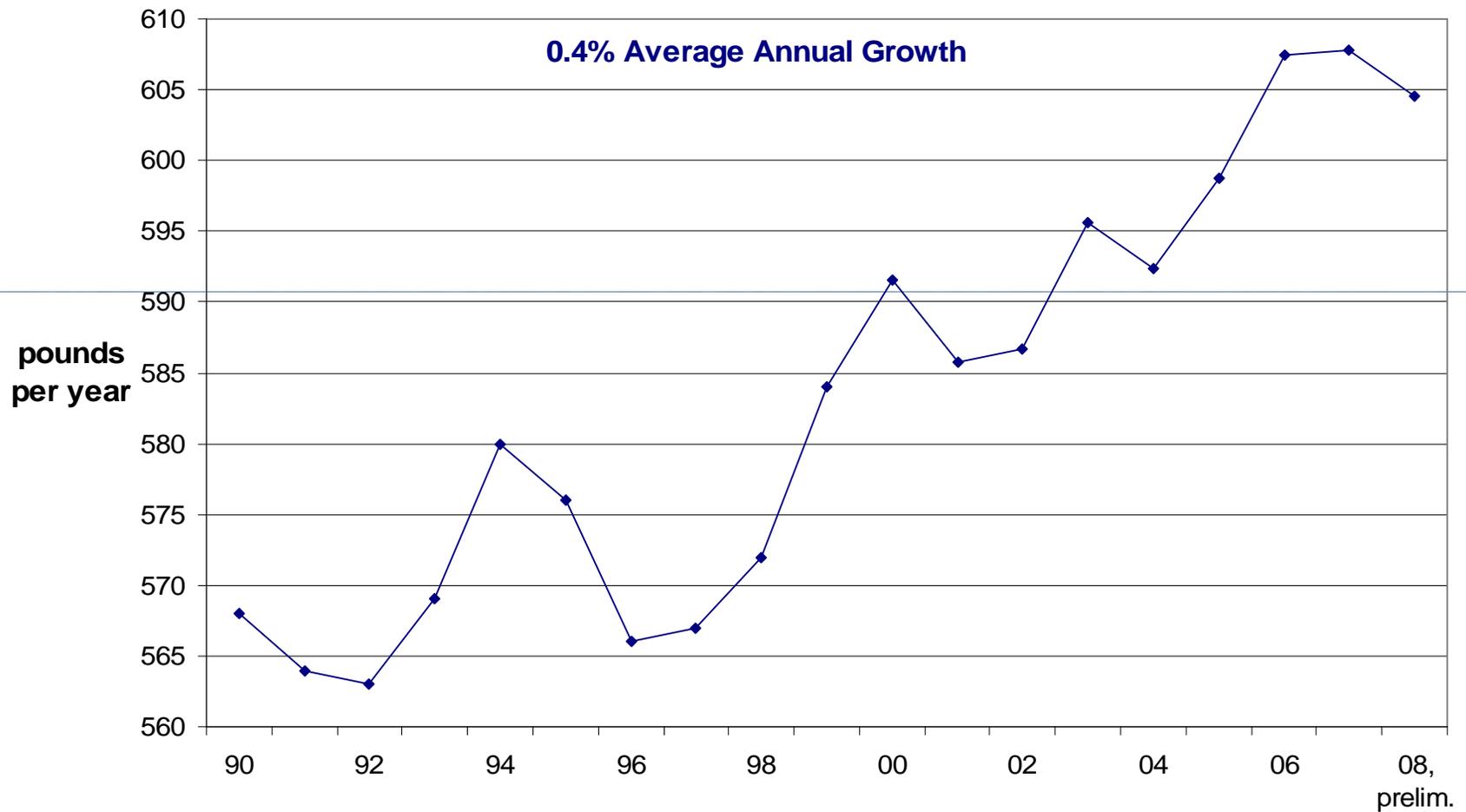
# U. S. Dairy Herd and Milk Production per Cow



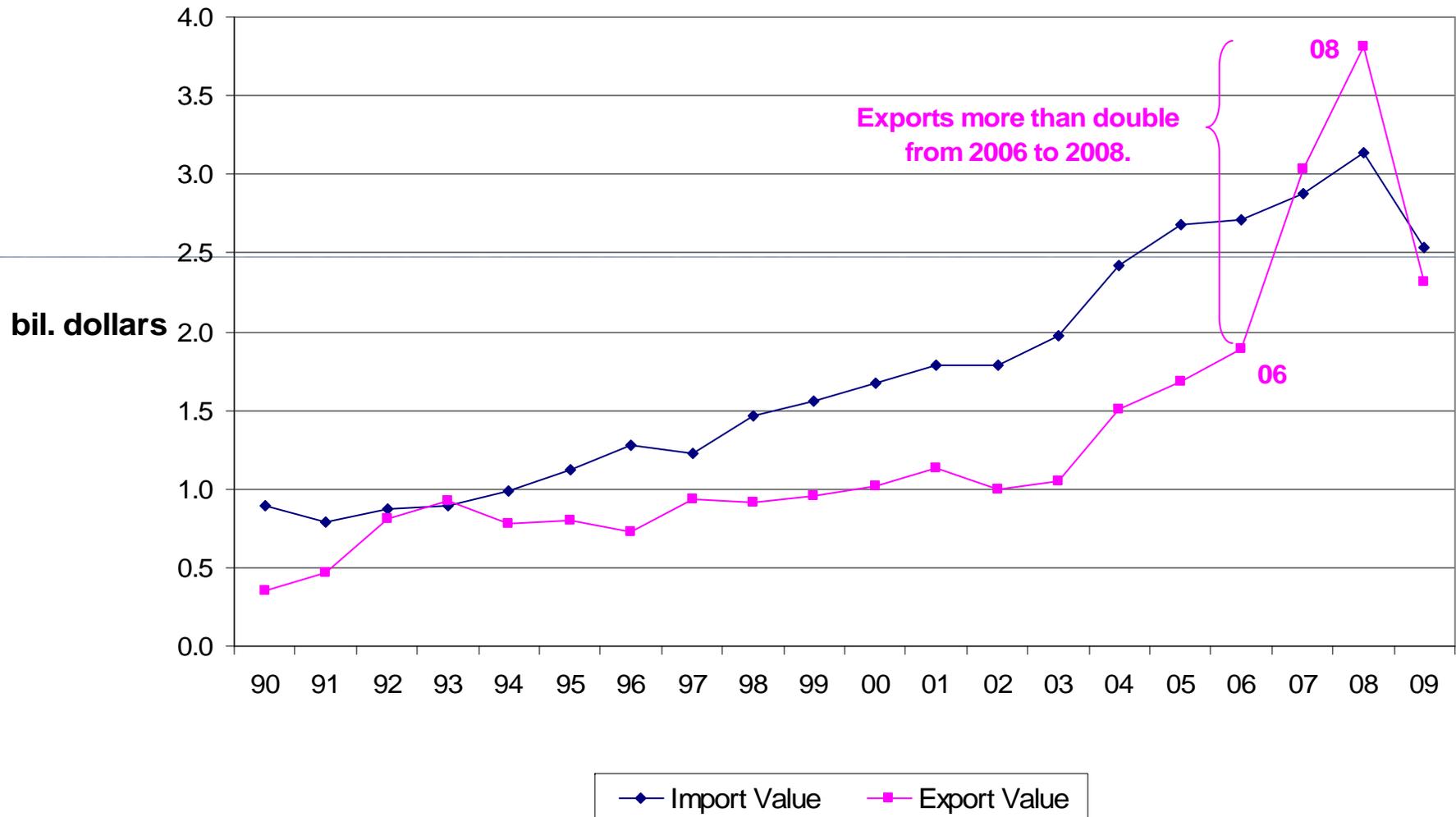
# U.S. Population



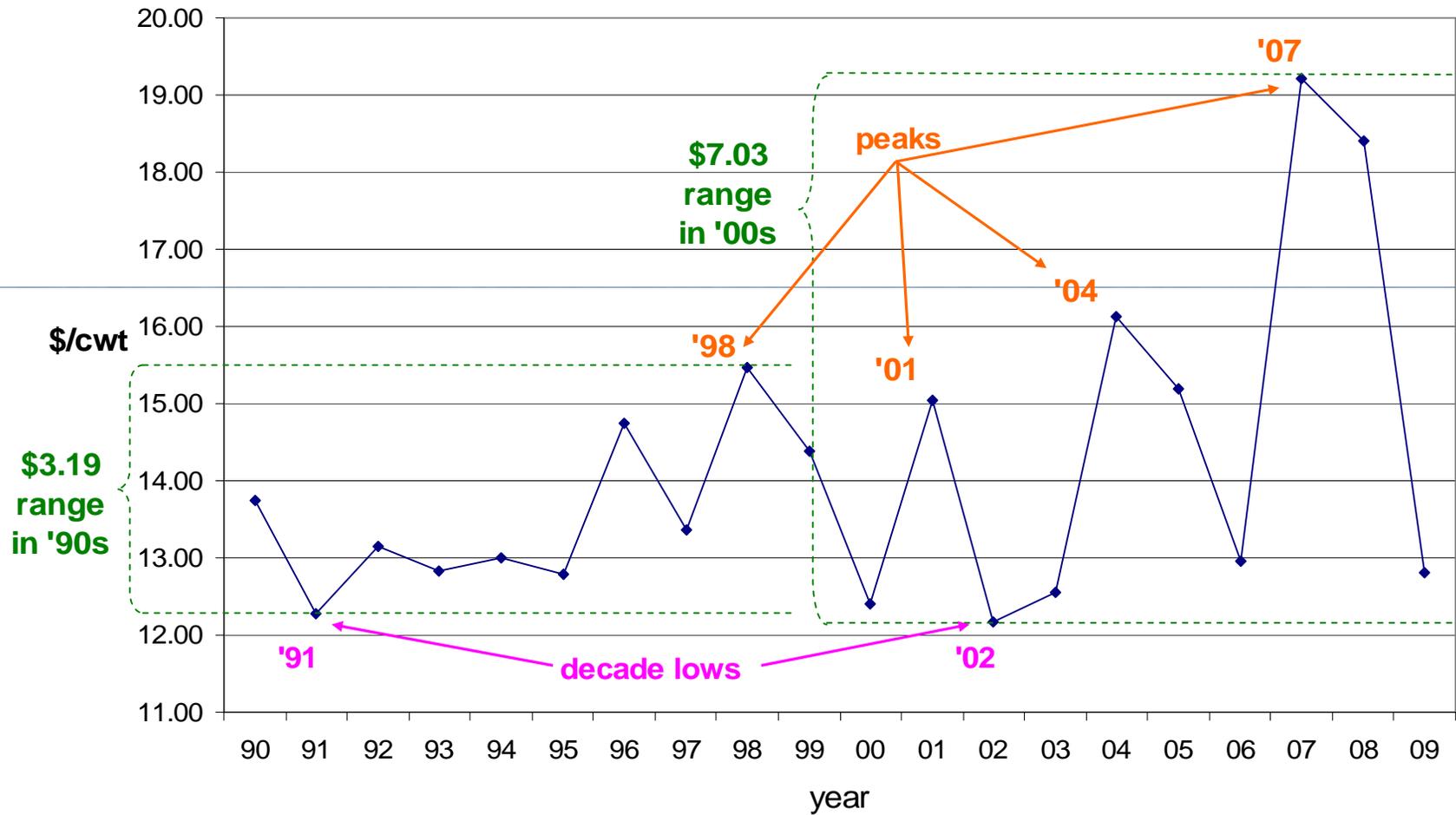
## Per capita consumption, milk equivalent fat basis



## U.S. Dairy Import and Export Values



# All-Milk Price



# A Review of the 2009 Dairy Situation

Why did milk prices plunge  
so low in 2009?

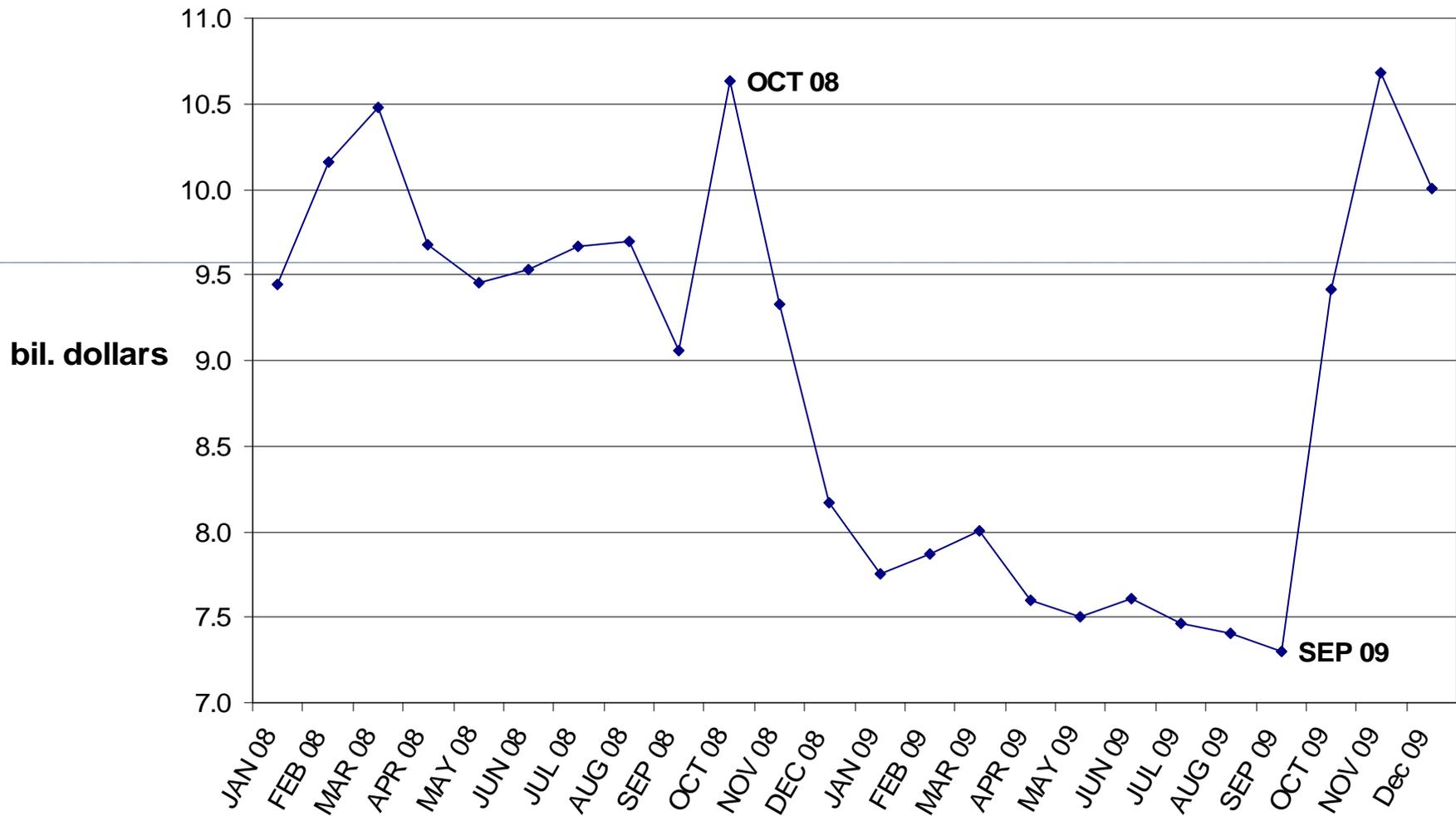
# Global Recession

- Recession began December 2007 (National Bureau of Economic Research)
- April 2009 *World Economic Outlook* of the International Monetary Fund (IMF):
  - Middle quarters of 2008
    - Mild recessions in advanced economies
    - Developing economies grew “at fairly robust rates by past standards.”
  - Global situation deteriorated after “the dramatic blowout of the financial crisis in September 2008.”
- Federal Reserve Chairman Ben Bernanke, at a Brookings Institution Forum in September 2009:
  - U.S. recession was “very likely over.”
  - “... still going to feel like a very weak economy for some time...”

# Shift in Food Demand

- Food sales decrease in 2009 compared to 2008
  - by 2.3 percent for food at home
  - by 2.2 percent for food away from home
- National Restaurant Association  
*Restaurant Performance Index (RPI)*
  - RPI > 100: Expansion
  - RPI < 100: Contraction
  - November 2007: Fell below 100 to 99.0
  - December 2008: Record low at 96.4
  - December 2009: At 98.7, highest level in nearly two years

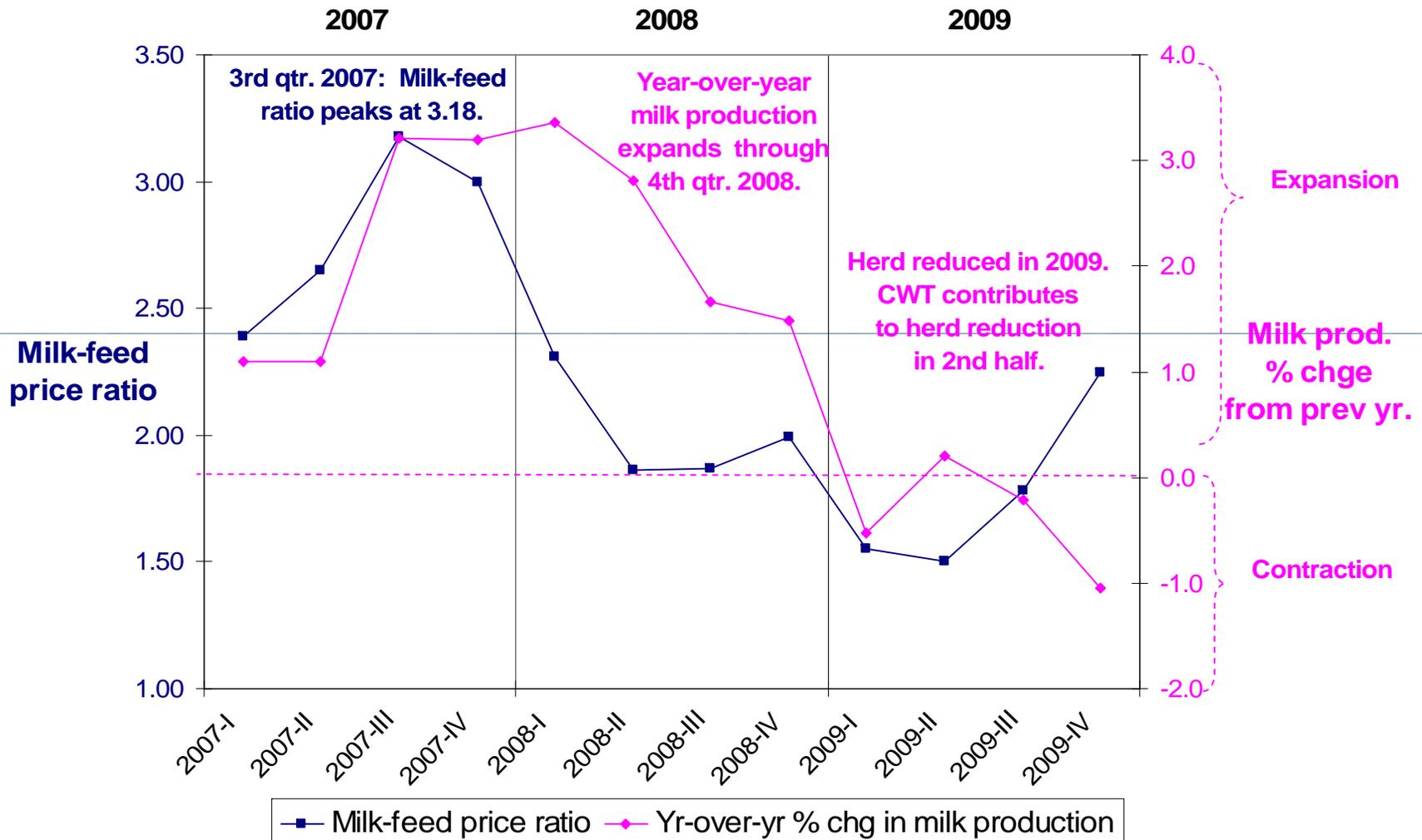
## U.S. Agricultural Exports, 2008-2009



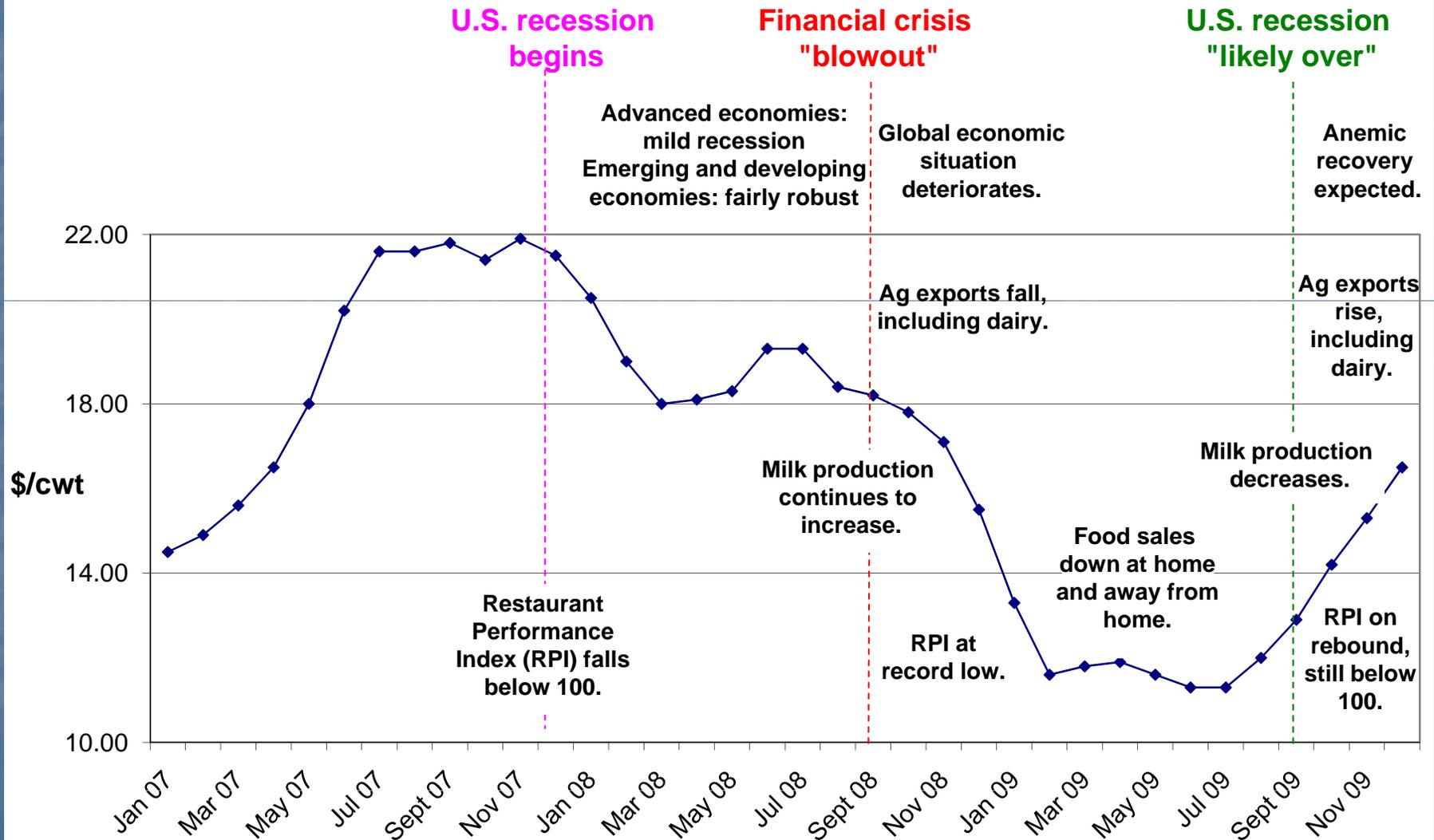
# Commercial Exports, Milk Equivalent Basis



## Milk-Feed Price Ratio and Year-Over-Year Change in Milk Production



# All-Milk Price and the Global Economic Recession, 2007-2009



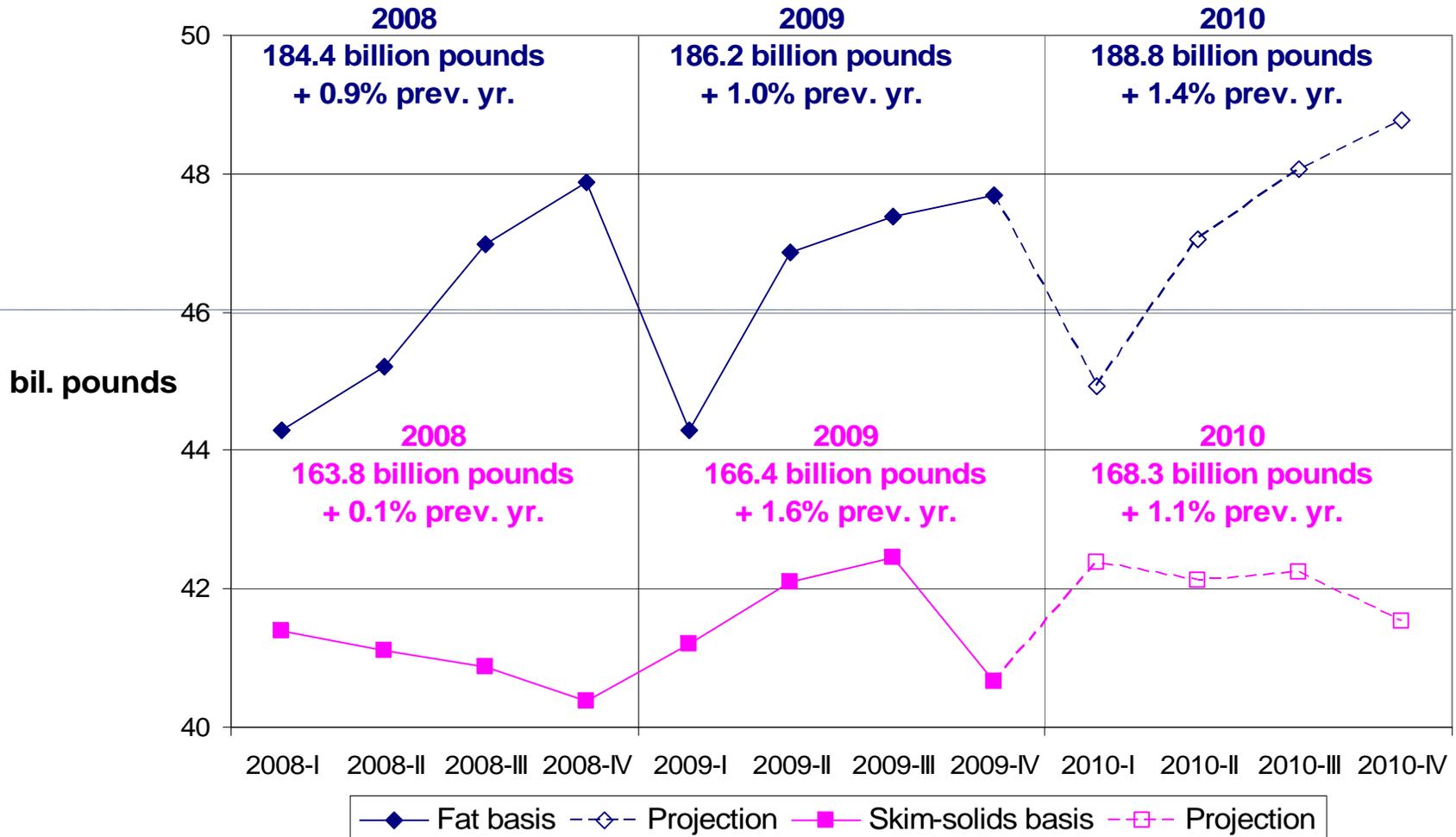
# U.S. Government Response to Low Milk Prices of 2009

- Milk Income Loss Contract (MILC) payments
- NDM being bartered or donated
- Dairy Export Incentive Program (DEIP) bids accepted
- Temporary support price increases from Aug. - Oct. 2009
- Agricultural Appropriations
  - Direct payments to dairy farmers
  - Purchase of cheese and cheese products
- Loans to dairy farmers
  - Direct loans
  - Guaranteed loans
- Dairy Advisory Committee to review the dairy situation and make suggestions over the next two years

# The Outlook for 2010

Will the all-milk price for 2010 be greater than the \$19.21 per cwt level of 2007?

# Domestic Commercial Use Projections



# World Markets and Trade Issues

(from December 2009 report)

- Concern about government stocks
  - EU intervention stocks:
    - 76,400 metric tons of butter
    - 259,300 metric tons of NDM
  - US uncommitted CCC stocks:
    - 27,000 metric tons of NDM
- GDP growth rate forecasts for 2010
  - Developed economies: 2.1%
  - Developing economies: 6.0%

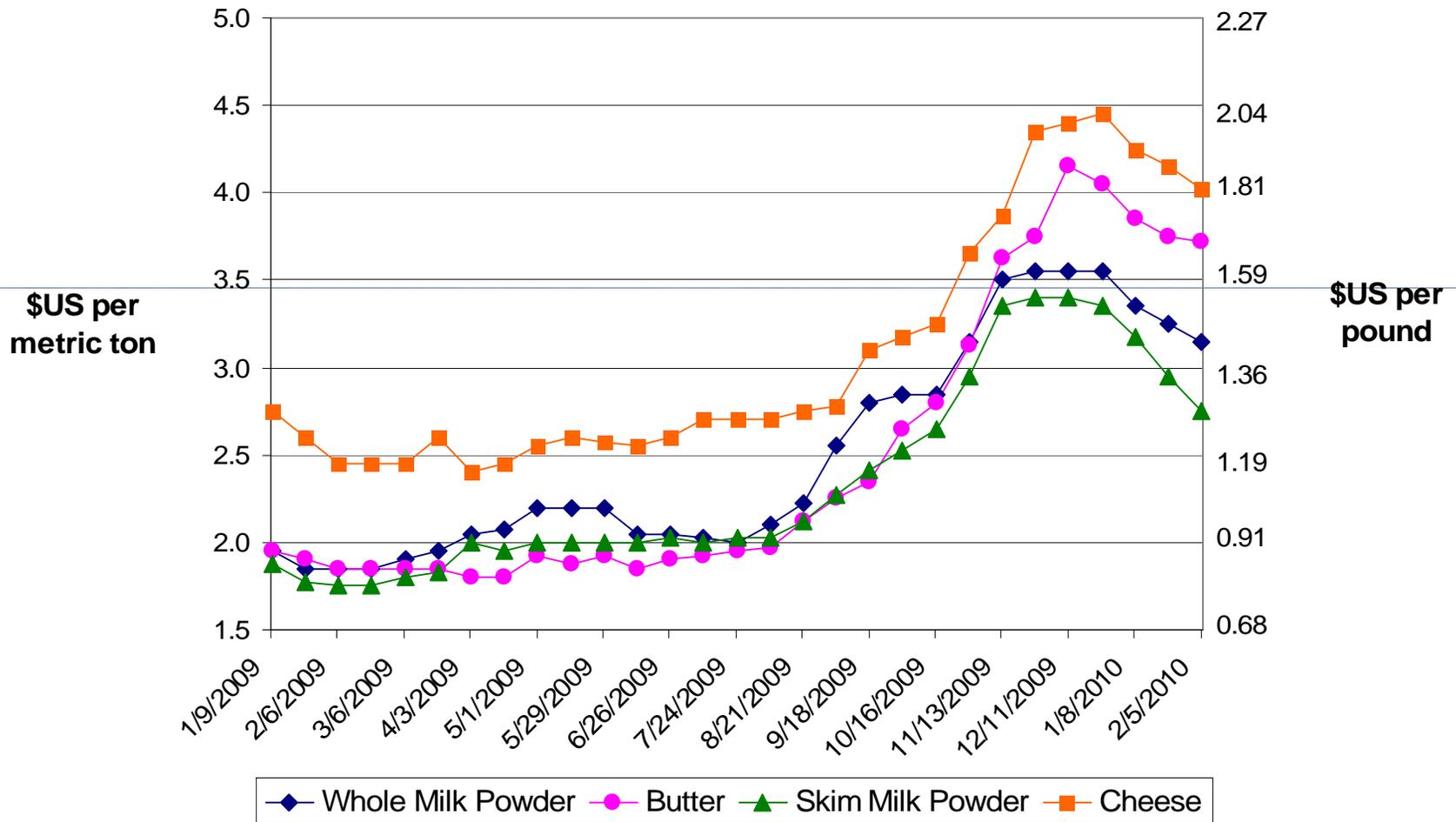
**Milk Production Forecasts of Major Exporting Countries  
(1000 metric tons)**

	2008	2009	2010	% change '10-'09
Australia	9,500	9,670	9,570	-1.0
EU-27	133,848	133,800	134,000	0.1
New Zealand	15,141	16,601	17,021	2.5
United States	86,183	85,865	85,684	-0.2

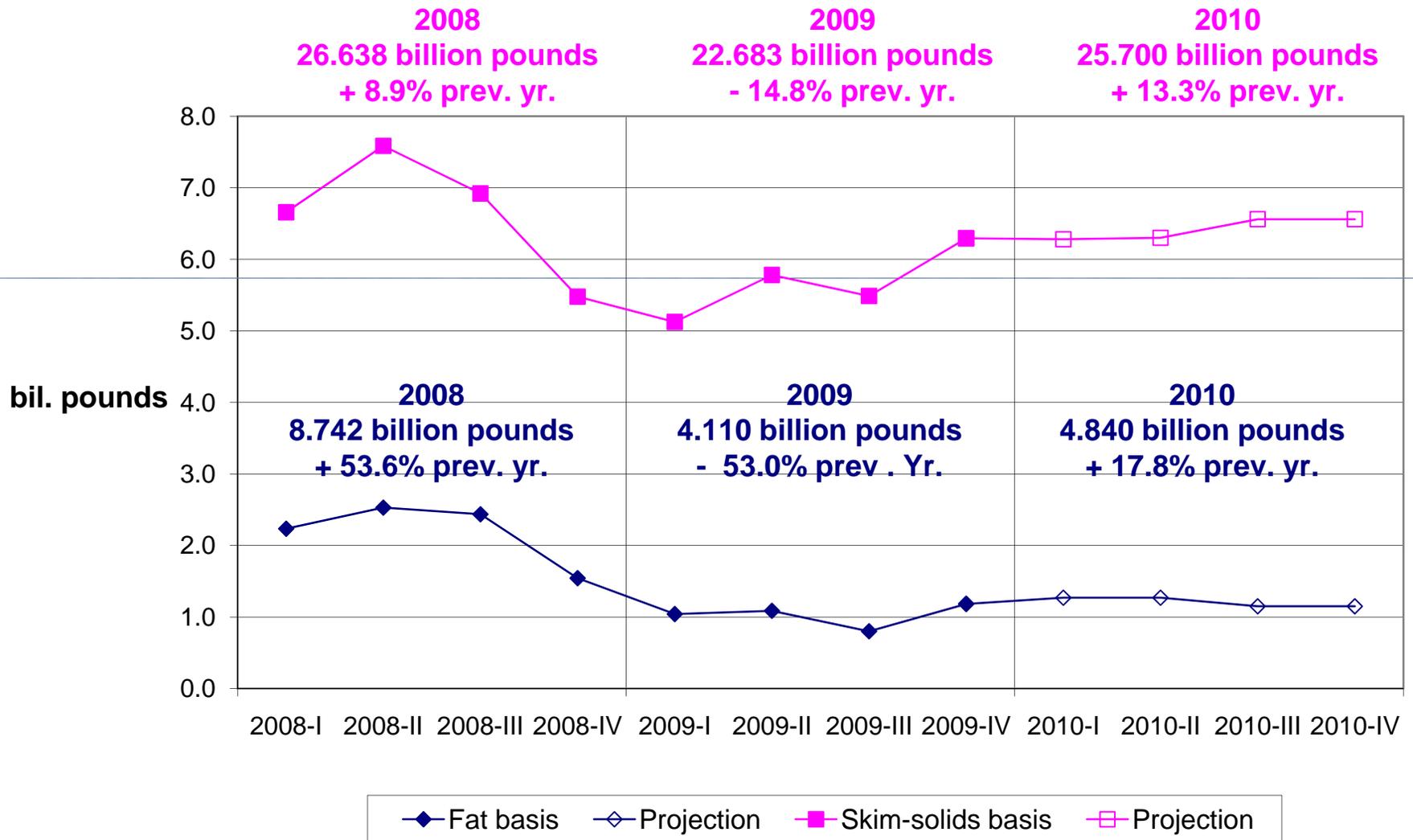
Australia, EU-27, and New Zealand forecasts are as of December 2009. US forecast is as of February 2010.

Australia year: July-June, New Zealand year: June-May

# Oceania Export Prices



# Commercial Exports

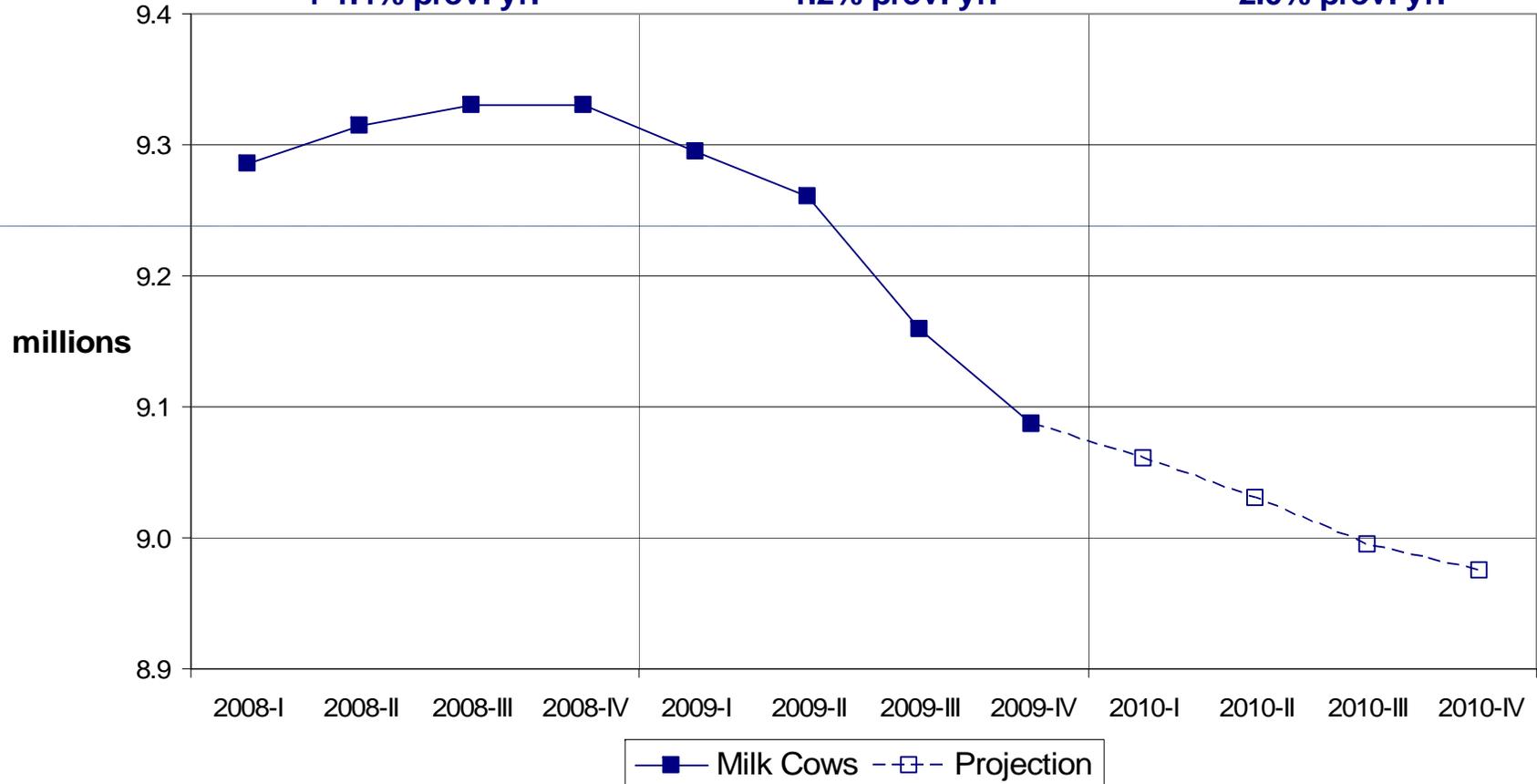


# Milk Cows

**2008:**  
9.315 million head  
+ 1.4% prev. yr.

**2009:**  
9.200 million head  
- 1.2% prev. yr.

**2010:**  
9.015 million head  
- 2.0% prev. yr.

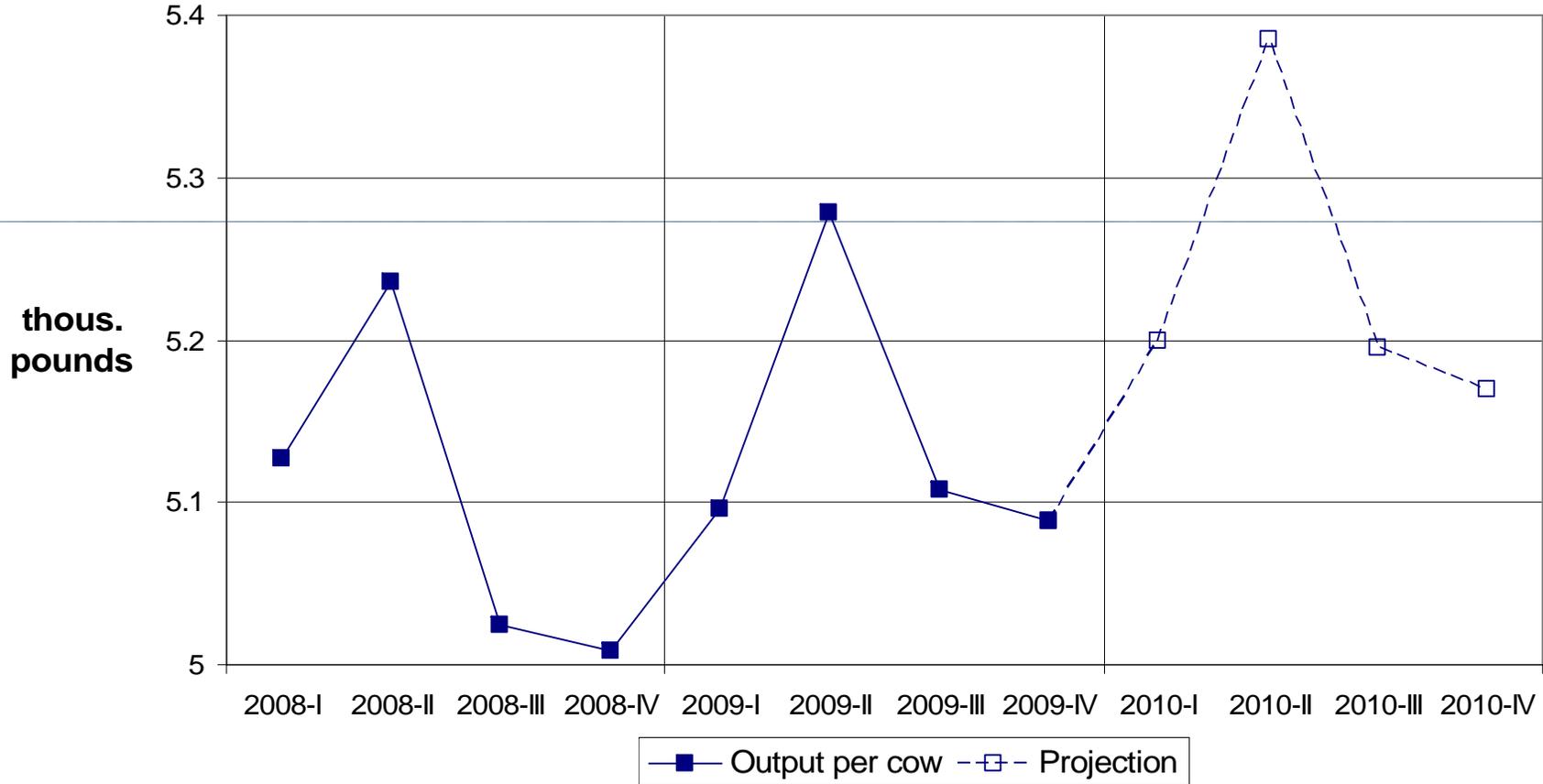


# Output per Cow

**2008:**  
20.4 thous. pounds  
+ 1.0% prev. yr.

**2009:**  
20.6 thous. pounds  
+ 0.9 prev. yr.

**2010:**  
21.0 thous. pounds  
+ 1.9% prev. yr.

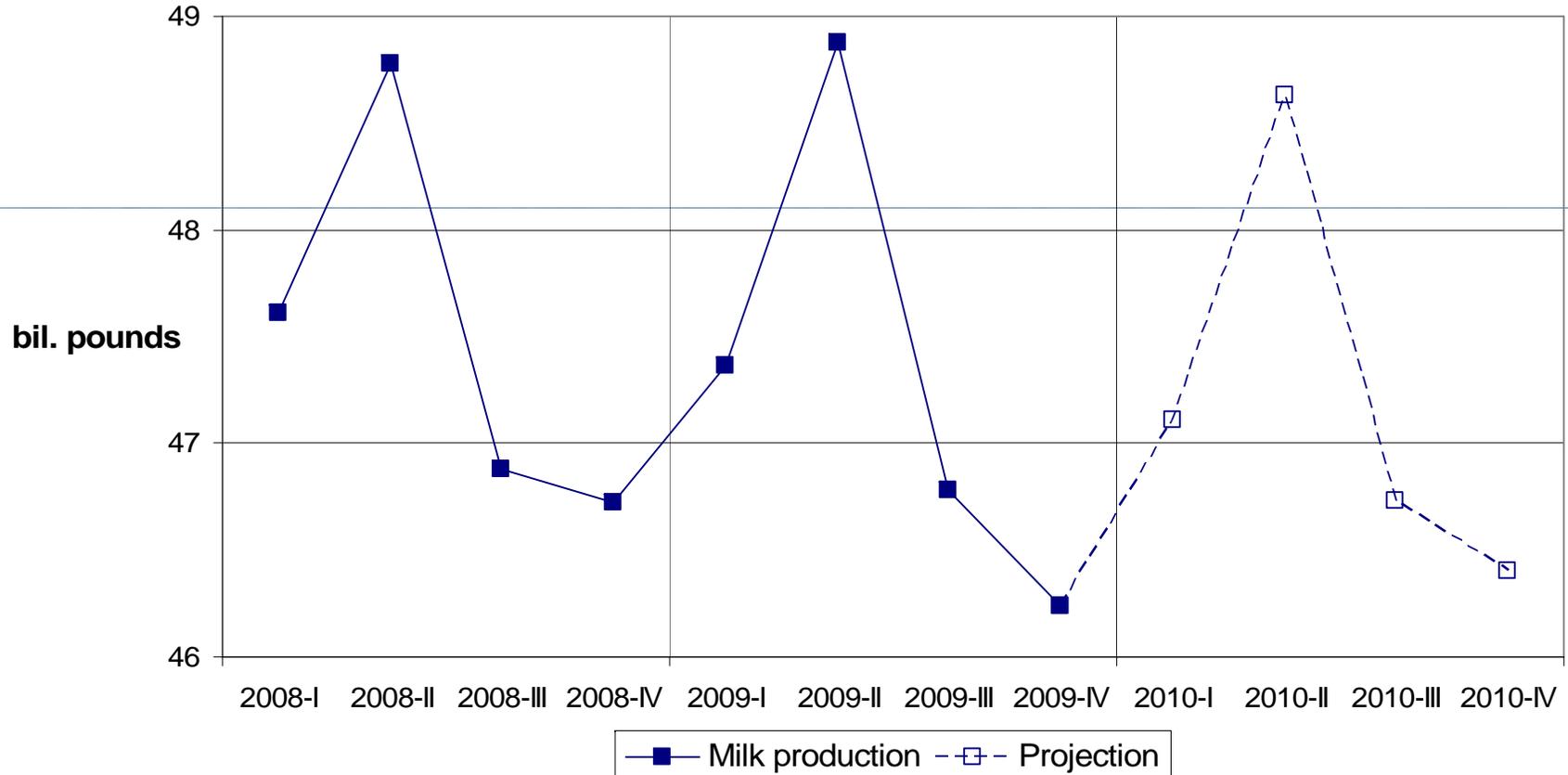


# Milk Production

**2008:**  
**190.0 bil. pounds**  
**+ 2.3% prev. yr.**

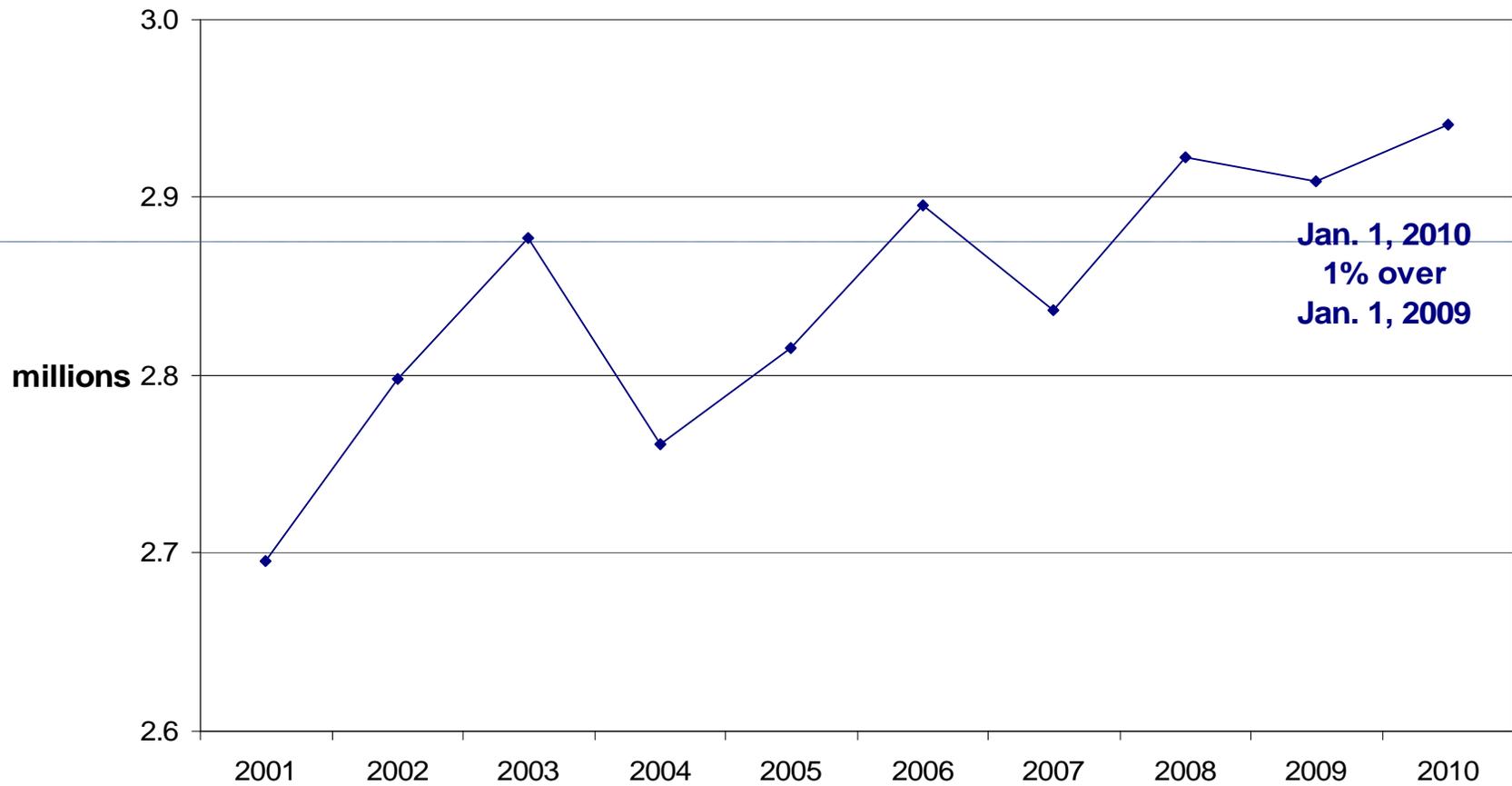
**2009:**  
**189.3 bil. pounds**  
**- 0.4% prev. yr.**

**2010:**  
**188.9 bil. pounds**  
**- 0.2% prev. yr.**



Given the lagged response of milk production to low prices, why do we not forecast a larger decrease in milk production for 2010?

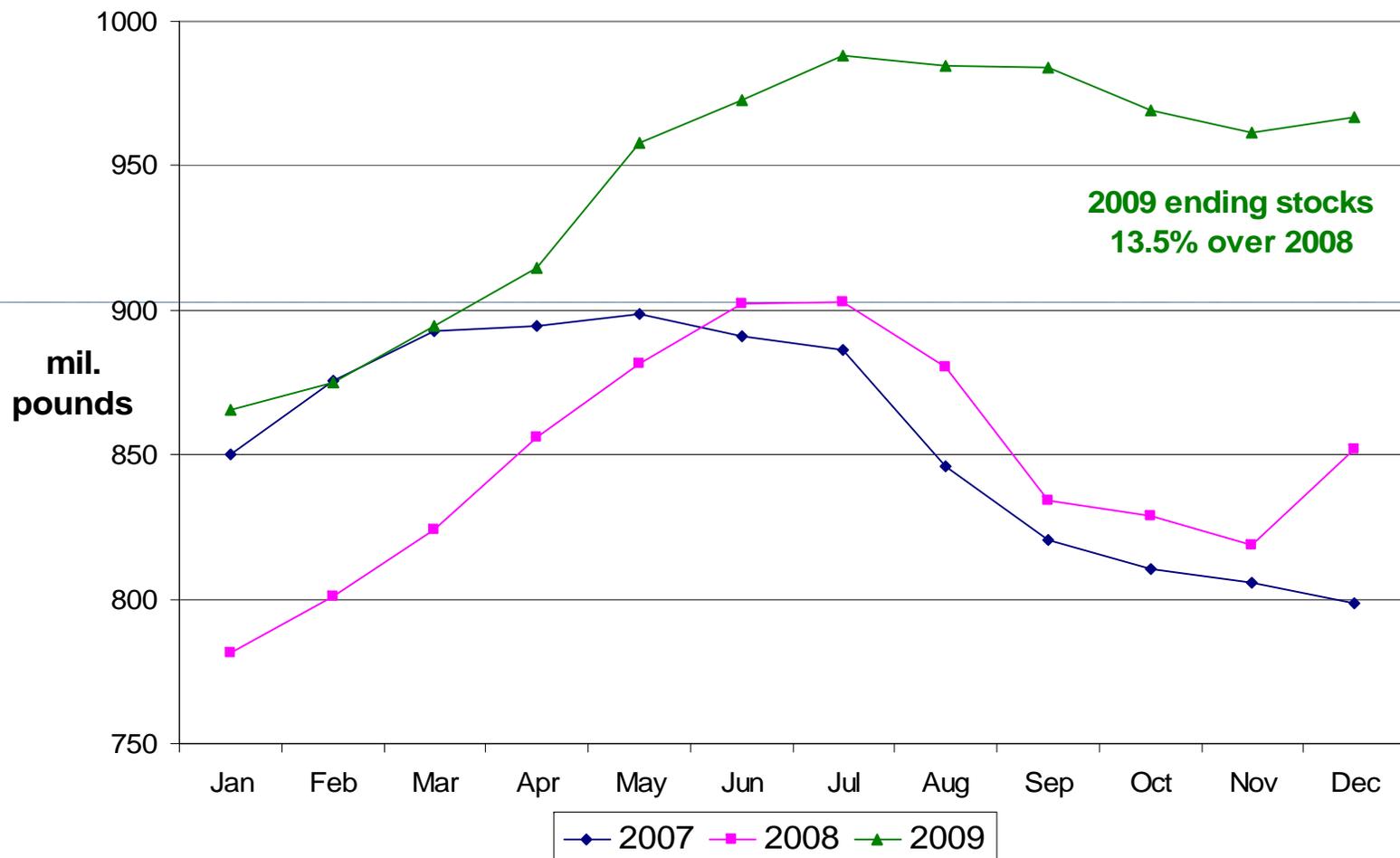
## Dairy Replacement Heifers, 500+ Lbs, Expected to Calve, Jan. 1 Inventory



# Feed Prices for 2009/10 Marketing Year

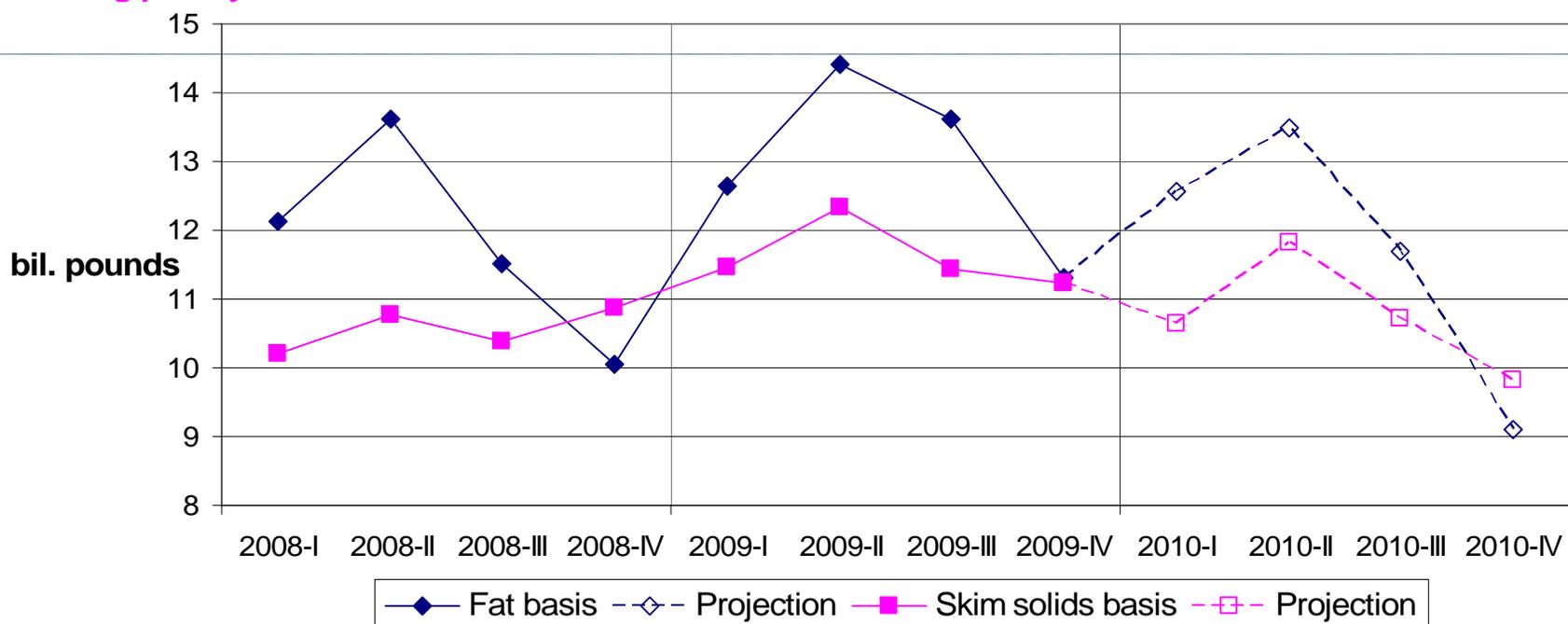
- Relatively high projections for feed price averages:
  - Corn: \$3.45 to \$3.95 per bushel
  - Soybeans meal: \$270 to \$320 per ton
- Prices not as high as for 2007/08:
  - Corn: \$4.20 per bushel
  - Soybeans: \$335.94 per ton
- Uptick of milk-feed price ratio latter part of 2009
- Expect 2010 milk-feed price ratio higher than for 2009
- Effect:
  - May dampen rate of decline of milk production from that of 2009
  - Probably not sufficient to encourage expansion

## Ending Cheese Stocks in Cold Storage



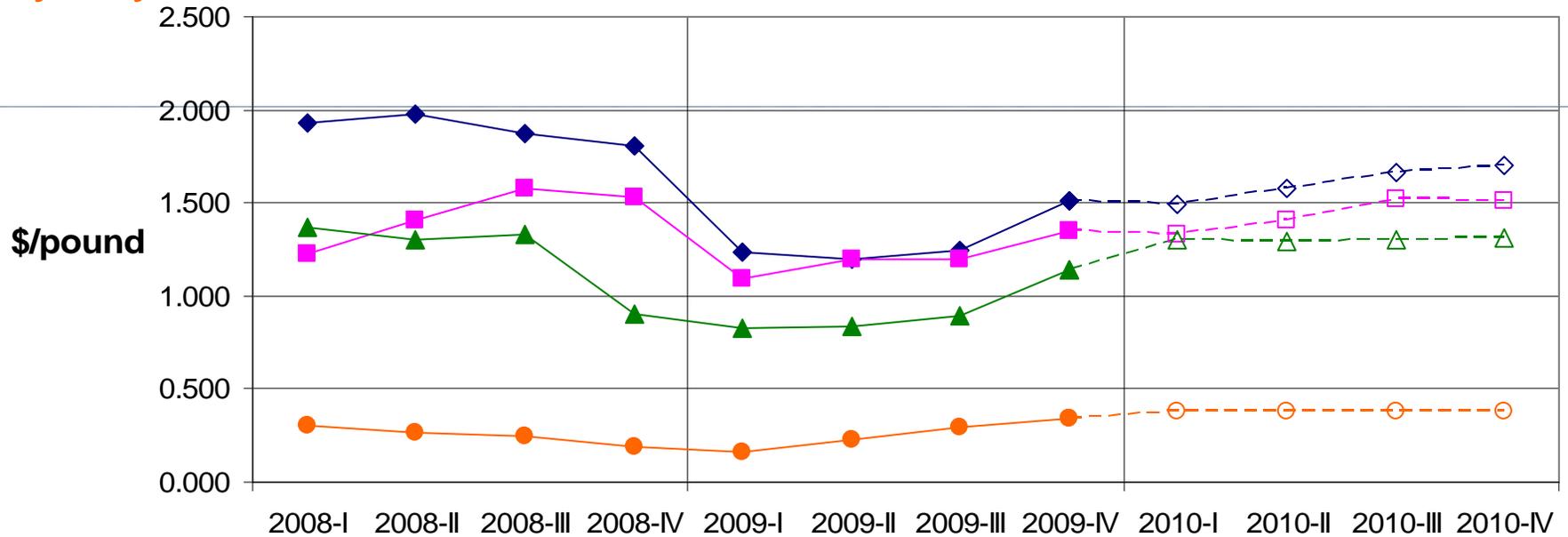
## Ending Commercial Stocks (bil. pounds)

	<u>2008</u>	<u>2009</u>	<u>2010</u>
<b>Fat Basis</b>	<b>10.0</b>	<b>11.3</b>	<b>9.1</b>
<b>% chg prev. yr.</b>	<b>- 3.0</b>	<b>+ 12.5</b>	<b>- 19.5</b>
<b>Skim solids basis</b>	<b>10.9</b>	<b>11.2</b>	<b>9.8</b>
<b>% chg prev. yr.</b>	<b>+ 9.3</b>	<b>+ 3.4</b>	<b>- 12.6</b>



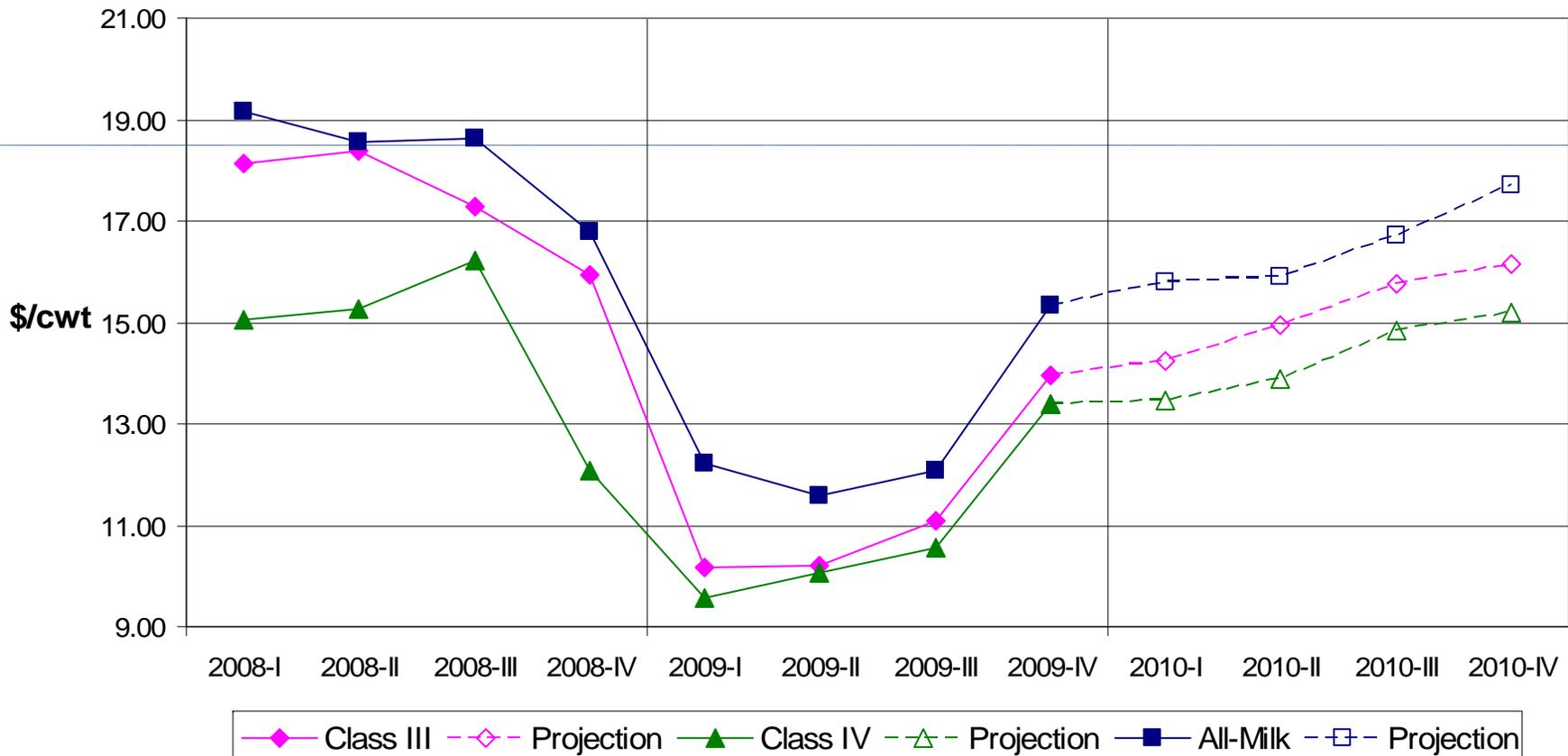
# Dairy Products Prices

	<u>2008</u>	<u>2009</u>	<u>2010</u>
<b>Cheddar Cheese</b>	<b>1.8954</b>	<b>1.2966</b>	<b>1.575 - 1.645</b>
<b>Butter</b>	<b>1.4356</b>	<b>1.2096</b>	<b>1.395 - 1.495</b>
<b>Nonfat Dry Milk</b>	<b>1.2256</b>	<b>0.9223</b>	<b>1.175 - 1.235</b>
<b>Dry Whey</b>	<b>0.2504</b>	<b>0.2585</b>	<b>0.375 - 0.405</b>



# Milk Prices

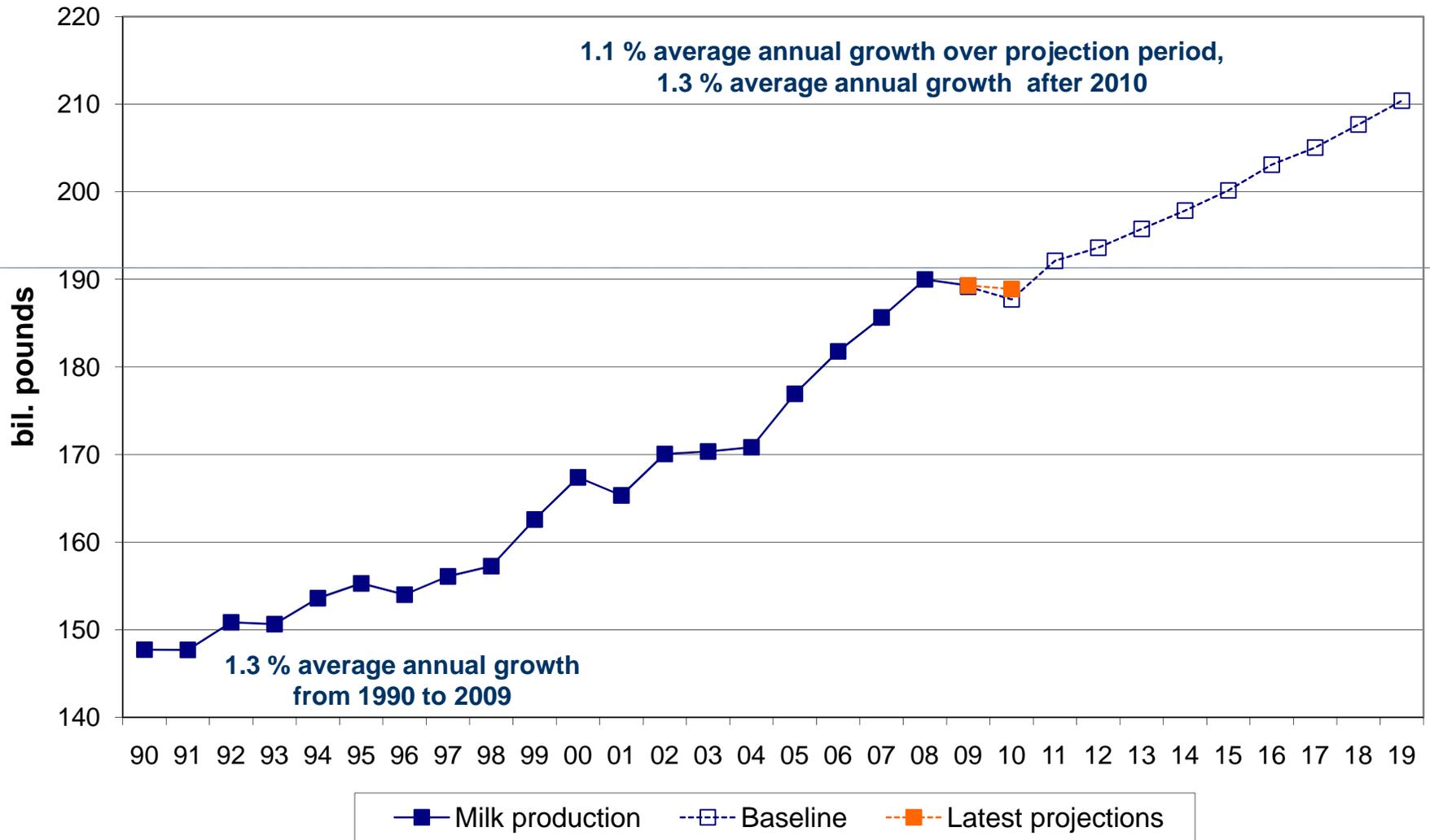
	<u>2008</u>	<u>2009</u>	<u>2010</u>
All Milk	18.29	12.81	16.20 - 16.90
Class III	17.44	11.36	14.90 - 15.60
Class IV	14.65	10.89	13.95 - 14.75



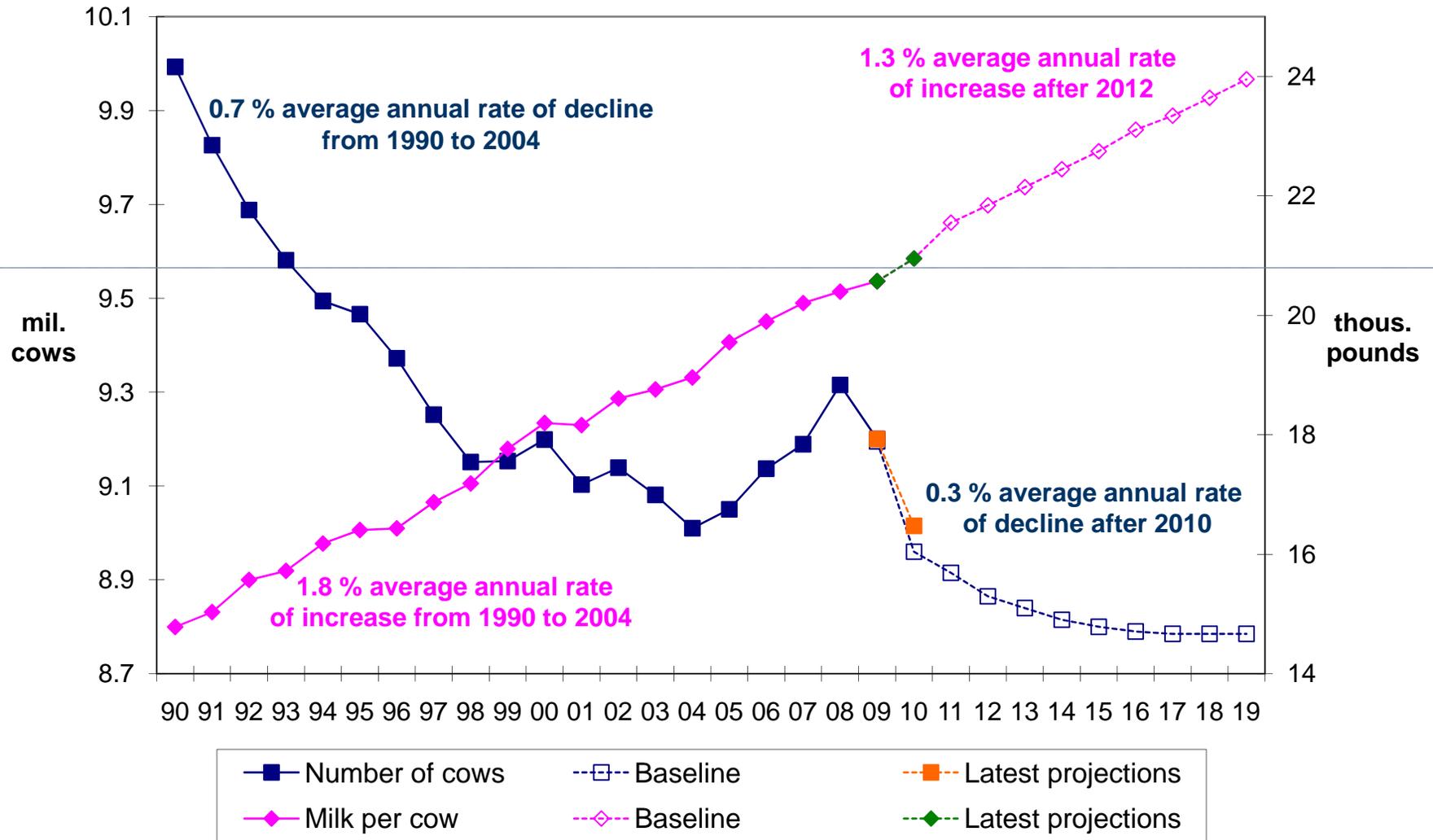
# A Few Words About Long-Term Projections

Latest forecasts for 2010 are in the same ballpark as long-term projections.

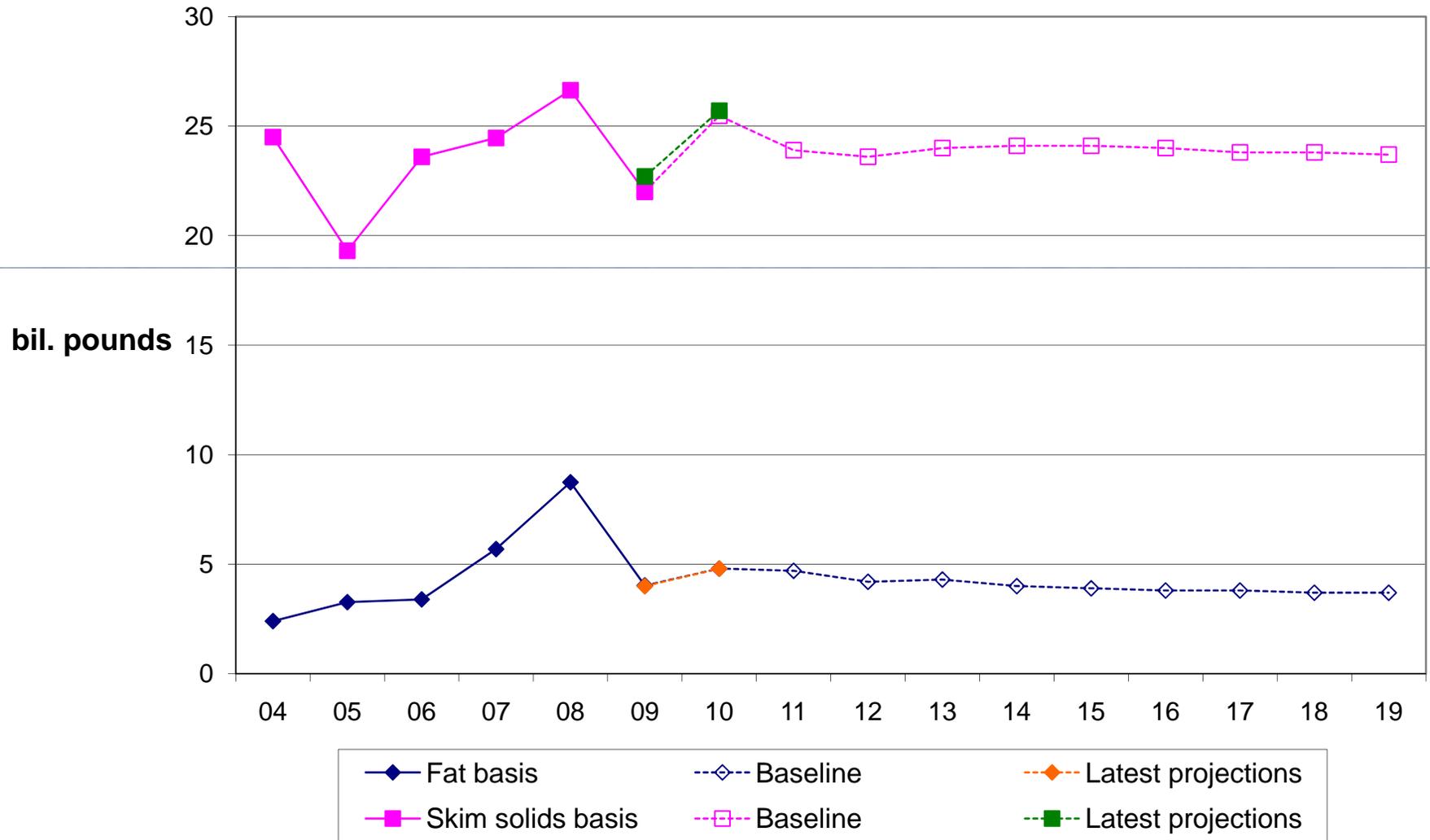
# Milk Production



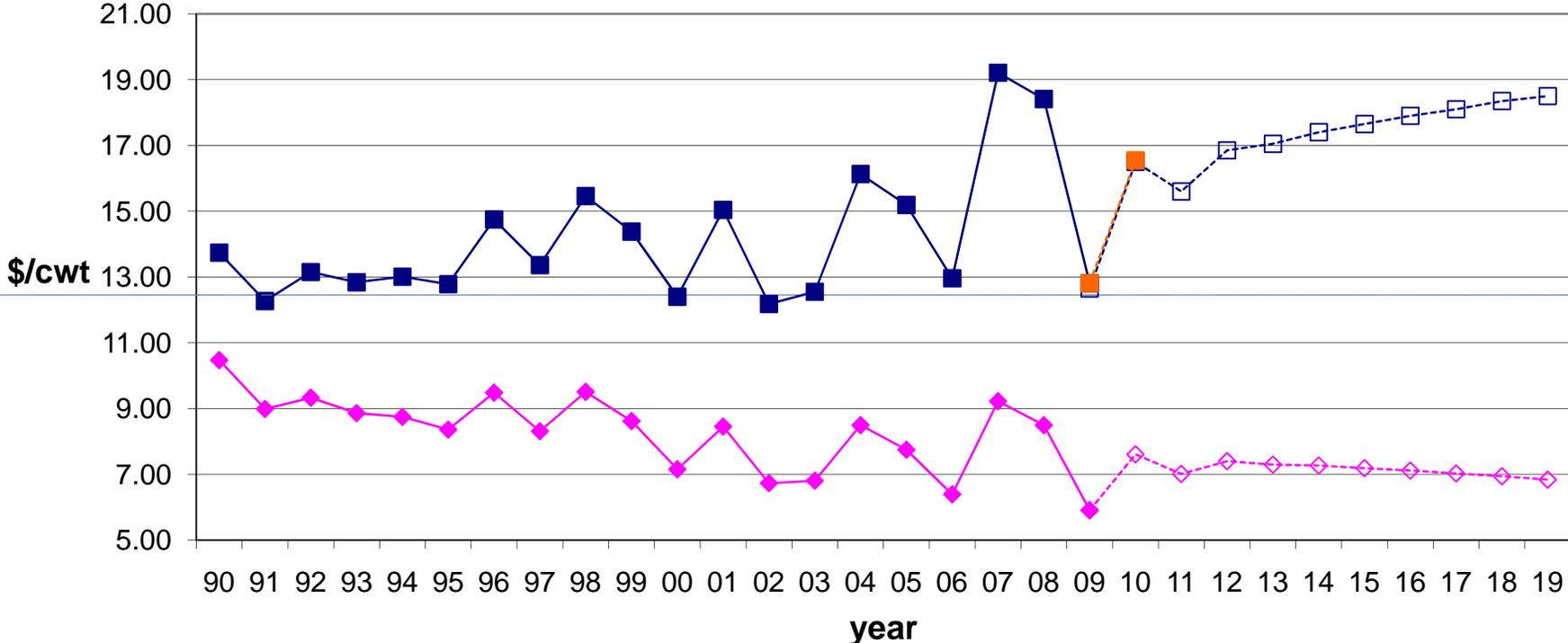
# Milk Cows and Output per Cow



# Commercial Exports, Milk Equivalent Basis



# All Milk Price (\$/cwt)



- All-milk price
- Baseline Projection
- Latest projections
- ◆ Real all-milk price (deflated by CPI-U, 1982-84=100)
- ◆ Baseline Projection

Thank you.