

Agricultural Outlook Forum
U.S. Department of Agriculture

Presented: February 18-19, 2010

Situation and Outlook for the
U.S. Dairy Industry

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February 19, 2010

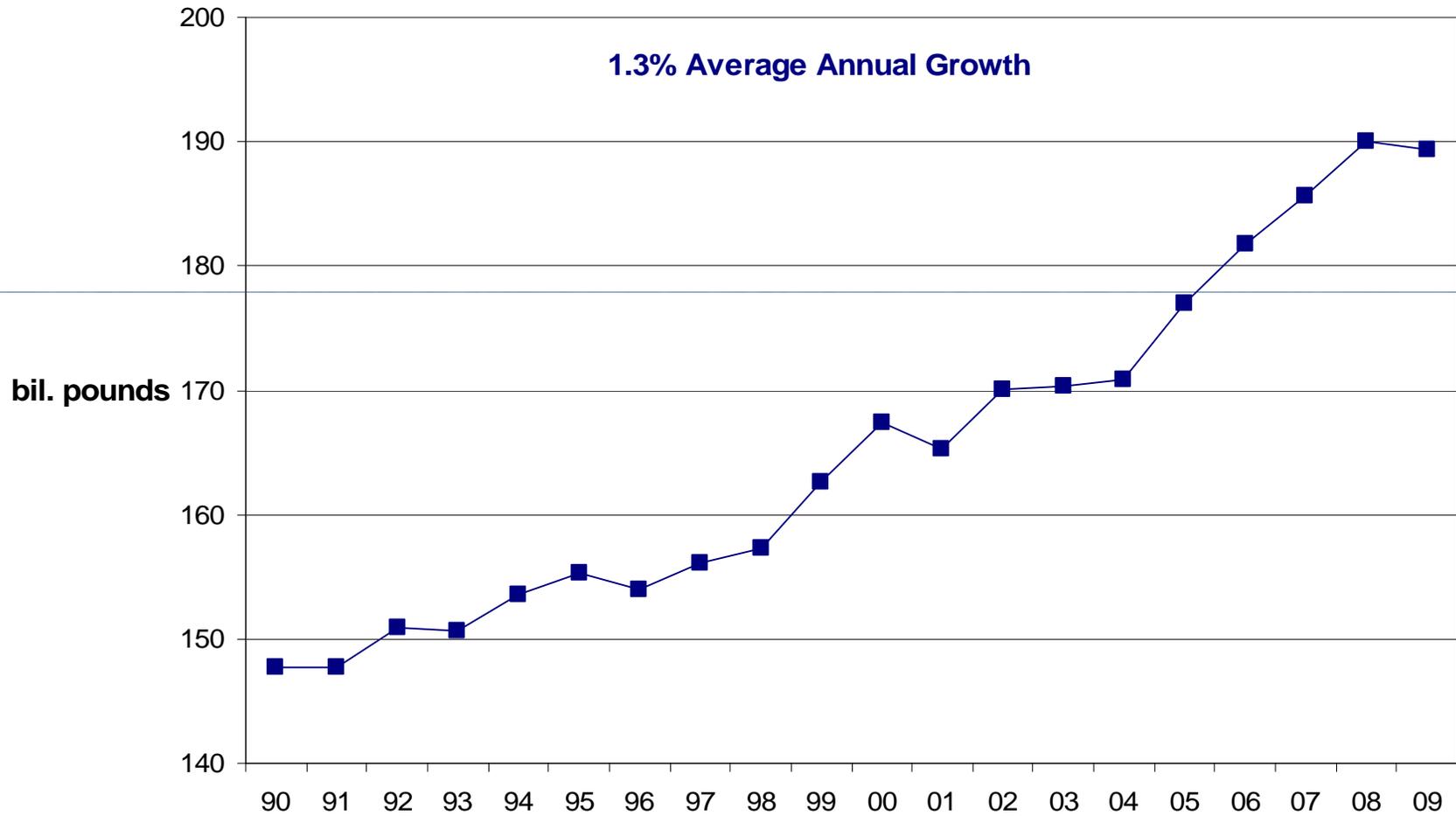
Ice Breaker



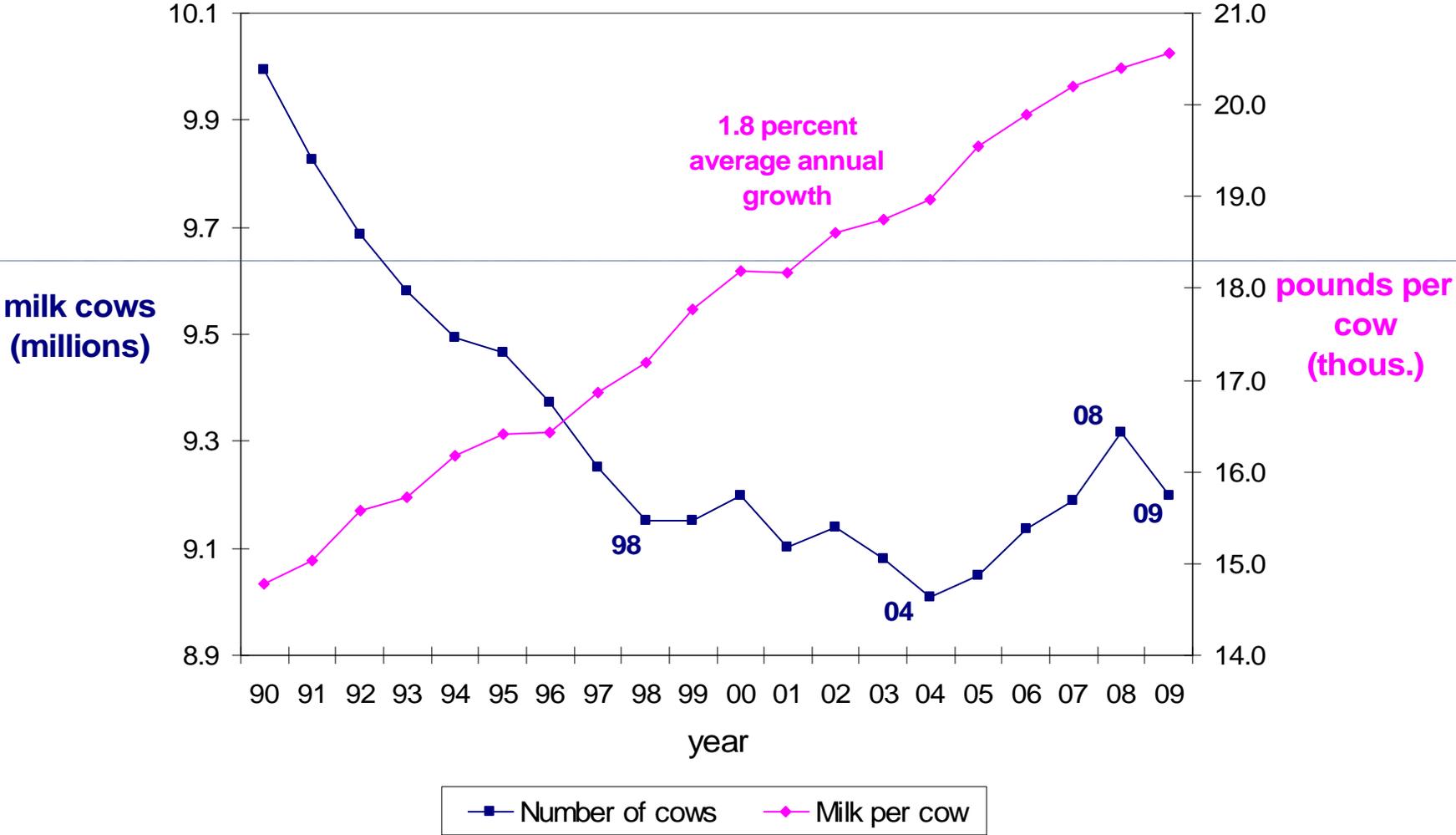
NASA photograph

A Look Back Over Two Decades

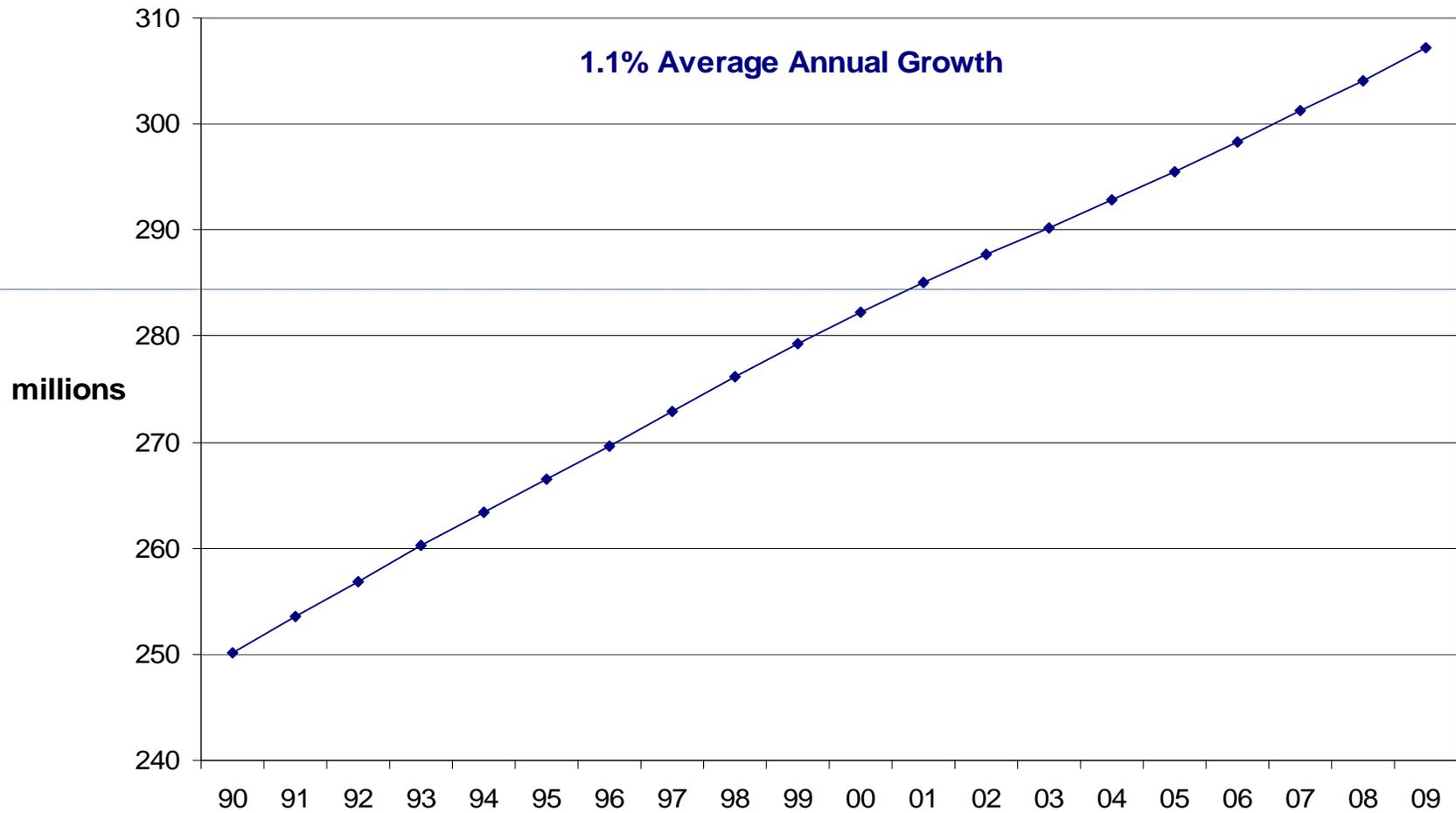
Milk Production



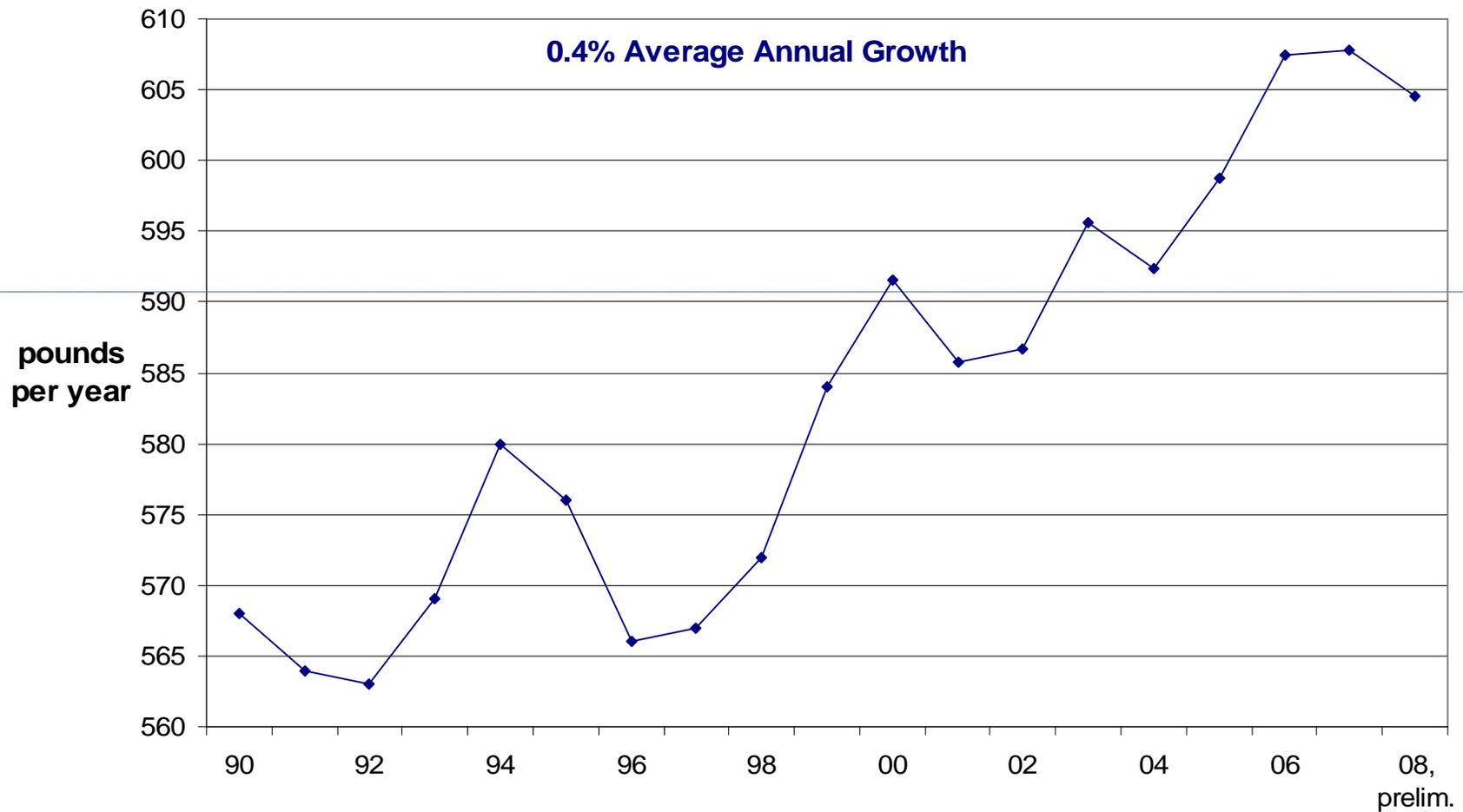
U. S. Dairy Herd and Milk Production per Cow



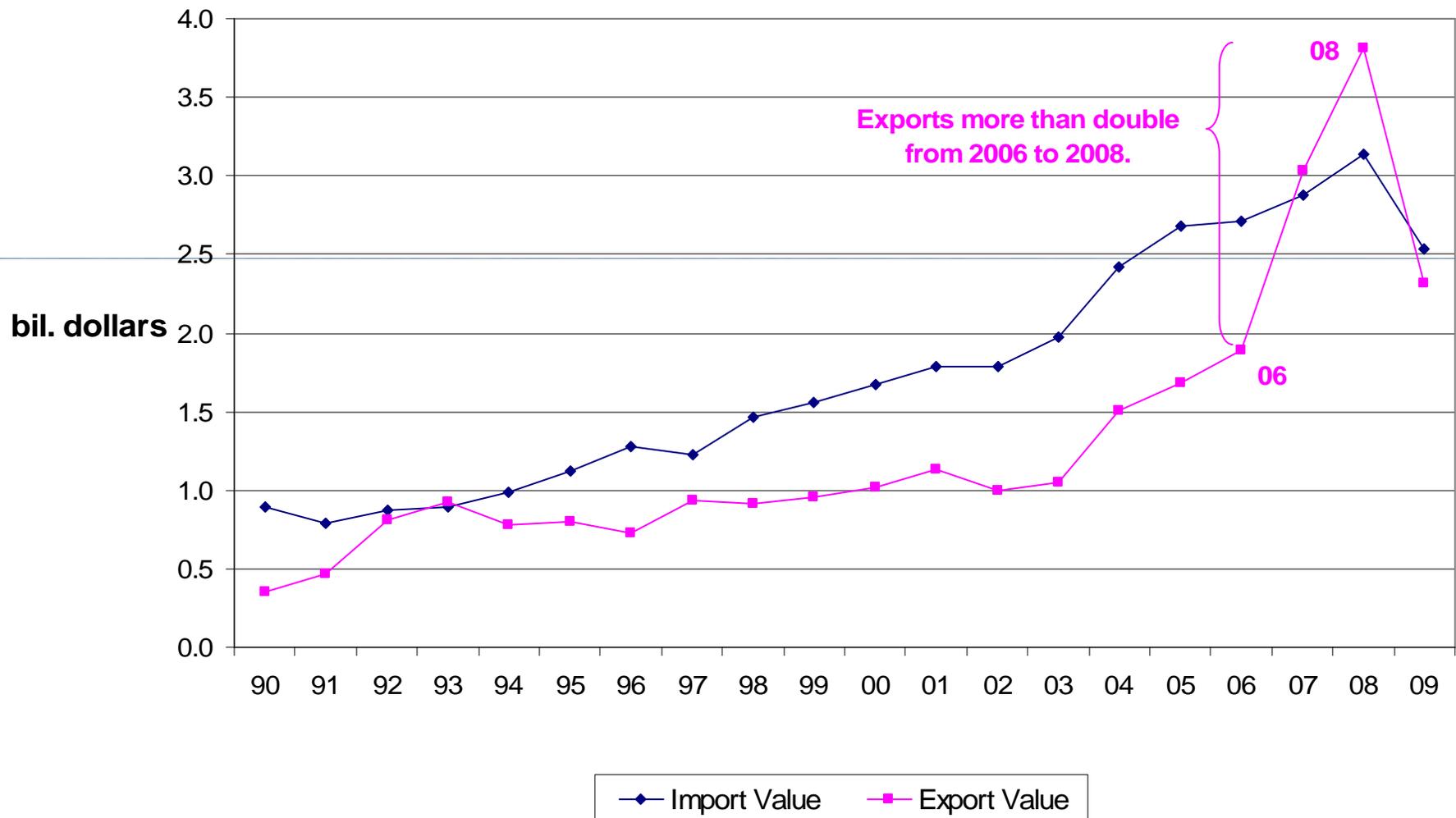
U.S. Population



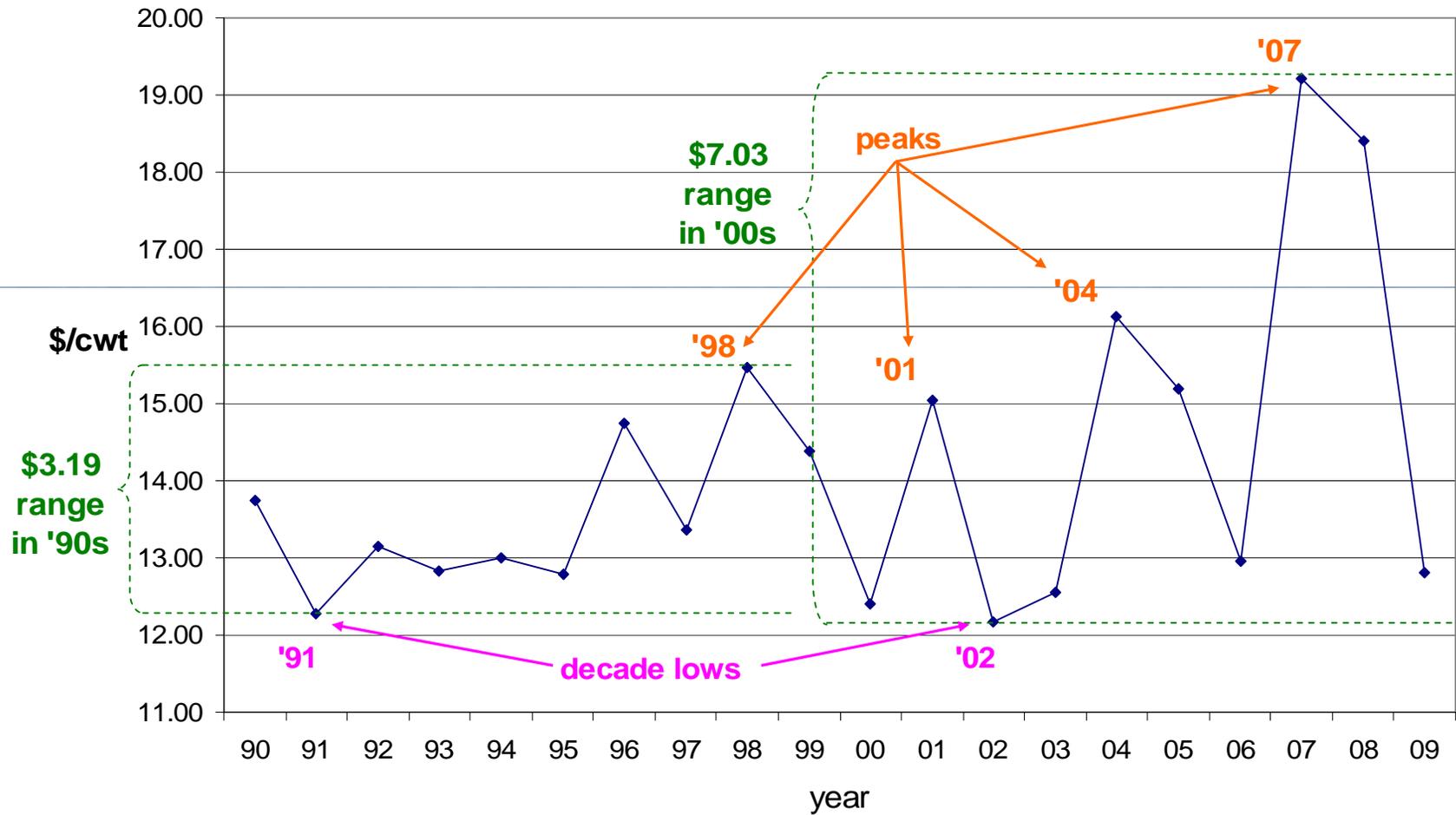
Per capita consumption, milk equivalent fat basis



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?

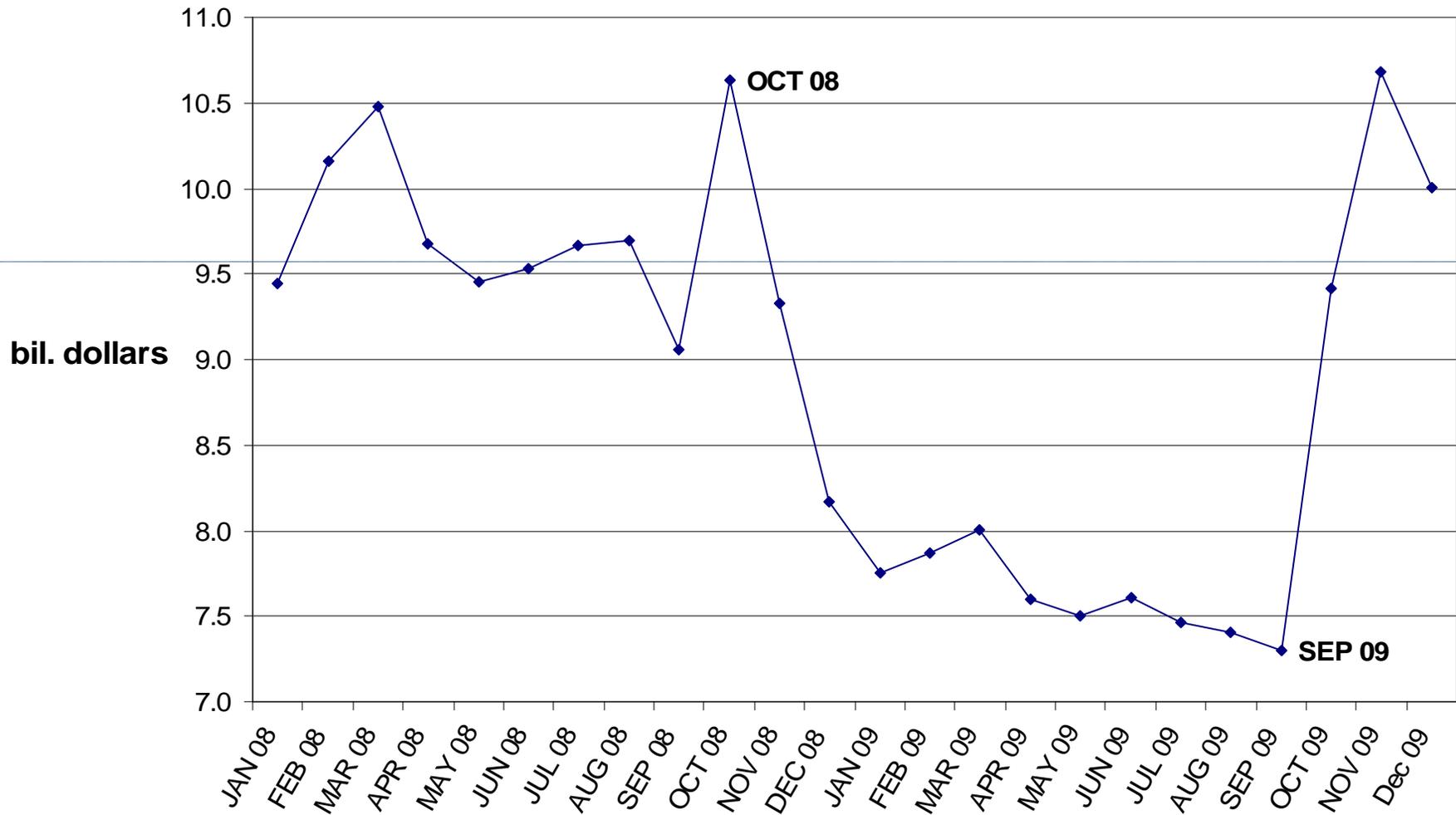
Global Recession

- 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...”

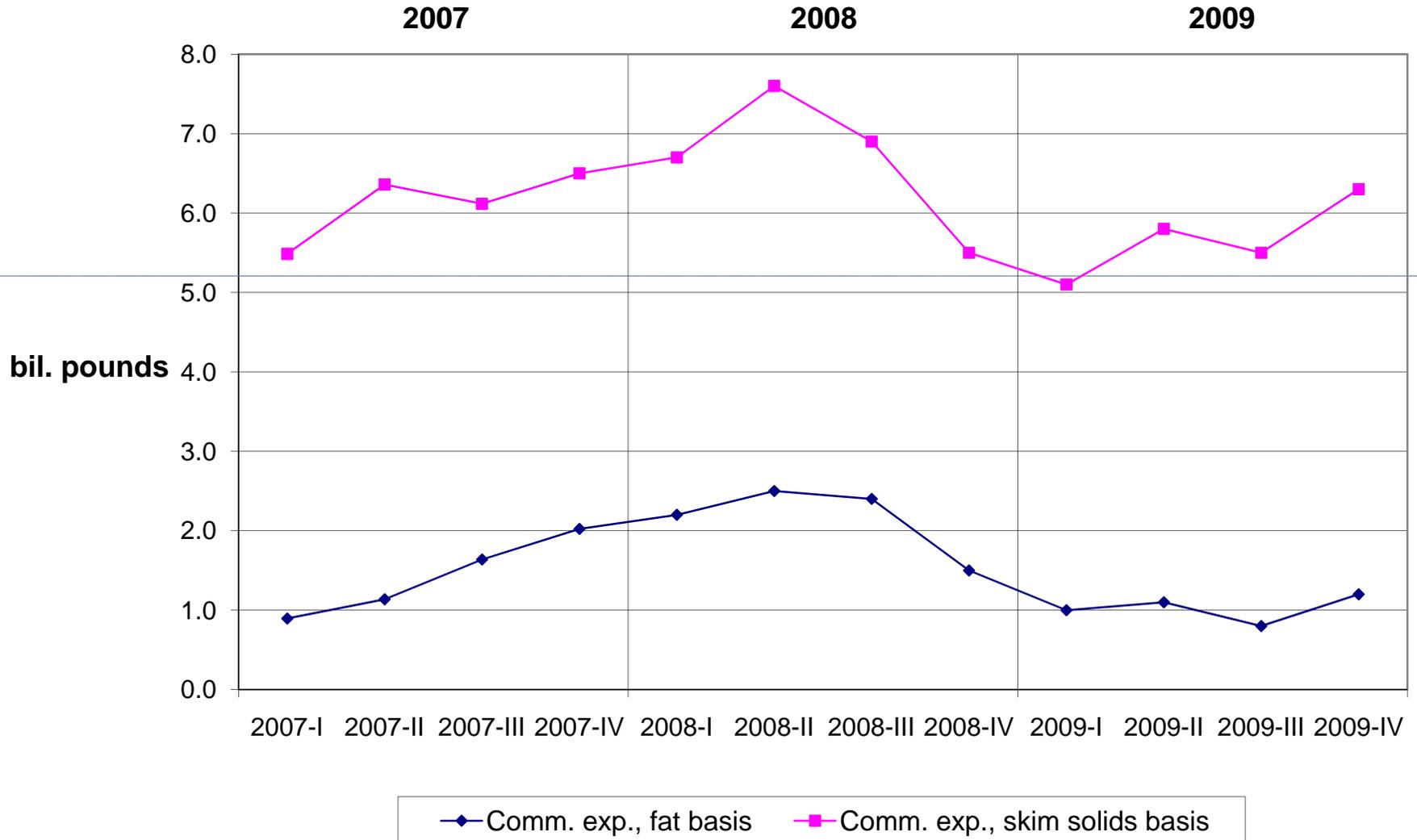
Shift in Food Demand

- 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

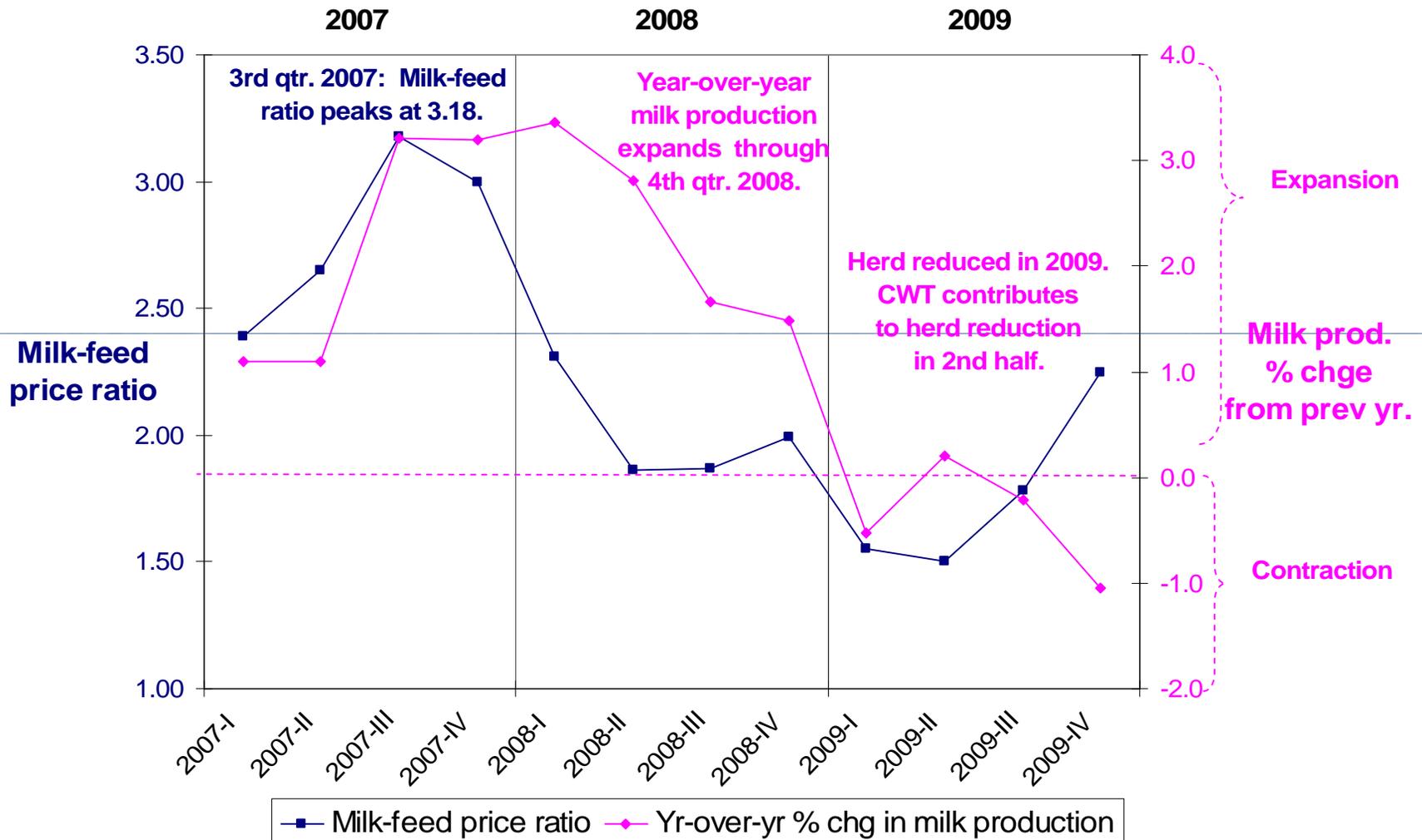
U.S. Agricultural Exports, 2008-2009



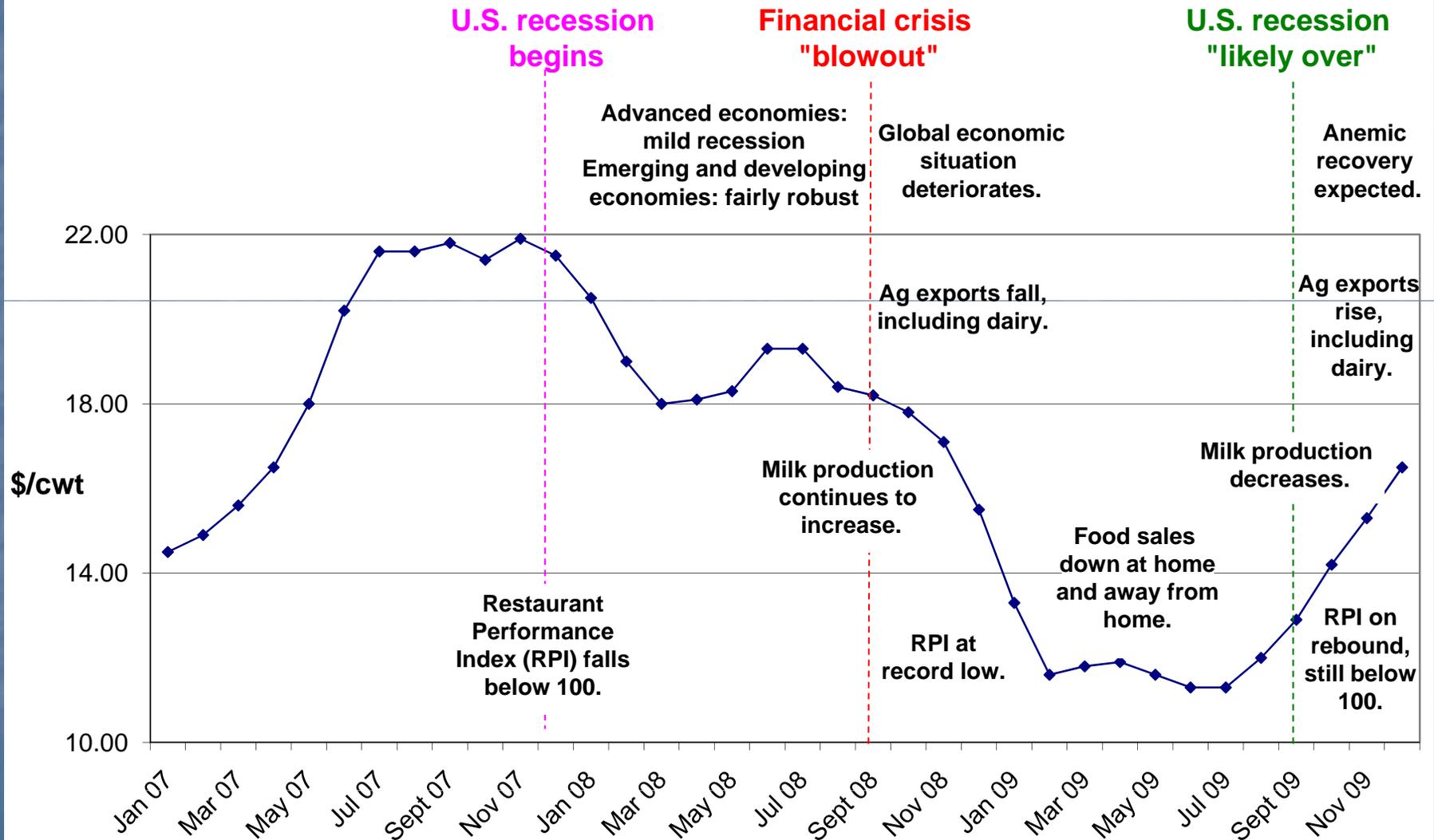
Commercial Exports, Milk Equivalent Basis



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



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



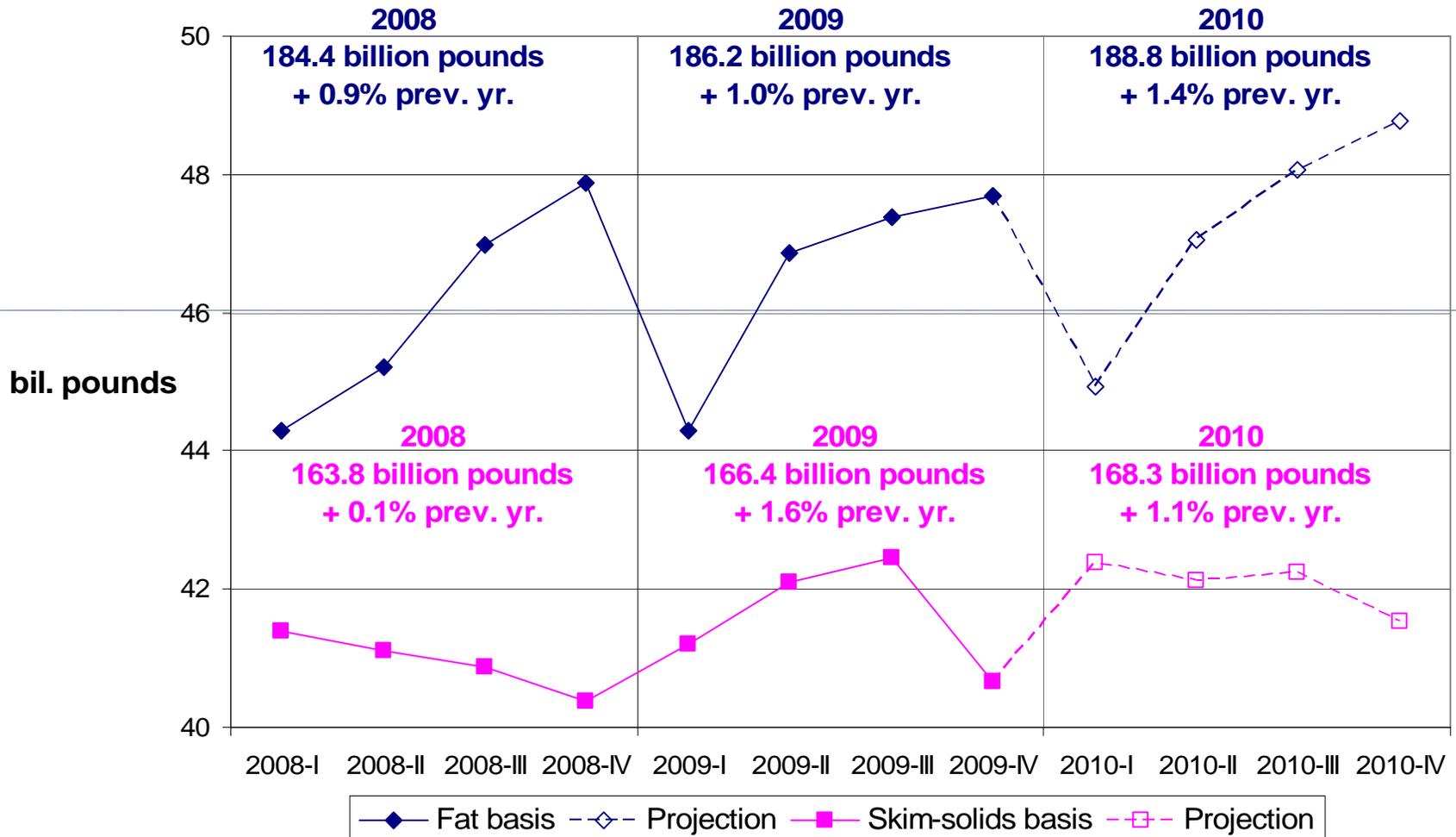
U.S. Government Response to Low Milk Prices of 2009

- 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%

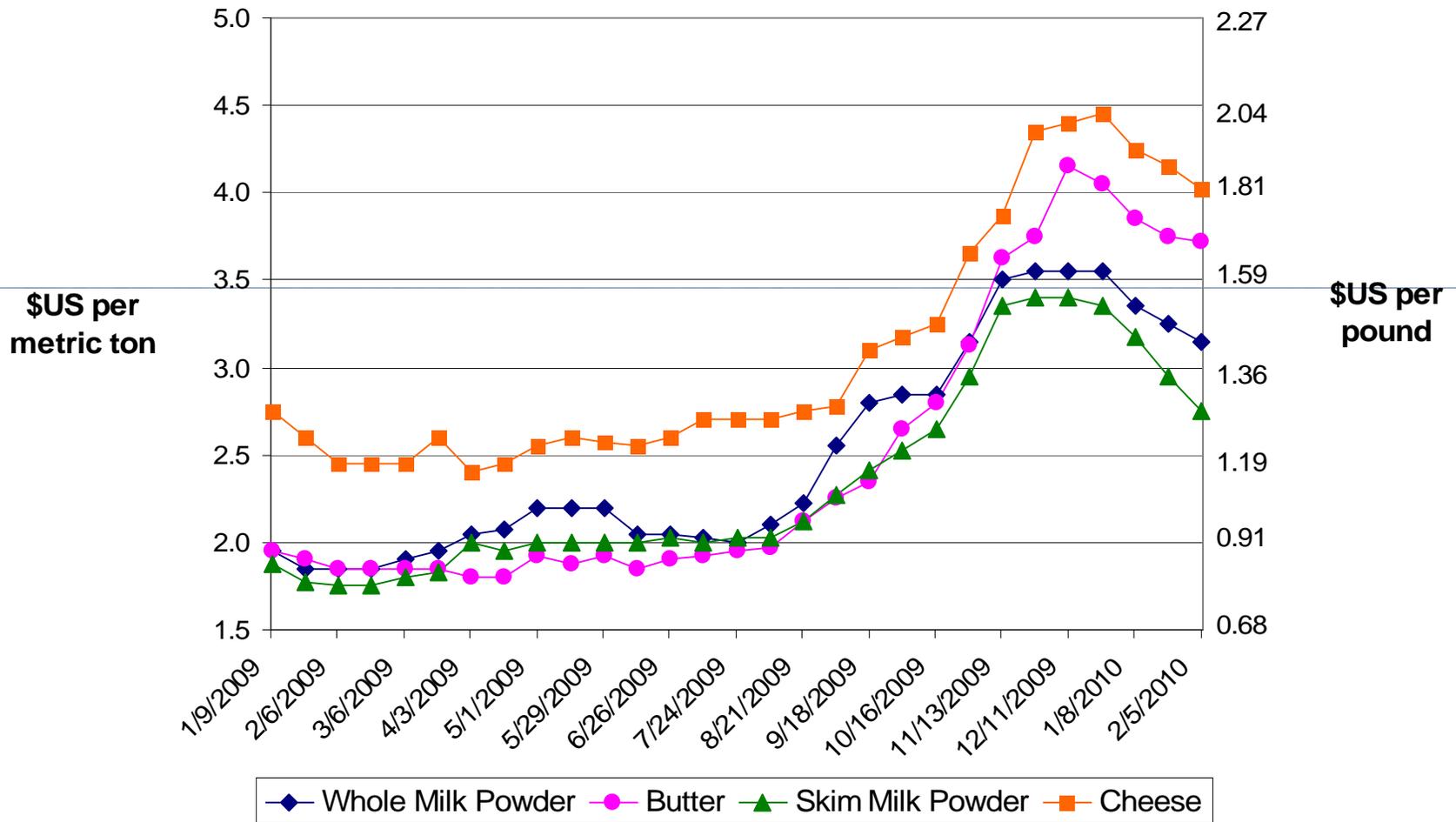
**Milk Production Forecasts of Major Exporting Countries
(1000 metric tons)**

| | 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 |

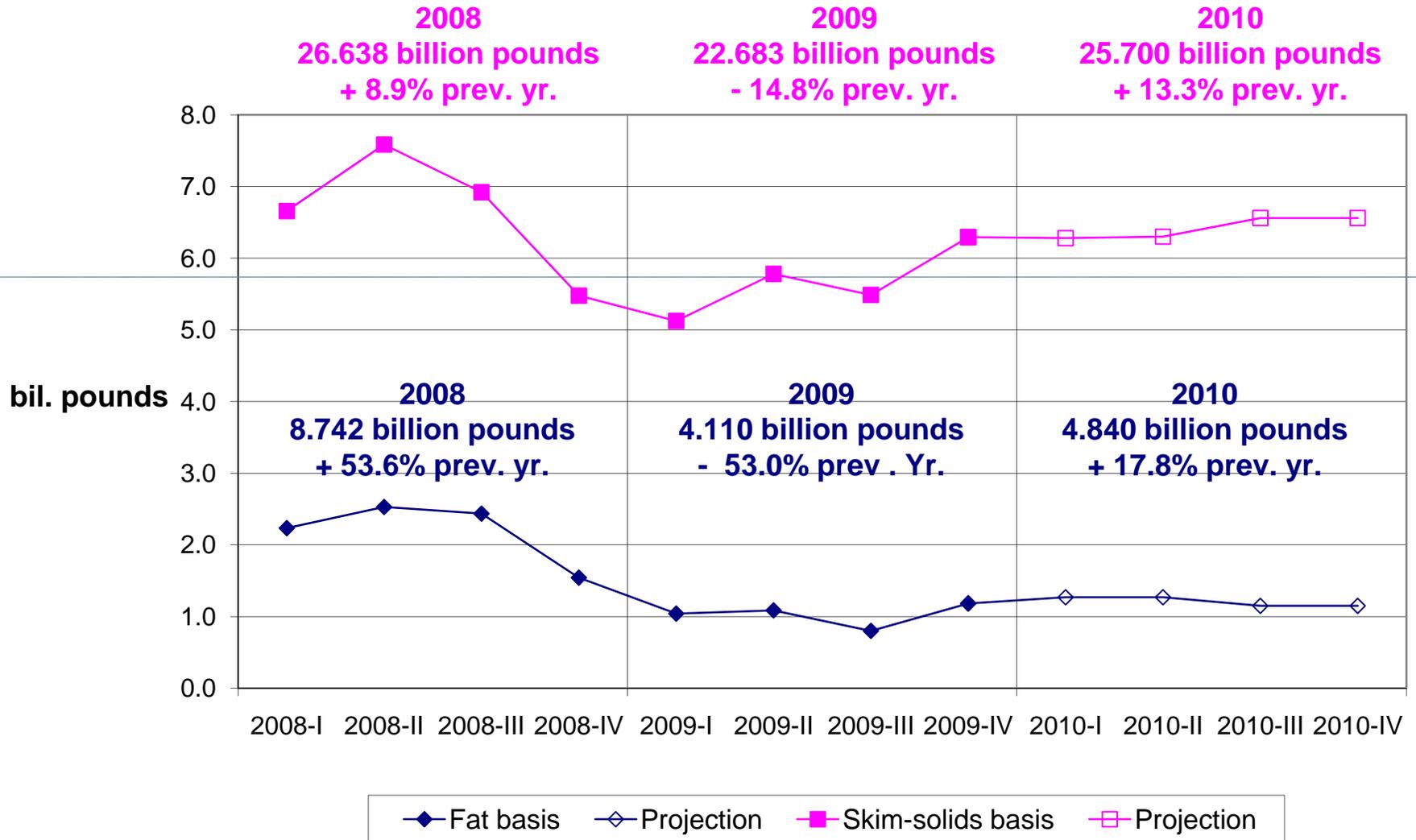
Australia, EU-27, and New Zealand forecasts are as of December 2009. US forecast is as of February 2010.

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

Oceania Export Prices



Commercial Exports

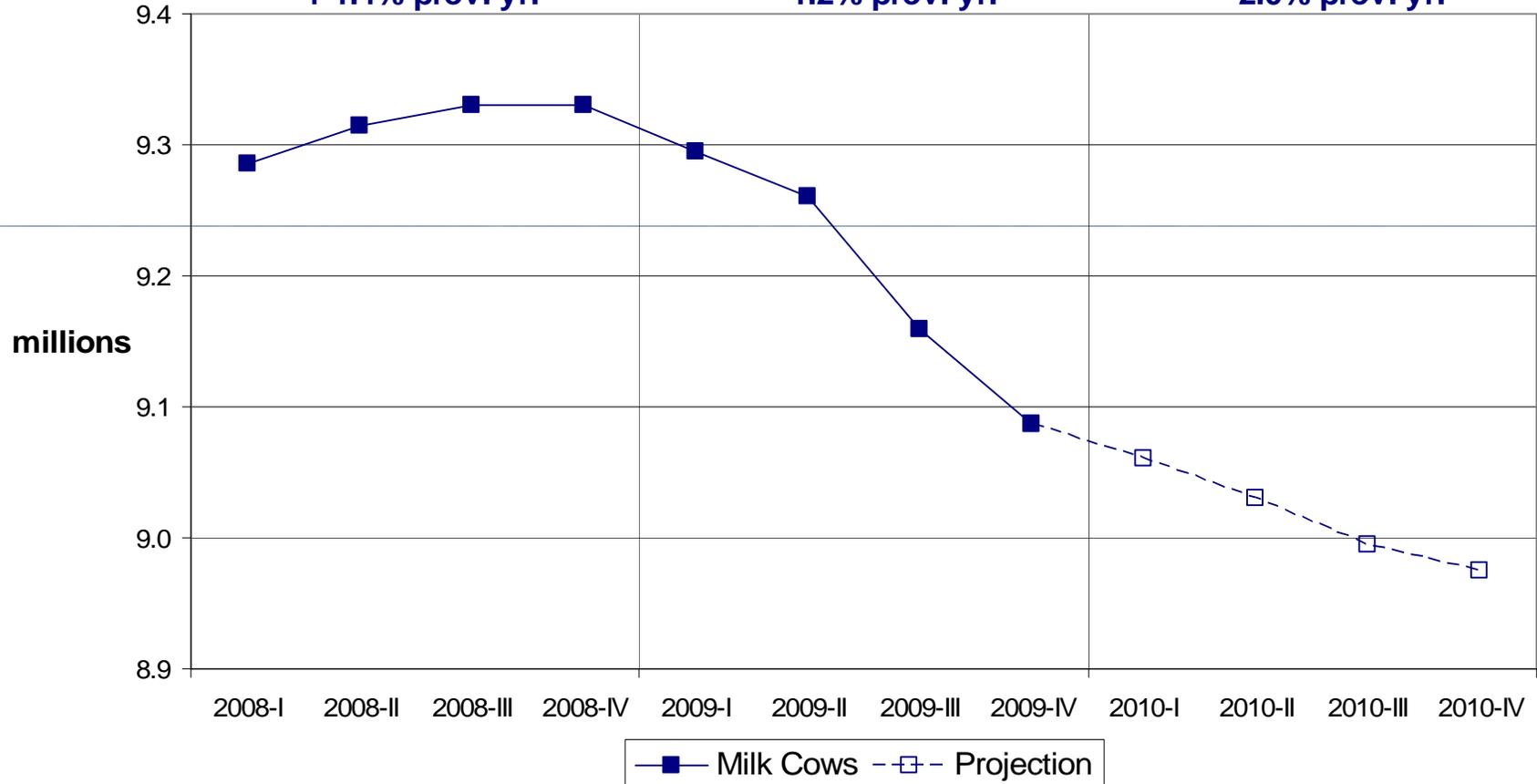


Milk Cows

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.

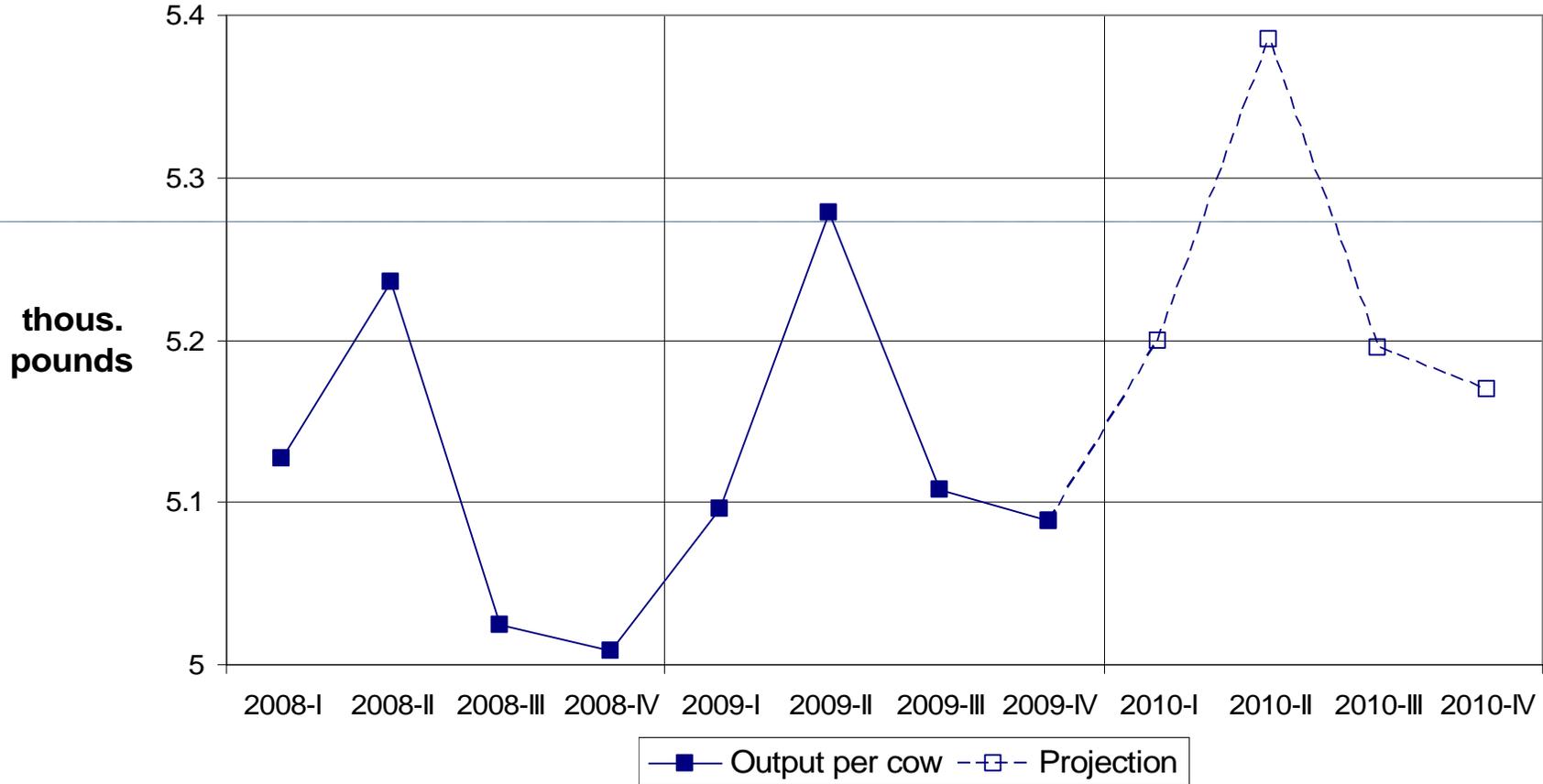


Output per Cow

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.

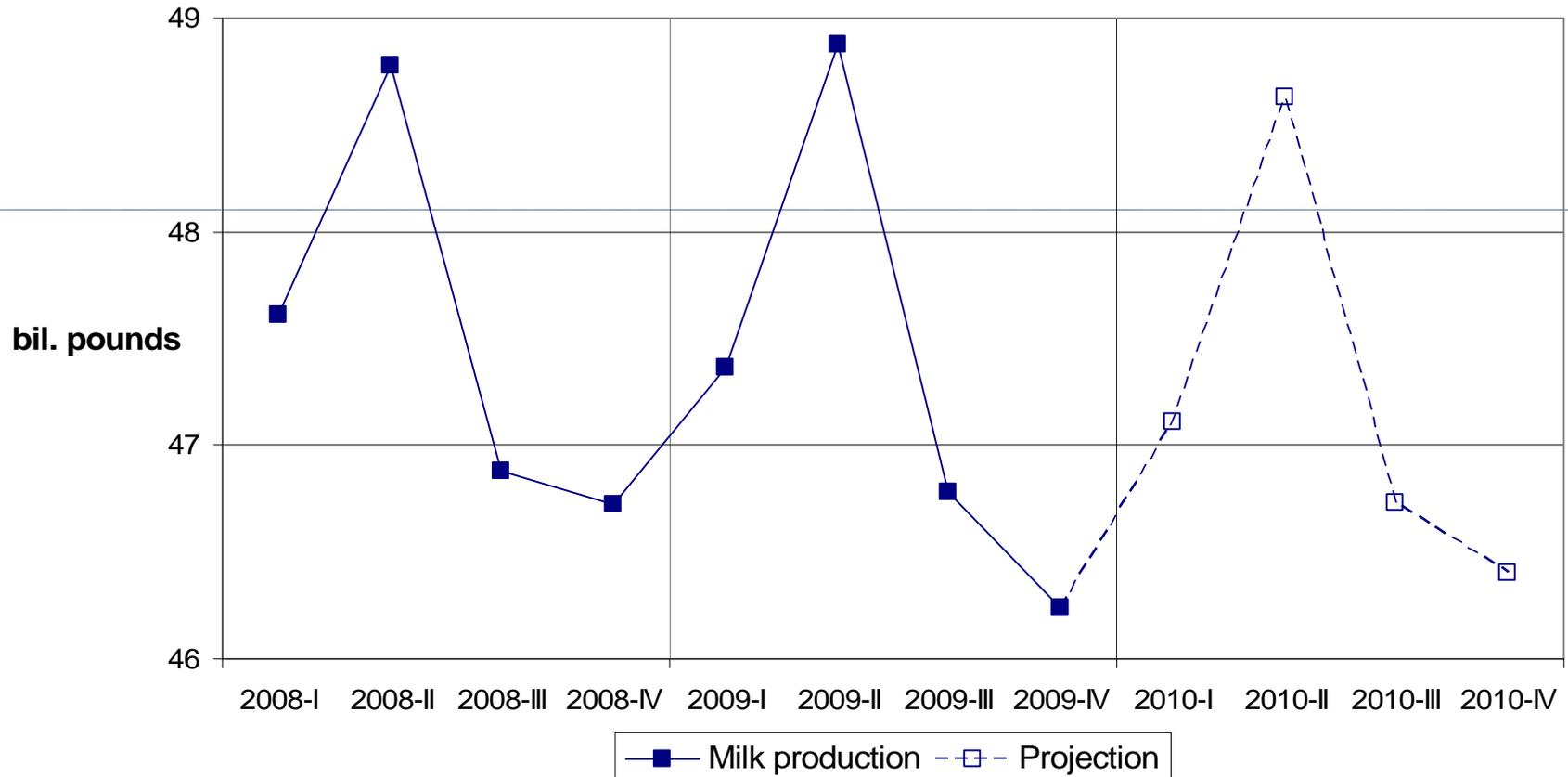


Milk Production

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

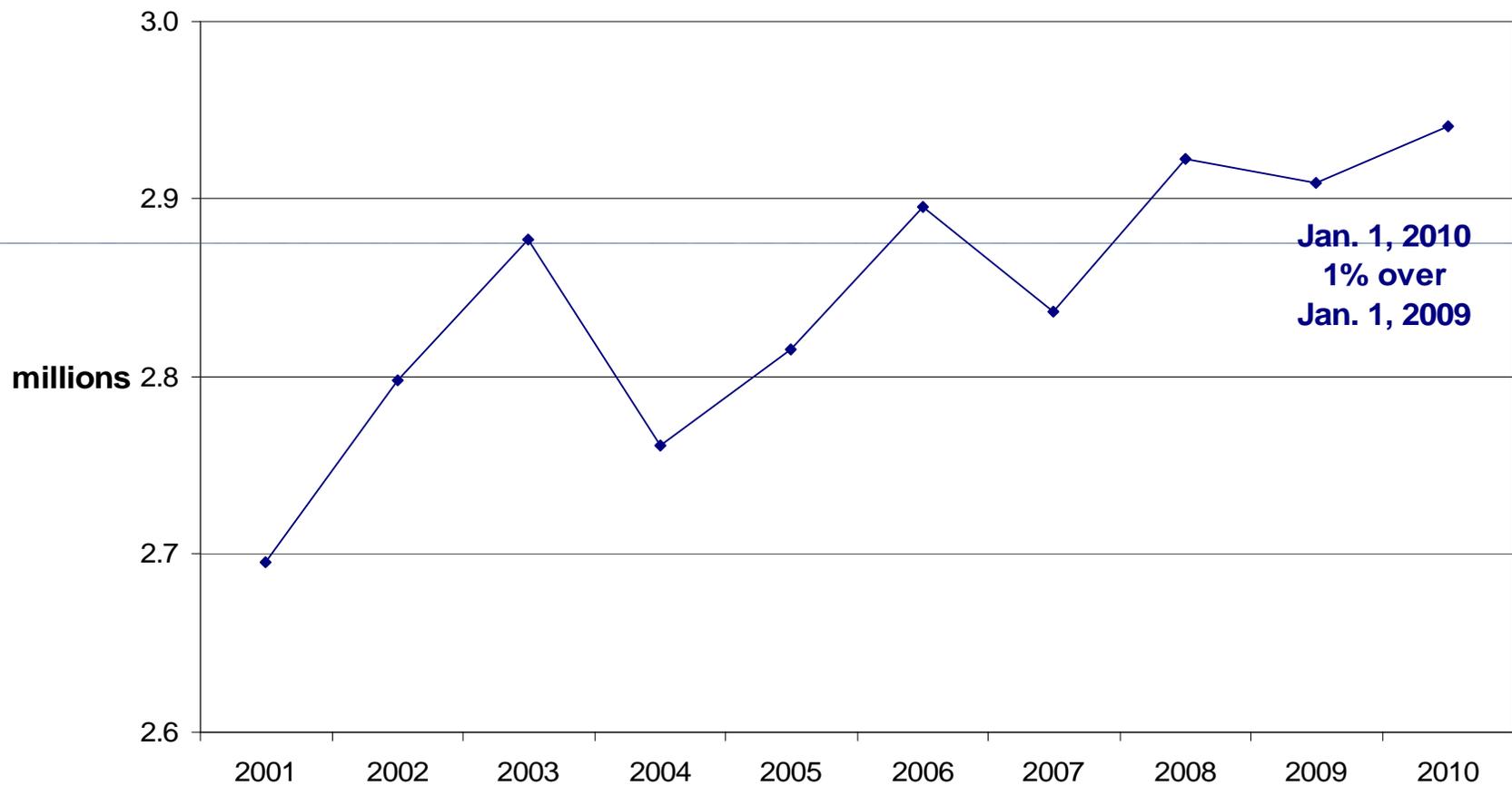
2009:
189.3 bil. pounds
- 0.4% prev. yr.

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?

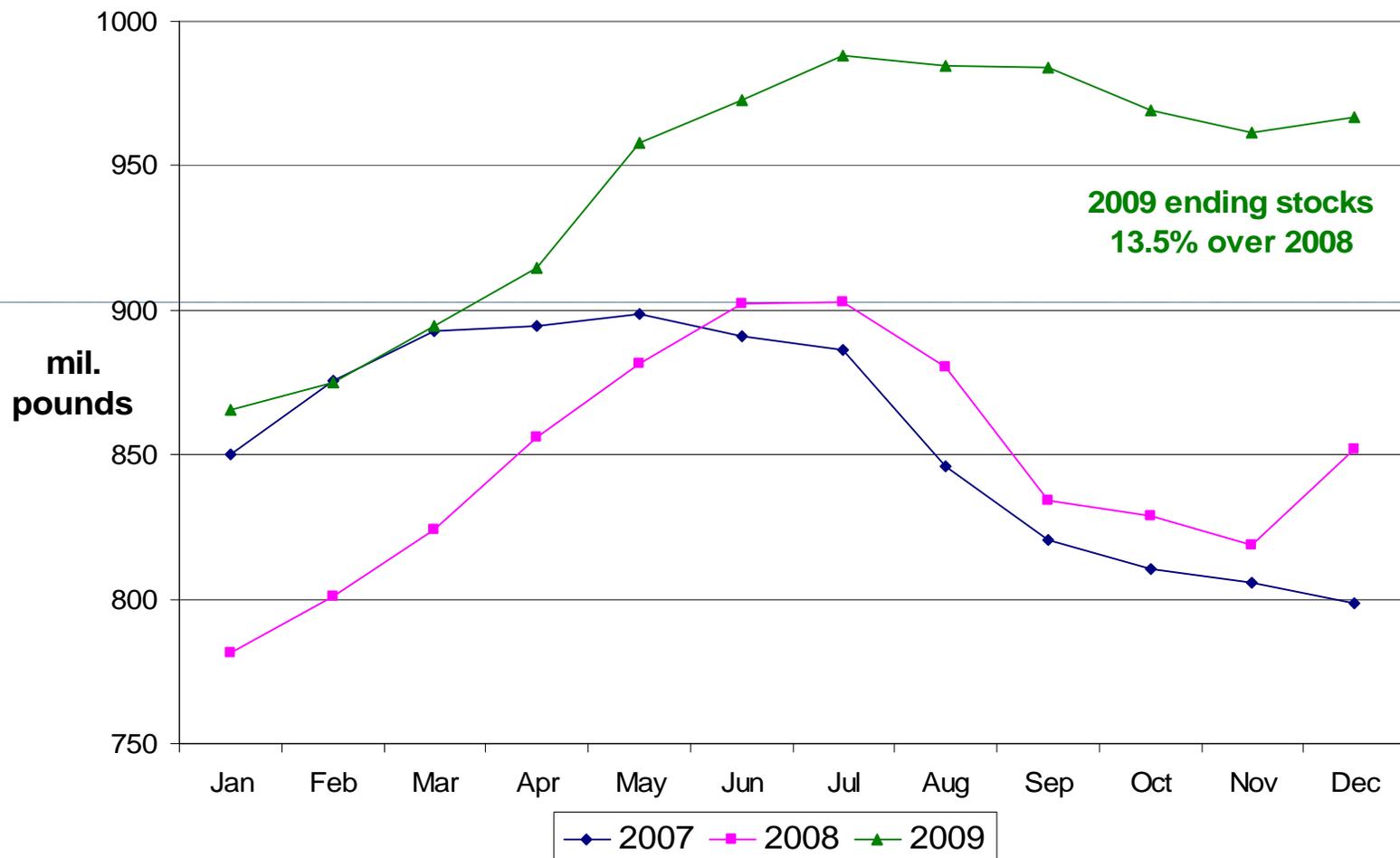
Dairy Replacement Heifers, 500+ Lbs, Expected to Calve, Jan. 1 Inventory



Feed Prices for 2009/10 Marketing Year

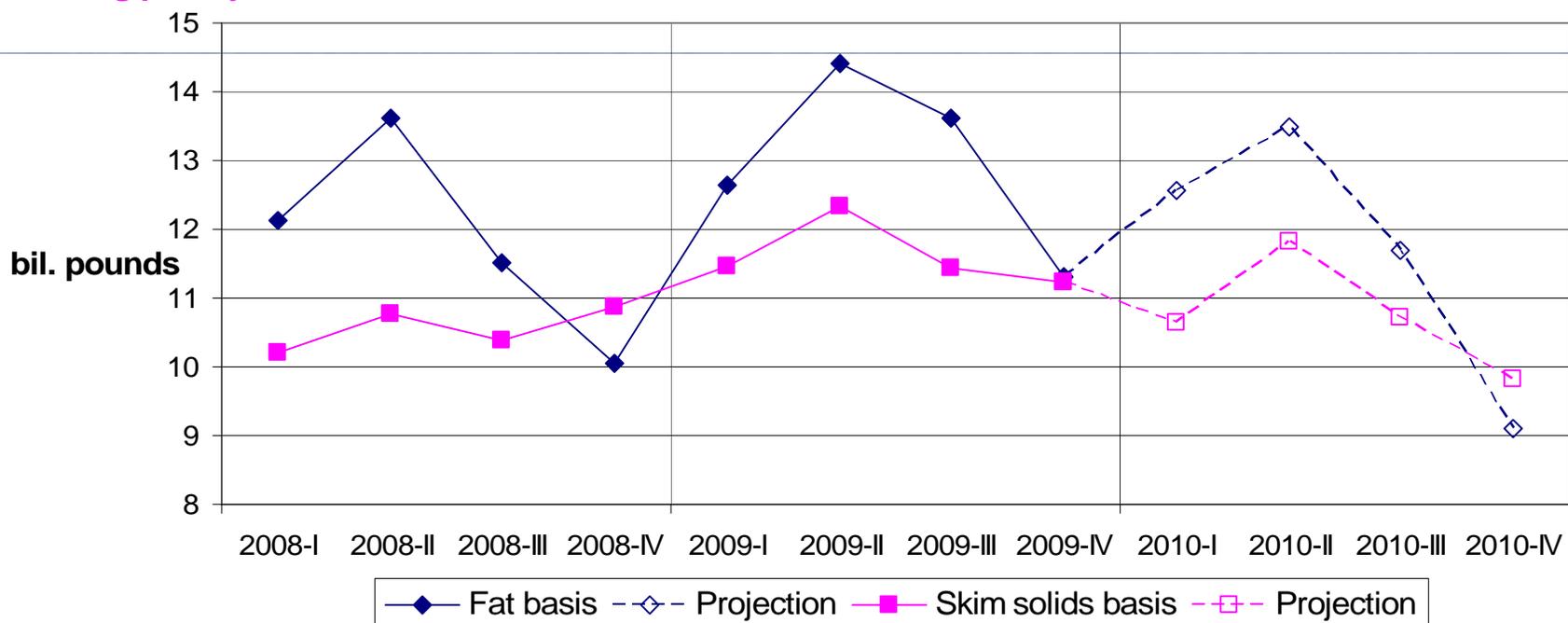
- Relatively high projections for feed price averages:
 - Corn: \$3.45 to \$3.95 per bushel
 - Soybeans meal: \$270 to \$320 per ton
- Prices not as high as for 2007/08:
 - Corn: \$4.20 per bushel
 - Soybeans: \$335.94 per ton
- Uptick of milk-feed price ratio latter part of 2009
- Expect 2010 milk-feed 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



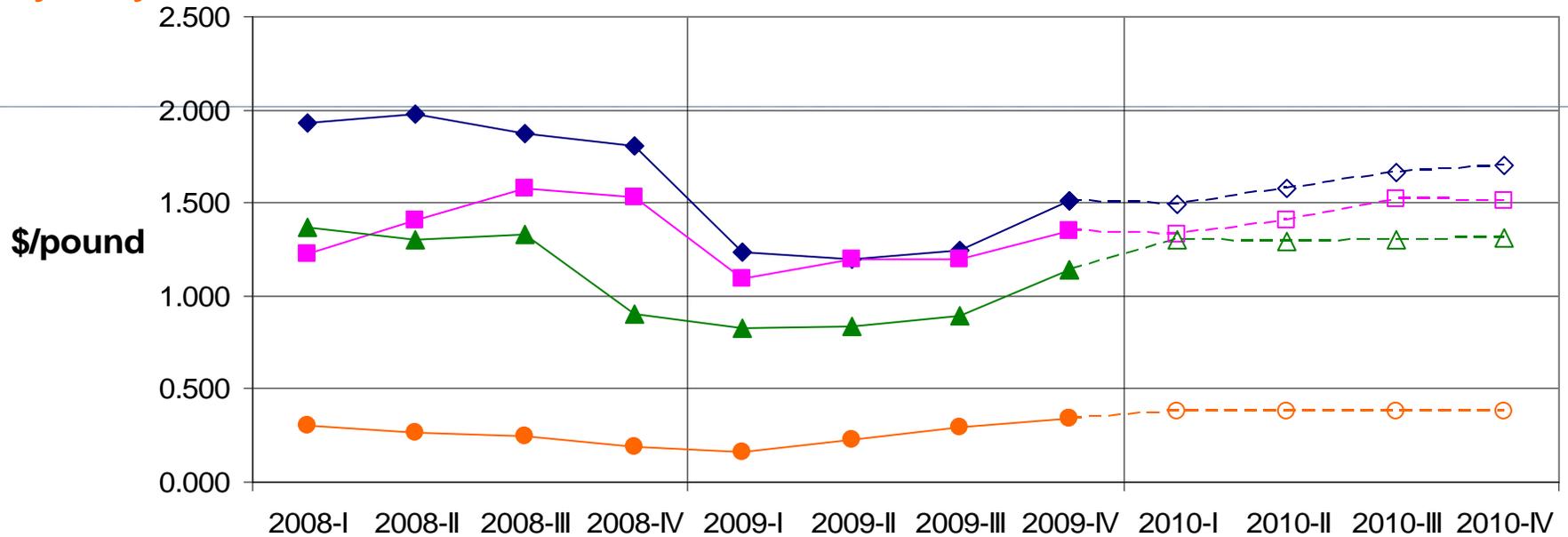
Ending Commercial Stocks (bil. pounds)

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



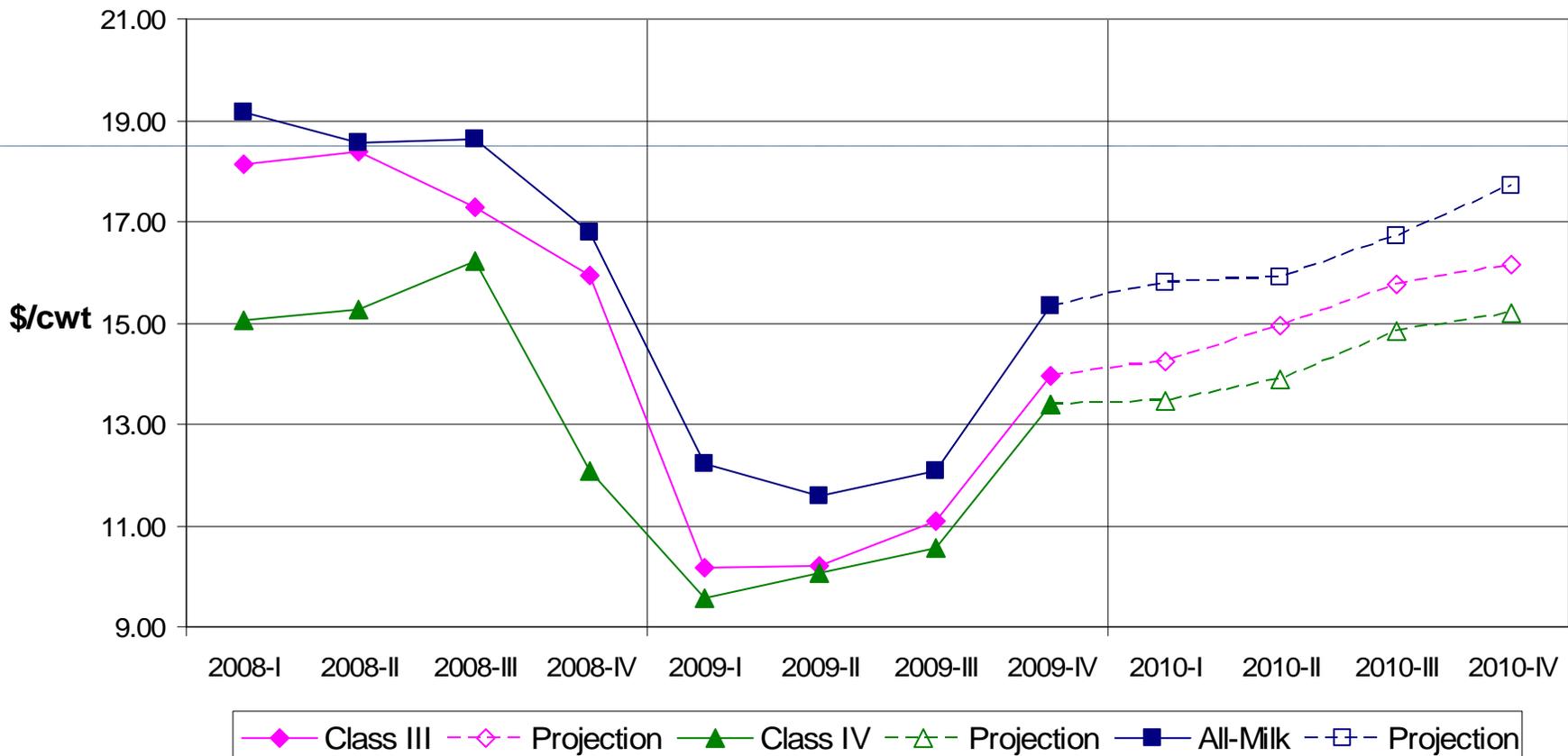
Dairy Products Prices

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



Milk Prices

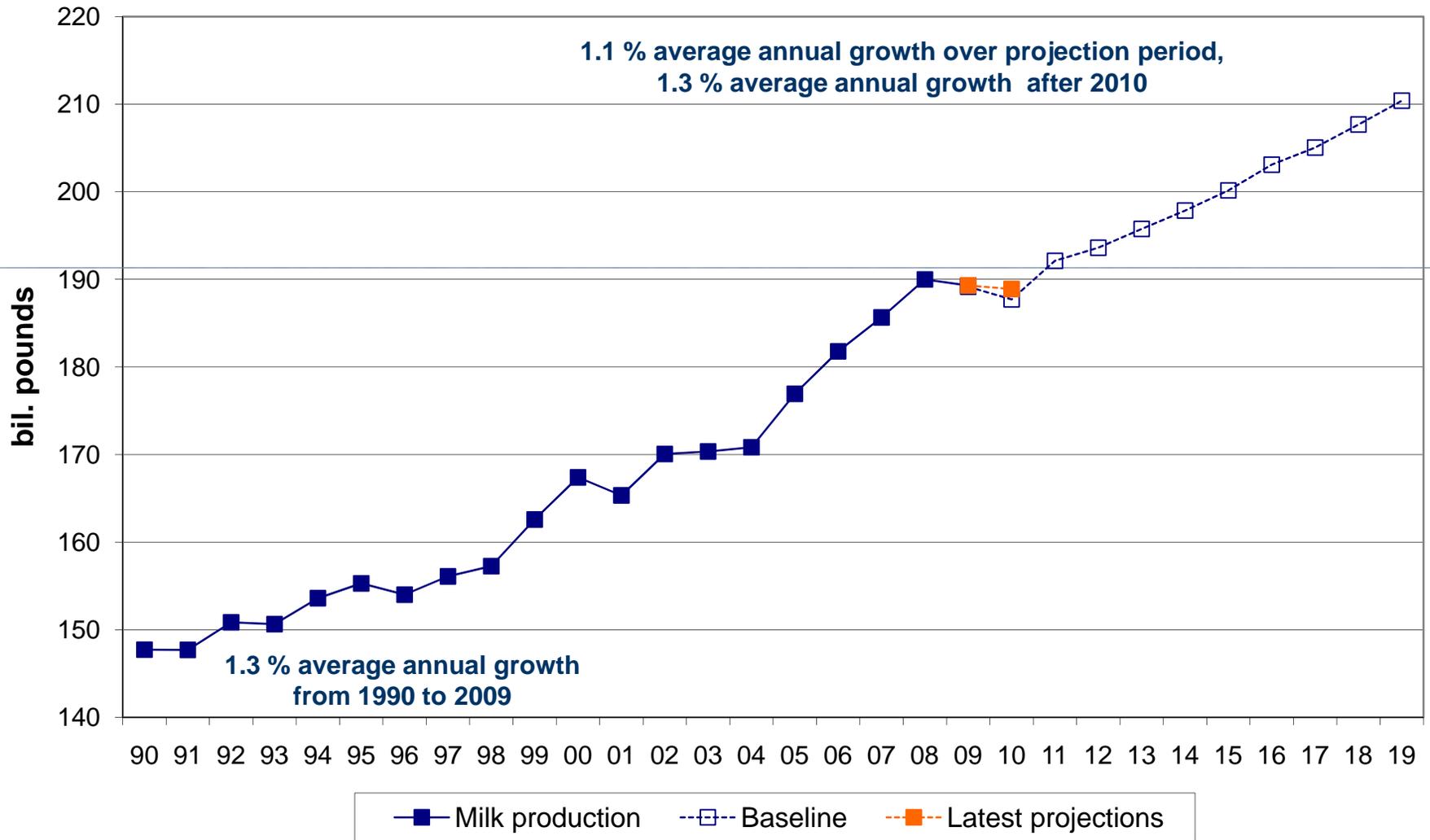
| | <u>2008</u> | <u>2009</u> | <u>2010</u> |
|-----------|-------------|-------------|---------------|
| All Milk | 18.29 | 12.81 | 16.20 - 16.90 |
| Class III | 17.44 | 11.36 | 14.90 - 15.60 |
| Class IV | 14.65 | 10.89 | 13.95 - 14.75 |



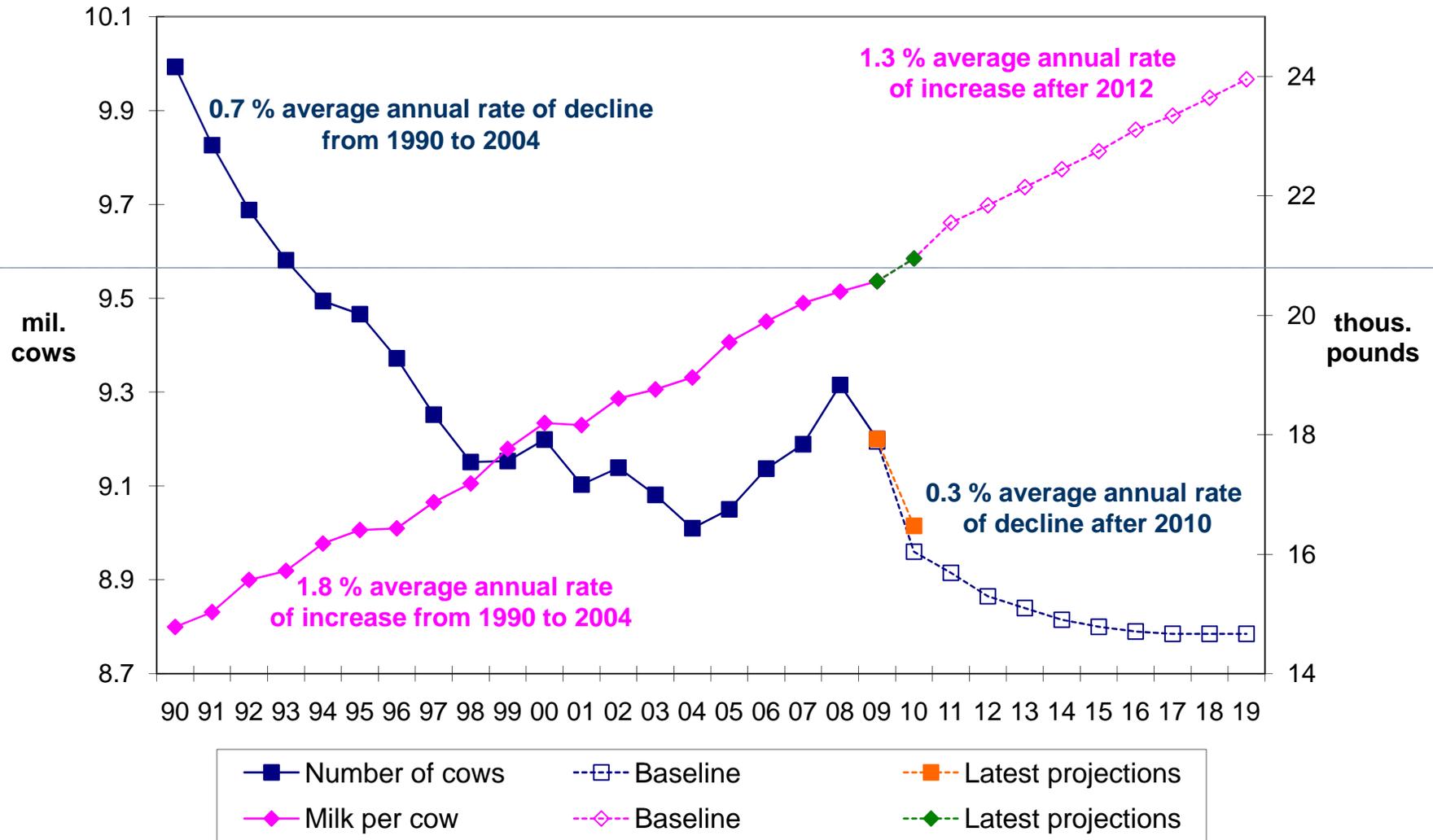
A Few Words About Long-Term Projections

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

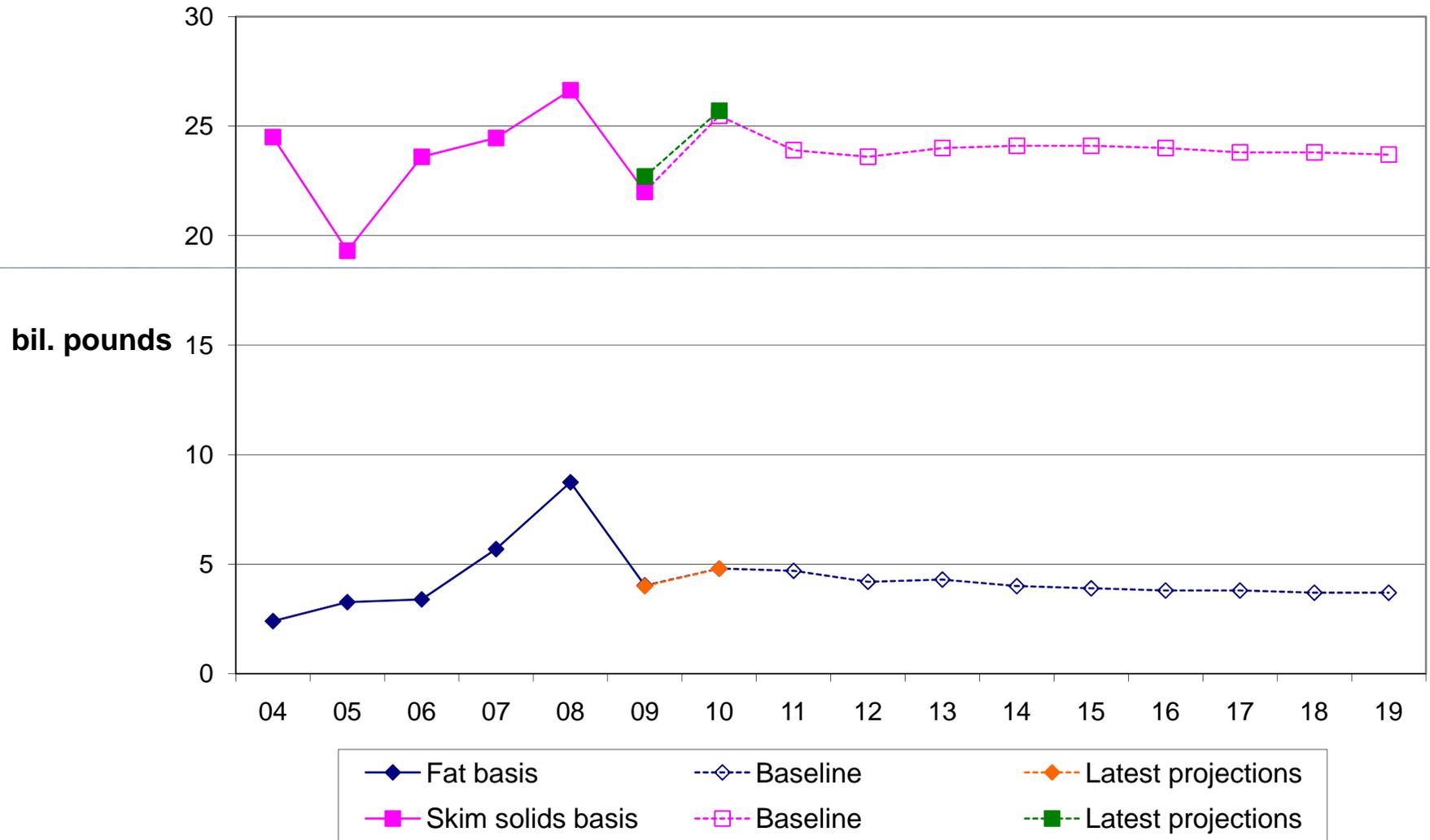
Milk Production



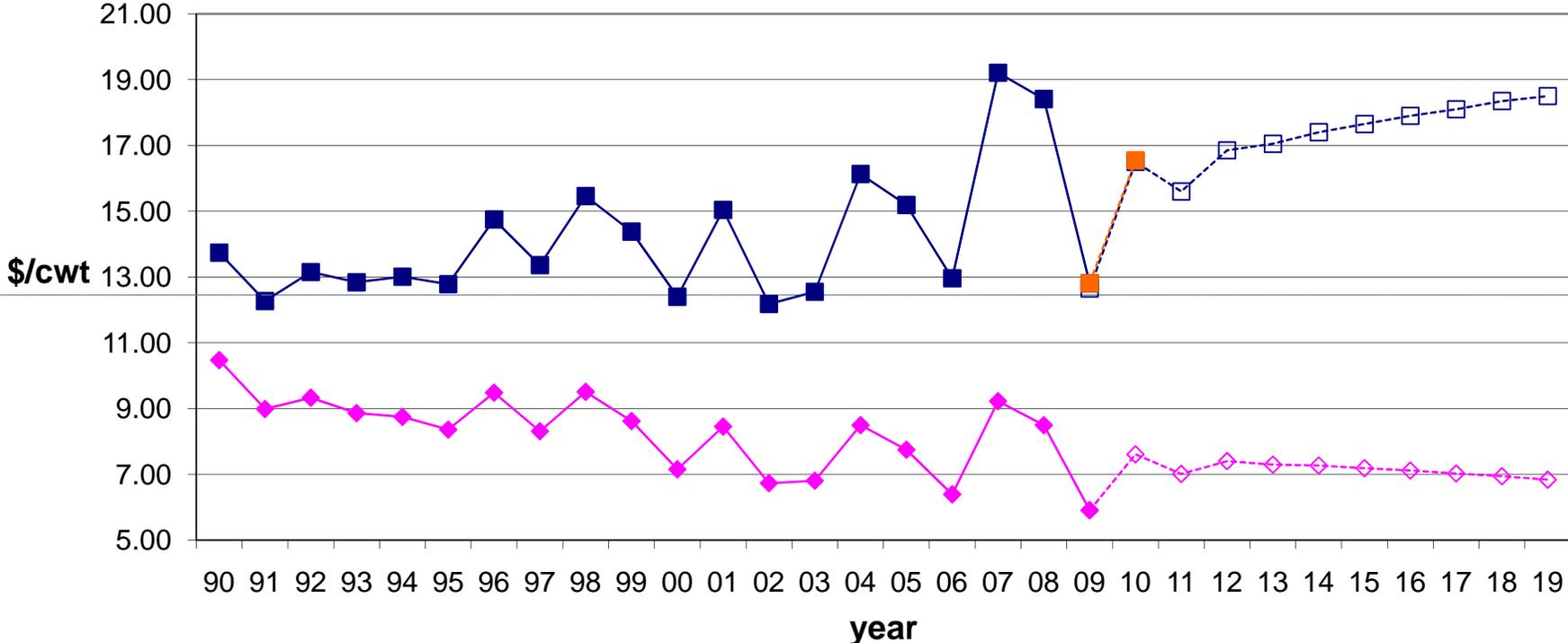
Milk Cows and Output per Cow



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.