**WEDNESDAY, JANUARY 13, 2010**
**State Capitol, Room 126**
**1:30 p.m.**

Informational Hearing

# *California Dairy Industry's Economic Competitiveness*

**Dairy Marketing – (Historic overview Aug. '08 to present)**

| | |
|---|---|
| International Market Collapse | Dr. Bill Schiek, Economist<br>Dairy Institute of California |
| Domestic Market Impact | Dr. James W. Gruebele, Economist<br>Dairy Consultant |

**Fiscal Impacts – (Present)**

| | |
|---|---|
| Lending Perspective | Sean Haynes, a Senior Relationship Manager/Lending<br>Rabobank, N.A./Agribusiness Division |
| Feed Market Conditions | Joel Karlin, Commodity Manager/Market Analyst<br>Western Milling |
| Producers' Perspective | Leo Van Warmerdam, Dairyman |

**Issues to come – (Future)**

| | |
|---|---|
| Temporary Milk Price Increase | Kevin Masuhara, Director Marketing Administration<br>David Ikari, Dairy Marketing Branch Chief<br>California Department of Food and Agriculture |
| Market Outlook | Stan Andre, CEO<br>California Milk Advisory Board (CMAB) |
| Future Feed Costs Impacts | Joel Karlin, Commodity Manager/Market Analyst<br>Western Milling |

**Public Comment –** 2 minute comment limit per person.

# BIOGRAPHY FOR WILLIAM SCHIEK, Ph.D.
# ECONOMIST, DAIRY INSTITUTE OF CALIFORNIA

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Dr. William Schiek is an Economist for the Dairy Institute of California, a trade association representing California's fluid milk processors and dairy product manufacturers. He is responsible for member education on milk pricing and dairy economics issues, assisting in the Institute's formulation of dairy pricing and public policy positions and representing the Association at state and federal milk pricing hearings. Prior to joining Dairy Institute's staff, Dr. Schiek was Assistant Professor of Agricultural Economics at Purdue University in West Lafayette, Indiana from 1991 to 1997. At Purdue, he had responsibility for teaching courses in Agricultural Marketing and Food Business Management and conducted research on a variety of food and agricultural marketing topics, including dairy marketing topics. From 1982 to 1989, Dr. Schiek was employed by the New York-New-Jersey Milk Market Administrator's Office (Federal Order Number 2) as Cooperative Relations Specialist (1982-84) and Economist (1985-89). Dr. Schiek has a Bachelor of Science degree from Cornell University in Applied Economics and Business Management and M.S. and Ph.D. degrees from the University of Florida in Food and Resource Economics.

# A Review of Recent International Dairy Markets and Prices

Dr. William Schiek

Dairy Institute of California

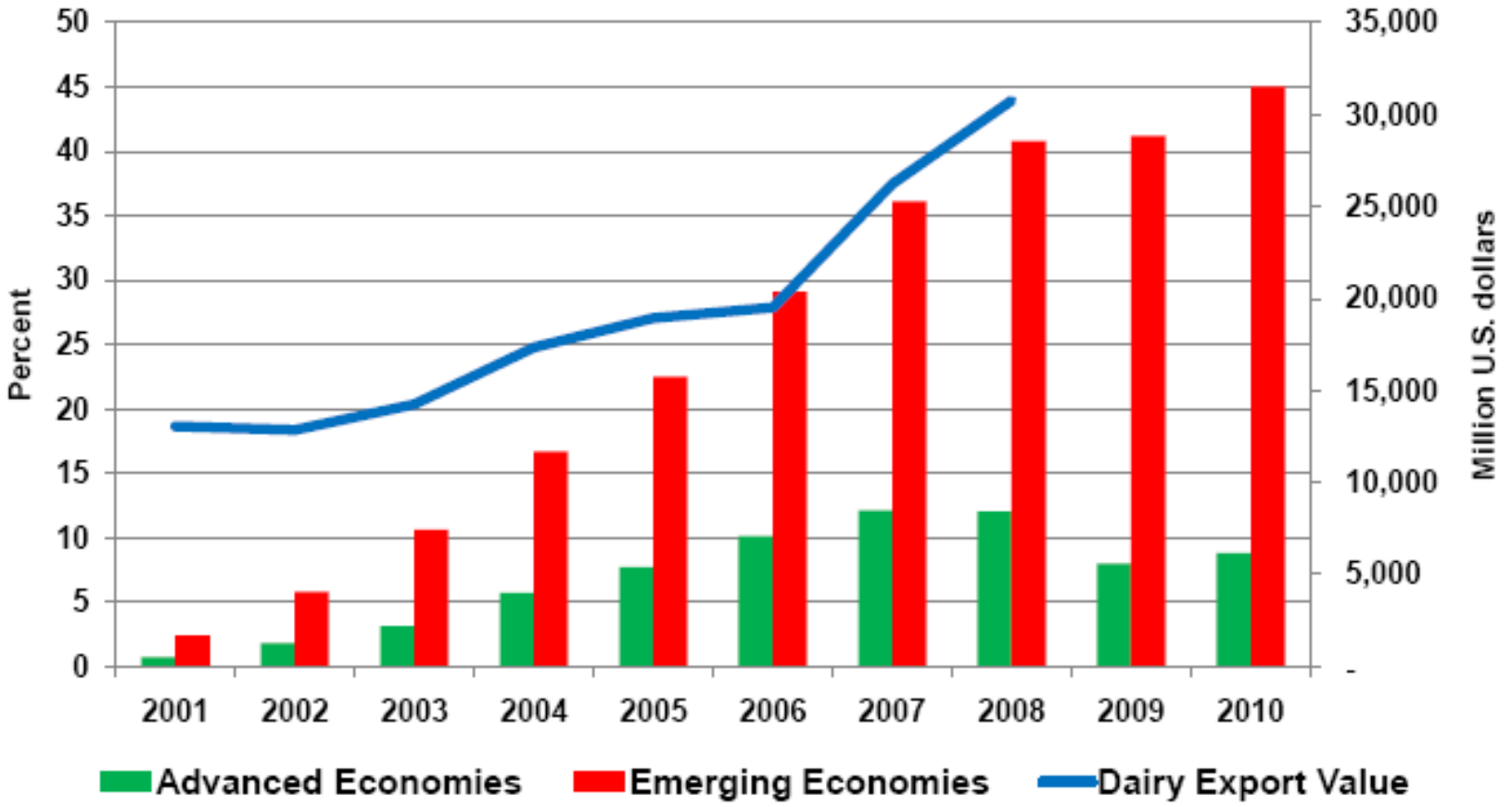
# A Wild Ride

- Global dairy price movements have resembled a roller coaster in recent years.
- Price movements have largely been driven by fundamental economic forces impacting the global dairy industry.
- Low prices in 2009 followed very high prices in 2007 and 2008.
- Global prices rebounded some late in 2009.

# How Did We Get Here?

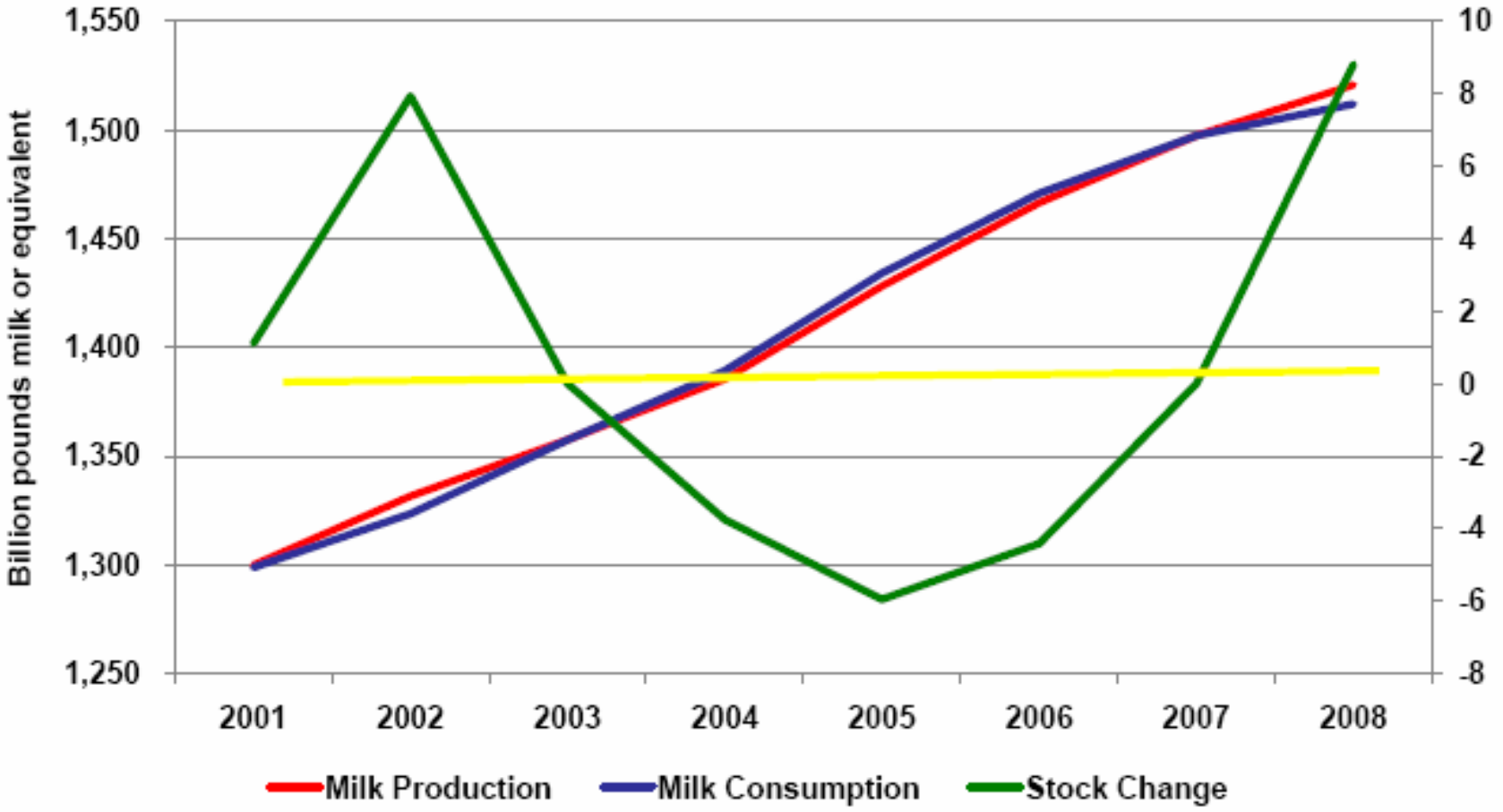
- In 2003, rapid income growth in emerging economics caused global demand for milk products to grow faster than output.
- For a few years, inventoried product made up the shortfall.
- By 2006, Global inventories and production were short of what buyers wanted, so prices began to rise.
  - Australia milk production hit by drought
  - EU milk production was below trend

# Cumulative GDP Growth Per Capita




Source: IMF, Global Economic Outlook, October 2009, Sustaining the Recovery, and GTIS, compiled by USDEC staff

# Global Dairy Balance

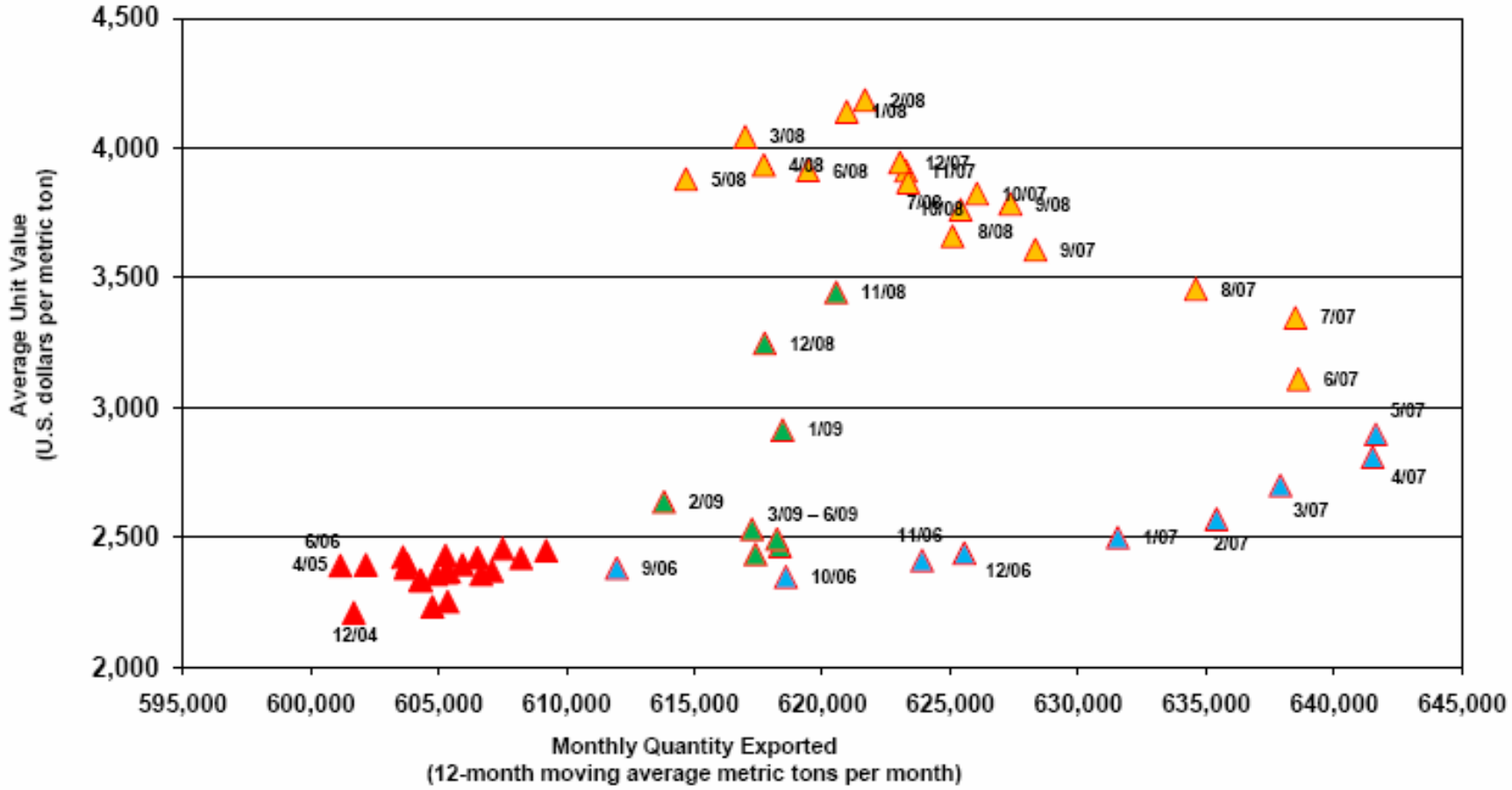



Source: Monika Wohlfarth, ZMB @ World Dairy Summit 2009 (conversion rate 2,204.623 pounds/ton)

# High Prices Begin to Impact Global Dairy Sales and Trade

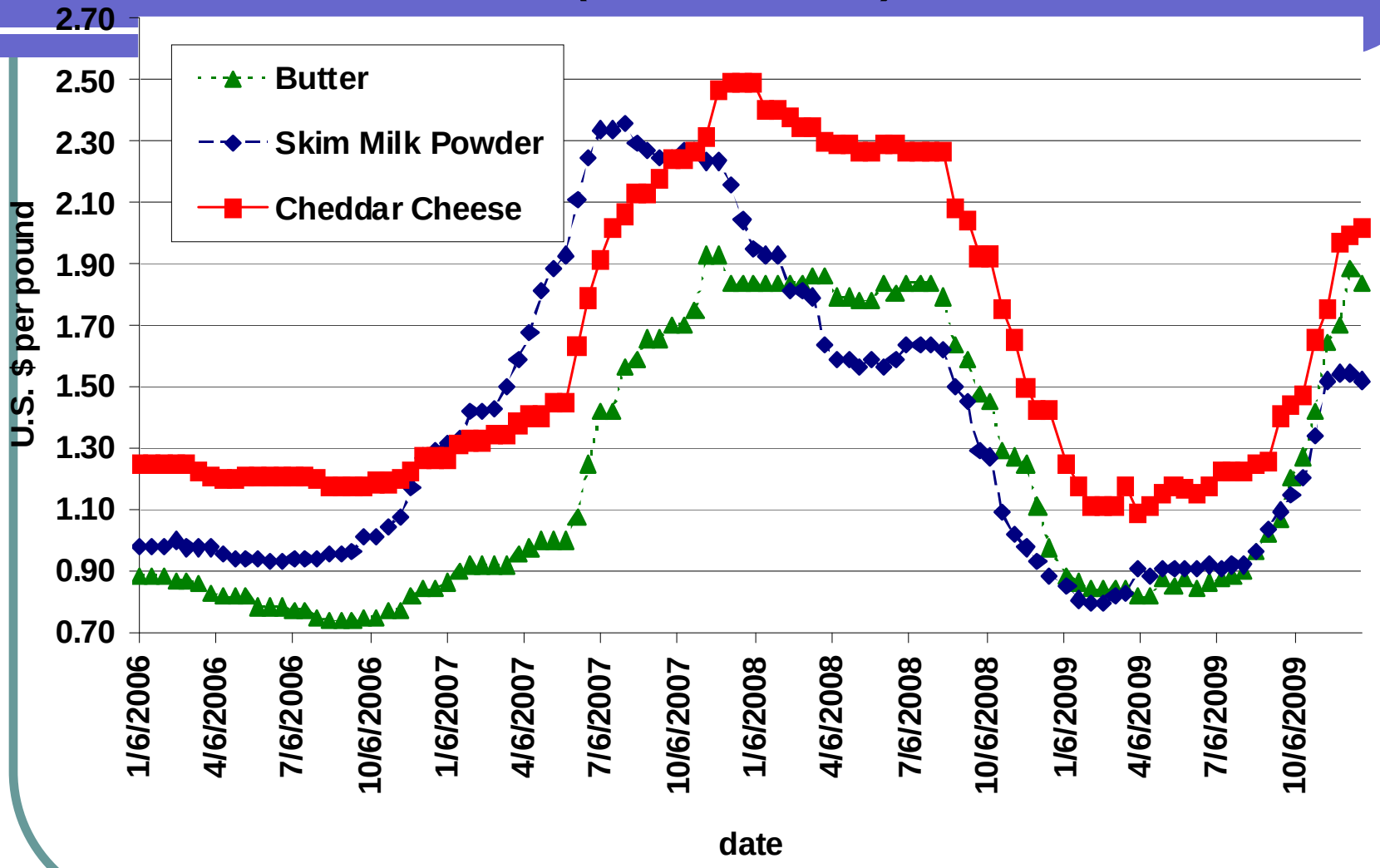
- Global prices increased to unprecedented levels in 2007.
- Some buyers continued purchasing, but others cut back significantly on dairy product volumes.
- Global dairy volume traded contracted substantially in late 2007.
- High prices led to an expansion of dairy herd size. Price began to decline somewhat in early 2008.
- A severe drought hit New Zealand in early 2008, causing its milk output to fall. Buyers looked to the U.S. for product and U.S. prices remained high into the autumn of 2008.

# Demand for Global Dairy Exports




Source: GTIS compiled by
USDEC Staff

# International Prices For Dairy Commodities, 2006-2009
## *(f.o.b. Oceania)*



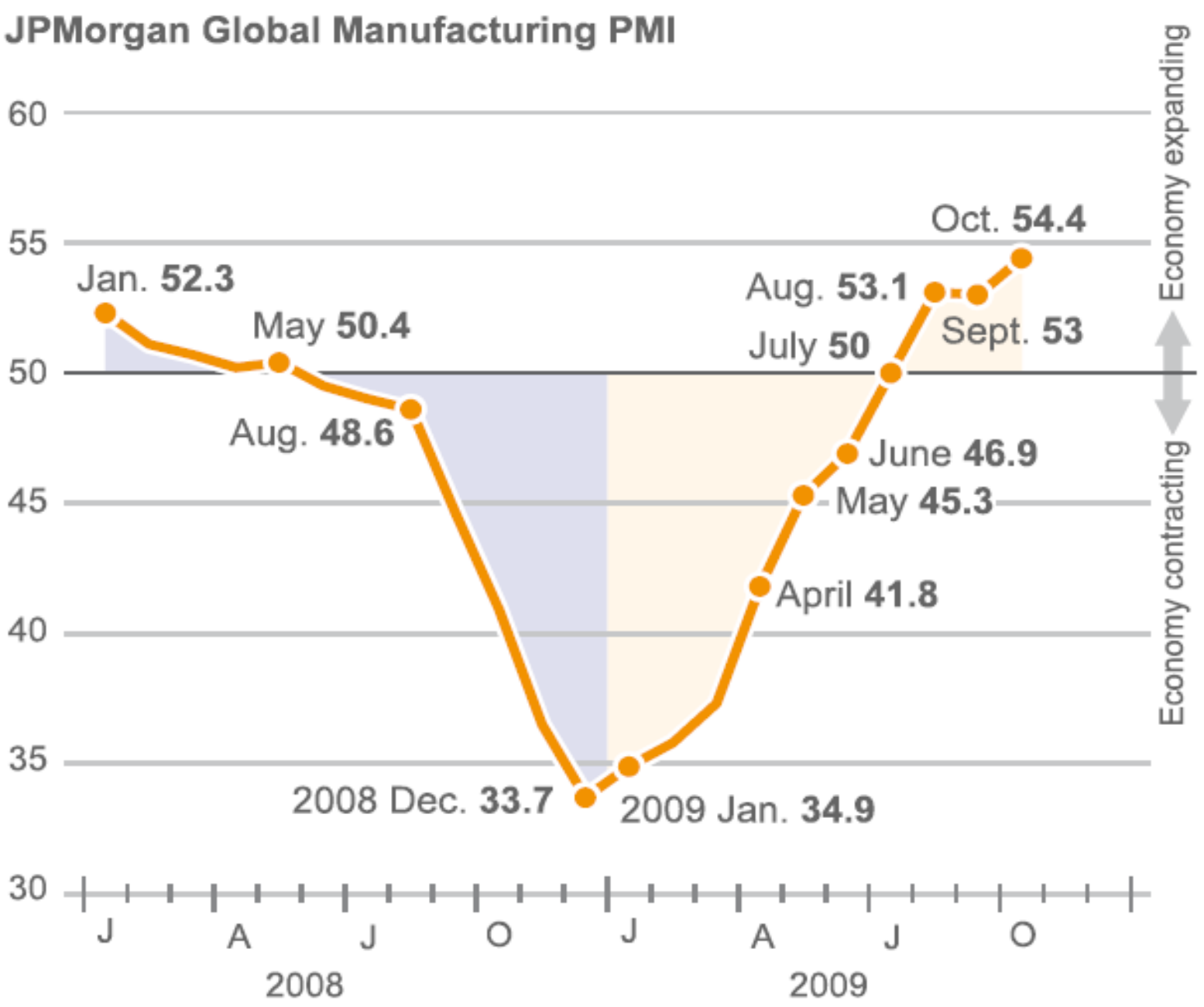

Source: Dairy Institute Chart Compiled from USDA data

# Global Demand Takes a Hit

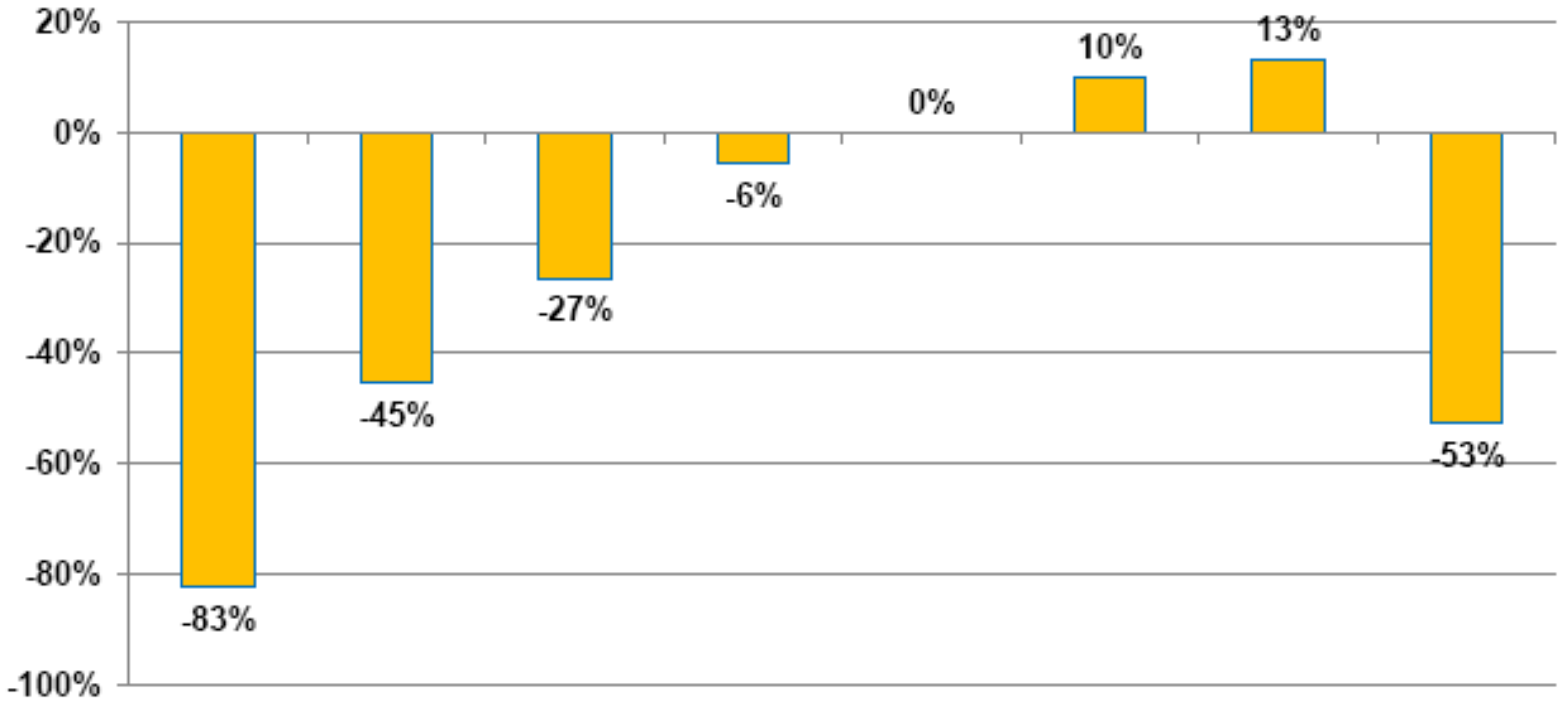
- Several Factors Influenced Global and U.S. dairy demand in late 2008 and into 2009.
- High prices had reduced global trade volumes in early 2008, but as New Zealand's supply dropped, demand for U.S. product increased.
- By the second half of 2008, New Zealand milk output was recovering and buyers were returning to their traditional supplier for product. US export sales began to fall.

# Global Demand Takes a Hit

- China experienced chaos in its milk industry due to the melamine scare.
- The global financial collapse slowed growth in consumer incomes and reduced financing for export shipments.
- Exchange rates, which had been favoring U.S. exports via the weak dollar, swung the other way as investors sought dollar denominated investments.
- U.S. exports became more expensive to foreign buyers and they looked elsewhere for product.


JPMorgan Global Manufacturing PMI
60
55
50
45
40
35
30
Jan. 52.3
May 50.4
Aug. 48.6
2008 Dec. 33.7
2009 Jan. 34.9
April 41.8
May 45.3
June 46.9
July 50
Aug. 53.1
Sept. 53
Oct. 54.4
Economy expanding
Economy contracting
J
A
J
O
J
A
J
O
2008
2009

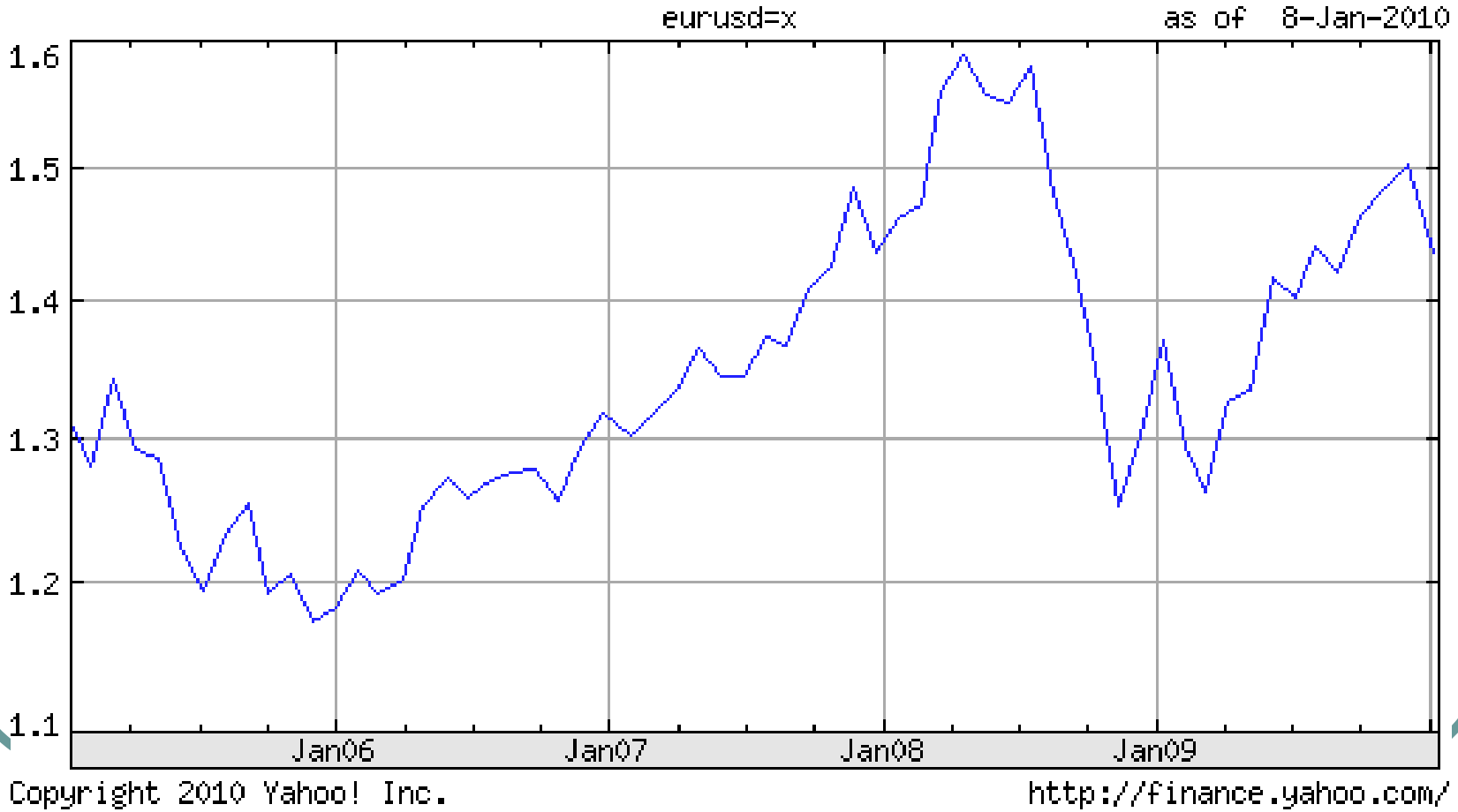
# U.S. YTD Export Change 2009 vs. 2008




| | Butterfat | Milk Powder | Cheese | Whey | Milk & Cream | Ice Cream | Lactose | All Value |
|---|---|---|---|---|---|---|---|---|
| Volume (1,000 MT) | 12.4 | 179.8 | 69.4 | 236.3 | 32.7 | 22.3 | 144.8 | $1.2 Bil. |

Source: USDEC

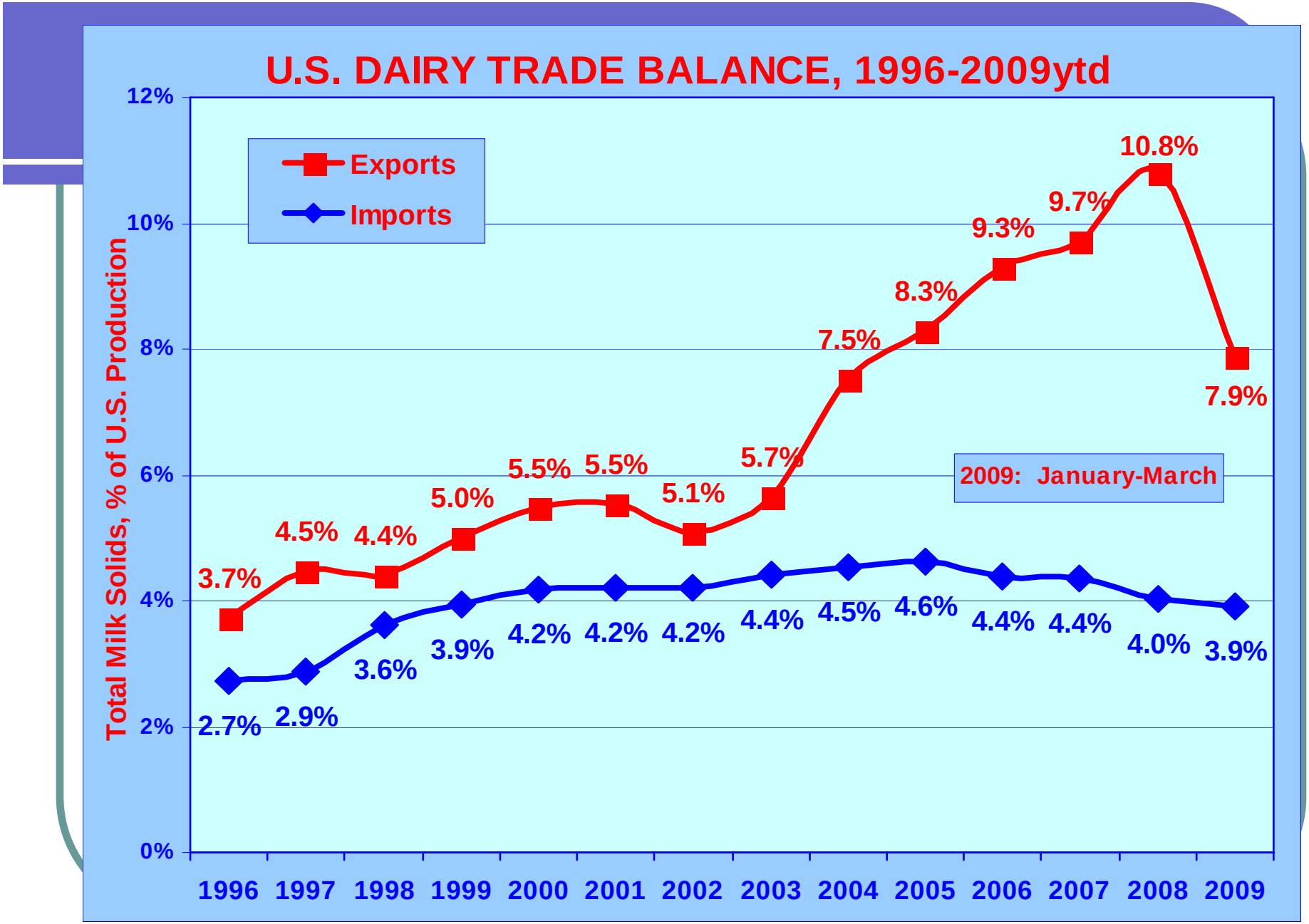
# Exchange Rate
# U.S. Dollars per Euro, 2005-2009



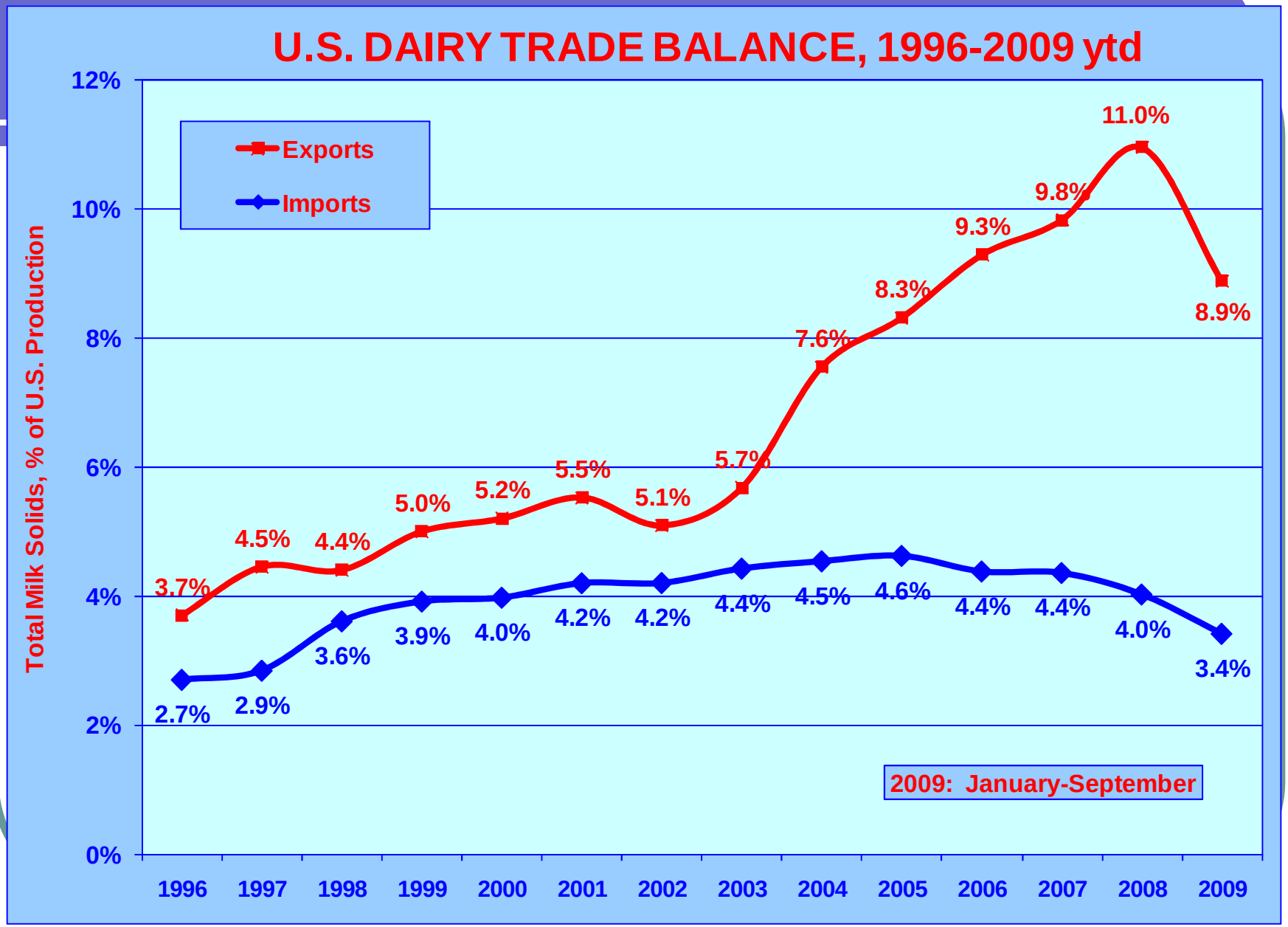
# Exchange Rate: U.S. $ / NZ $, 2005-09

# Low Prices Set the Stage For Markets to Rebound

- Low prices in early 2009 made dairy products more affordable, and as the economy began to stabilize, domestic buyers returned.
- As the U.S. dollar weakened, U.S. product became more affordable again.
- Strong growth in emerging economies is supporting global dairy product demand.
- International prices have strengthened substantially and prospects are good for strong prices in 2010.
- Even though the U.S. dairy export sales took a hit in 2009, they were still stronger than any year prior to 2006. They also appeared to pick up substantially in late 2009.




Source: USDEC, data from National Milk Producers Federation




Source: USDEC, data from National Milk Producers Federation

# BIOGRAPHY FOR JAMES WILLIAM GRUEBELE, Ph.D.
# ECONOMIST, DAIRY CONSULTANT

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Dr. James William Gruebele is a dairy economist and dairy industry consultant with emphasis on dairy pricing policy, milk pooling issues, and plant feasibility studies, and has served as an expert witness in a number of court cases. Dr. Gruebele has testified in federal order hearings, and since 1977 has testified at almost all of the California Department of Food and Agricultural hearings on pricing or pooling issues. He was a professor of Agricultural Economics at the University of Illinois for twelve and a half years and served as Vice President and Executive Vice President for Dairyman's Cooperative Creamery Association for fourteen and a half years. Dr. Gruebele received a Bachelor of Science Degree from North State University in Agricultural Education, a Master of Science Degree in Agricultural Economics from Iowa State University, and a Ph.D. in Agricultural Economics from the University of Minnesota.

# ASSEMBLY COMMITTEE ON AGRICULTURE

## INFORMATIONAL HEARING ON CALIFORNIA DAIRY COMPETITIVENESS

# JAMES W. GRUEBELE ECONOMIST

- DAIRY INDUSTRY CONSULTANT

# MILK AND DAIRY PRODUCT PRICES

| | 2006 | 2007 | 2009 |
|---|---|---|---|
| • Overbase | 10.87 | 19.79 | 9.84 |
| • Butter | 1.24 | 1.40 | 1.18 |
| • Cheese | 1.24 | 2.00 | 1.16 |
| • Powder | .8653 | 1.92 | .813 |

# CURRENT PRICES

- NOVEMBER OVERBASE $13.13
- POWDER PRICE $1.30
- CHEESE PRICE $1.41
- BUTTER PRICE $1.33

# 2007 and 2008

- Demand strong U.S and internationally
- Drought in New Zealand and Australia
- California and U.S. dairy industry geared up to supply domestic and international markets

# 2008 and 2009

- Price resistance
- World wide recession
- Credit crisis
- High unemployment
- Drought problems alleviated

# Cost side issue

- ethanol
- Enviromental issues

- Change in Feed prices
-

| | 2007 | 2008 | 2009 |
|---|---|---|---|
| Feed | 14.5% | 25.3% | -20.0% |

- Problem was that milk prices fell faster than feed prices in 2009

# MARKETS ARE WORKING

- 2007 and 2008 were unique
- No need to change course

# BIOGRAPHY FOR SEAN HAYNES, VICE PRESIDENT
# RABOBANK AGRIBUSINESS DIVISION

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**Mr. Sean Haynes is a Vice President and Senior Relationship Manager with Rabobank's Agribusiness Division. For the past ten years, Mr. Haynes has been responsible for the active management and growth of a diverse portfolio of agricultural loans throughout the Central Valley, with specific expertise in dairy, beef, poultry, wine and food processing. His day to day work includes debt structuring, financial risk identification and mitigation, financial consulting, and underwriting of loans to both industry and operational risk. Mr. Haynes received his Bachelor of Science Degree in Agricultural Economics/Agribusiness from the University of California, Fresno.**

# BIOGRAPHY FOR JOEL KARLIN
# COMMODITY MANAGER/MARKET ANALYST
# WESTERN MILLING

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Joel Karlin is a market analyst and feed grain merchandiser for Western Milling in Goshen, California. He is responsible for merchandising six different feed ingredient products to dairy customers and other grain brokers. He also has a select number of clients to whom he sells various feeds, including bulk commodities, mixed feeds, and minerals. One of his main responsibilities is to provide market research to clients via a weekly newsletter on the feed and dairy markets, special reports, and statistical summaries. Mr. Karlin's areas of research include supply-demand analysis, price forecasting, and implementation of price risk management programs. He is a well requested speaker and has presented to a number of groups, including the United States Department of Agriculture, and the California Grain and Feed Association. He is frequently quoted in the media, including Dow Jones, Bloomberg, and Reuters. Mr. Karlin received a Bachelors Degree in Economics from Northwestern University and just completed a Masters in Agribusiness at Kansas State University.

# California Dairy Industry's Economic Competitiveness

Informational hearing Jan 13, 2010

## *Feed Market Conditions*

Joel Karlin

Commodity Manager/Market Analyst

Western Milling

# What has happened

- CA milk producer have been subjected to a sharp escalation in feed costs, their number one expenditure combined with a historic plunge in milk prices
- Feed values, for a number of reasons appear to have made a structural shift to higher price ranges than seen in the past
- CA producers fare worse than others in U.S. as larger amount of feed is procured “off-farm”. Large part of ration imported from out of state or even out of country. Hike in rail rates over the years comes on top of steep increase in price of many bulk agricultural commodities

# Components of a CA dairy ration

- Typical cow will consume 50-55 lbs of dry matter per day and produce 70-75 lbs of milk

**18 lbs of alfalfa**
**30 lbs of corn silage**
**4 lbs of whole cottonseed**

**Forage portion**

**12.5 lbs of rolled corn**
**6 lbs of canola meal**
**4 lbs of dried distillers grain**
**2.5 lbs of wheat millrun**

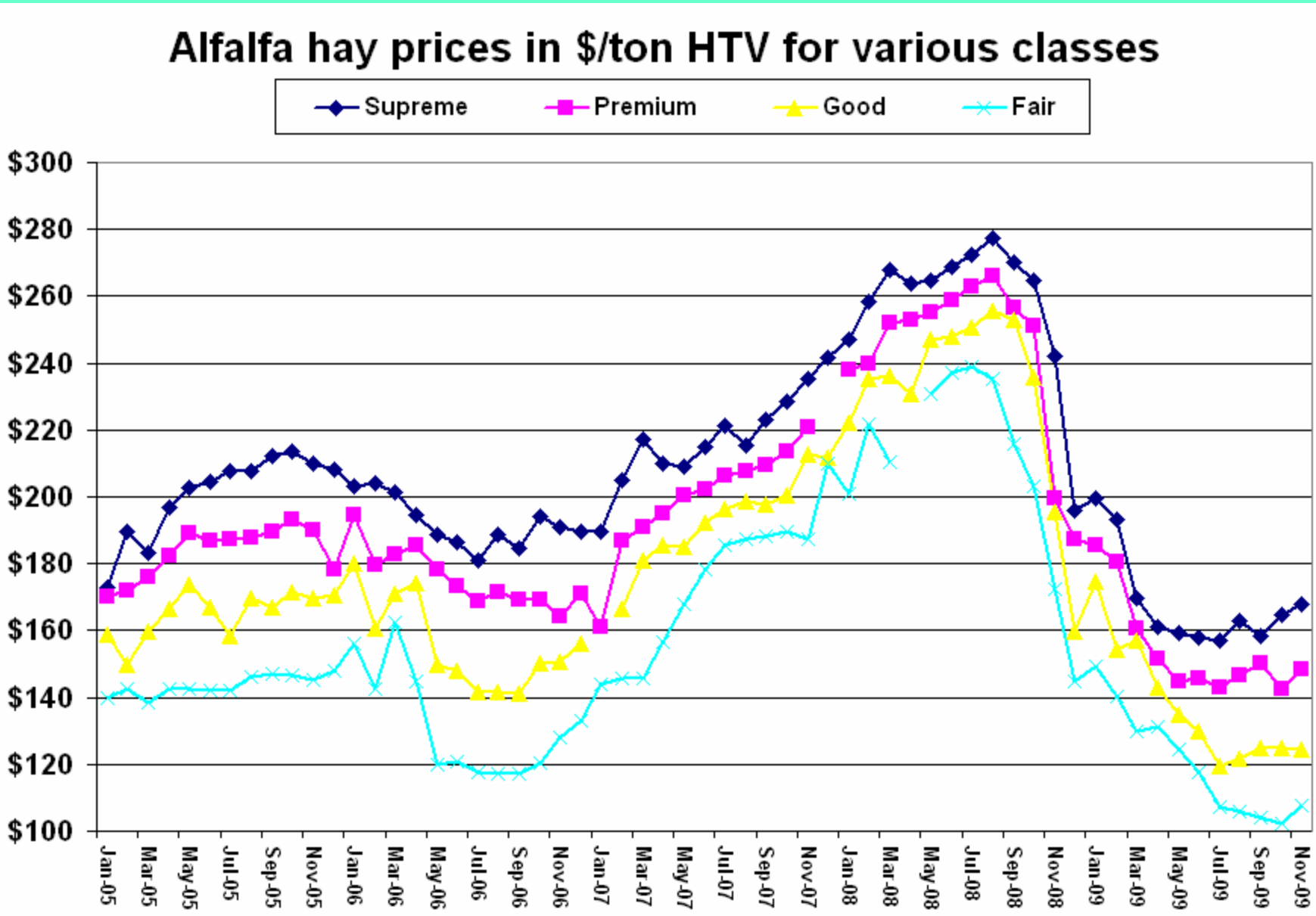
**Concentrate portion**

**0.2 lbs urea**
**0.9 lbs minerals**

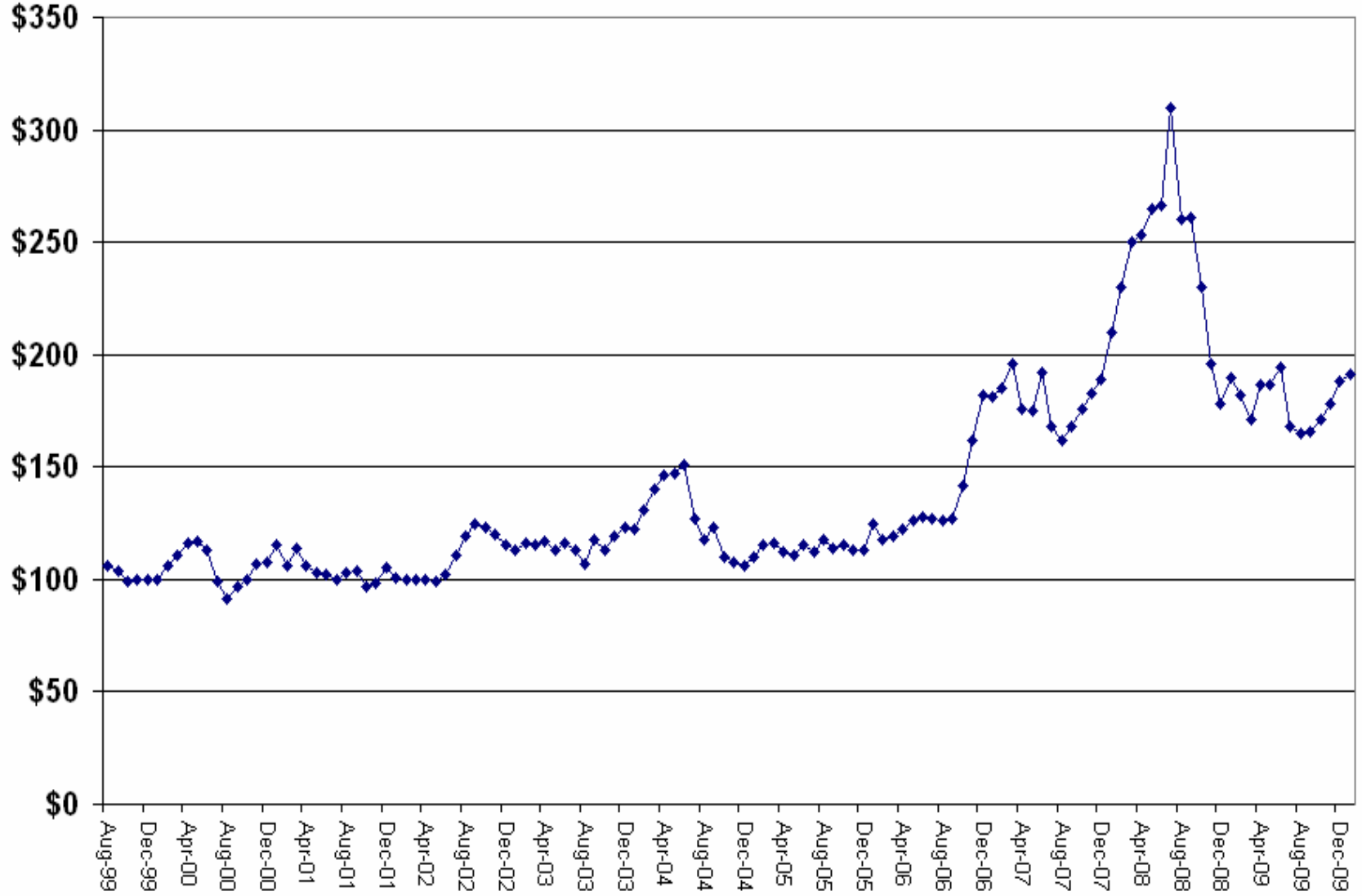
**Micro portion**

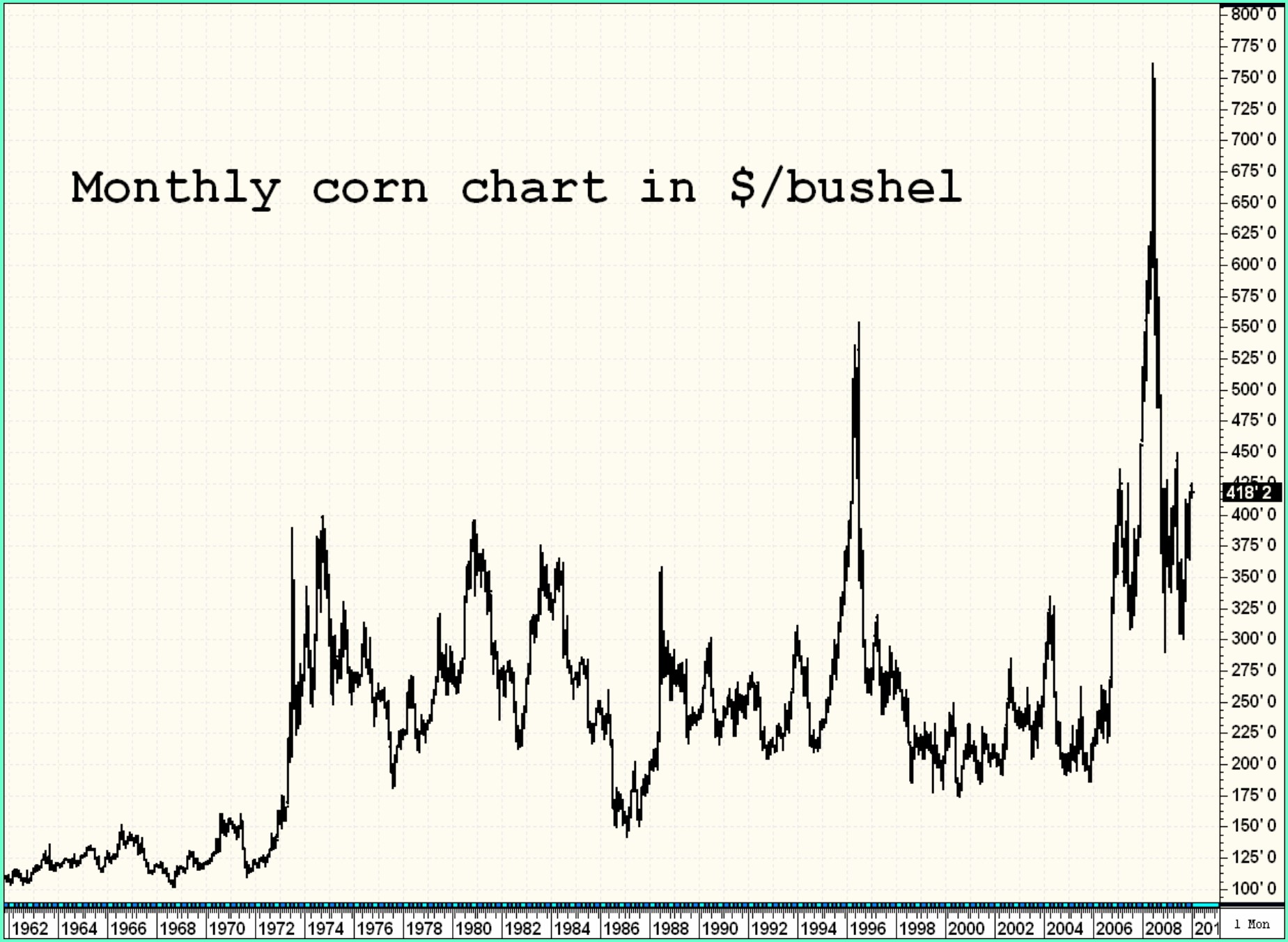
# Ration cost impact by portion

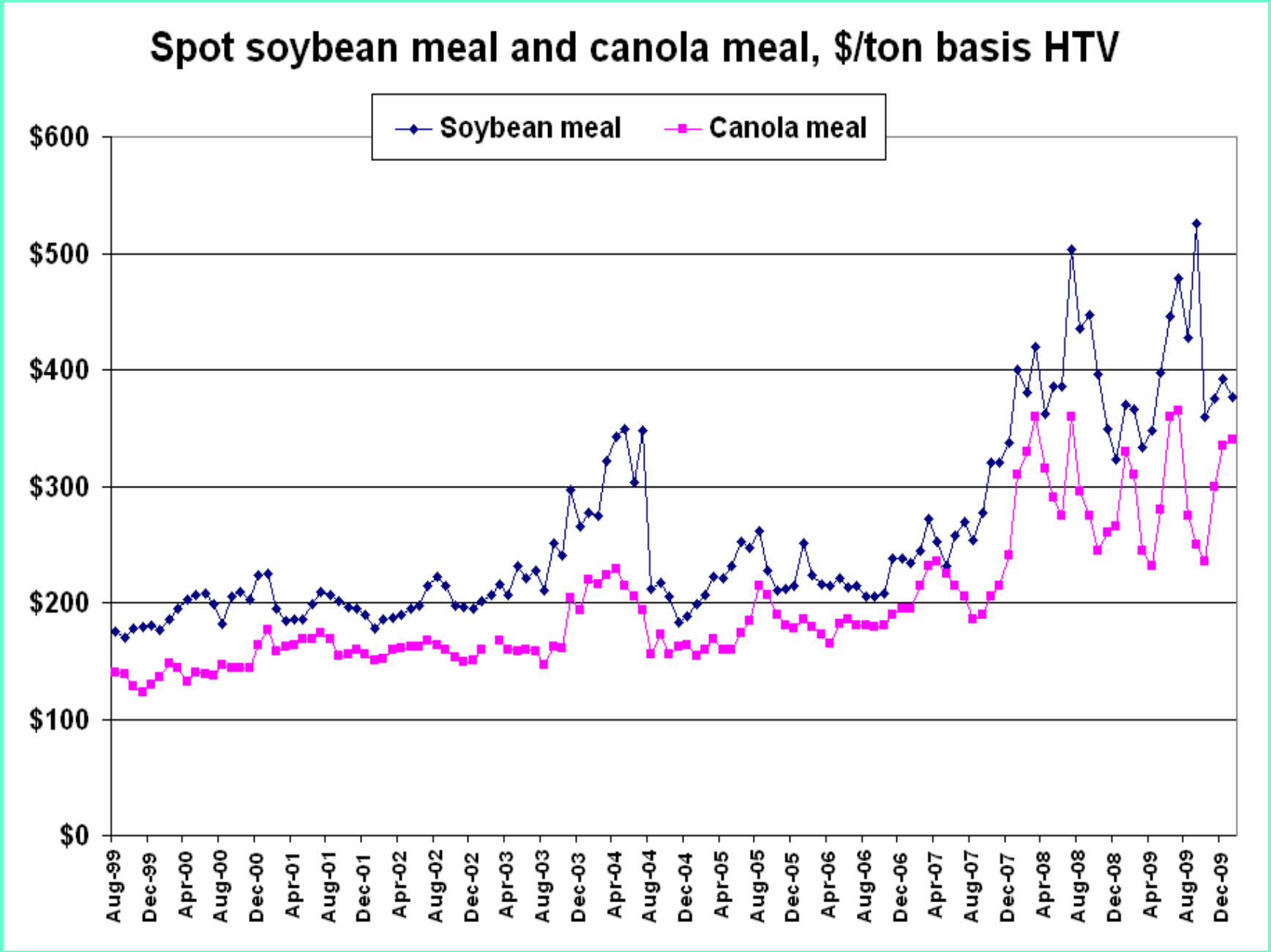
- Forage- alfalfa hay, cottonseed, and silage costs have increased due to high grain corn, better returns from alternative crops, and scarce water. Hay and cotton acreage in CA has plunged.
- Concentrate- Higher corn and soybean prices linked to rising demand in developing nations, increased usage for renewable fuels, and investor demand linked to falling dollar, desire to own hard goods, and realization that consumption has outpaced production.
- Micros- Increased energy prices leading to higher nitrogen costs (fertilizers, urea) and increased tangible and investor demand for key minerals like selenium, copper, iron, magnesium


Alfalfa hay prices in $/ton HTV for various classes
Supreme
Premium
Good
Fair
$300
$280
$260
$240
$220
$200
$180
$160
$140
$120
$100
Jan-05
Mar-05
May-05
Jul-05
Sep-05
Nov-05
Jan-06
Mar-06
May-06
Jul-06
Sep-06
Nov-06
Jan-07
Mar-07
May-07
Jul-07
Sep-07
Nov-07
Jan-08
Mar-08
May-08
Jul-08
Sep-08
Nov-08
Jan-09
Mar-09
May-09
Jul-09
Sep-09
Nov-09

# Spot rolled corn in $/ton HTV




Monthly corn chart in $/bushel
800' 0
775' 0
750' 0
725' 0
700' 0
675' 0
650' 0
625' 0
600' 0
575' 0
550' 0
525' 0
500' 0
475' 0
450' 0
418' 2
400' 0
375' 0
350' 0
325' 0
300' 0
275' 0
250' 0
225' 0
200' 0
175' 0
150' 0
125' 0
100' 0
1962 1964 1966 1968 1970 1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 201
1 Mon


Spot soybean meal and canola meal, $/ton basis HTV
Soybean meal
Canola meal
$600
$500
$400
$300
$200
$100
$0
Aug-99
Dec-99
Apr-00
Aug-00
Dec-00
Apr-01
Aug-01
Dec-01
Apr-02
Aug-02
Dec-02
Apr-03
Aug-03
Dec-03
Apr-04
Aug-04
Dec-04
Apr-05
Aug-05
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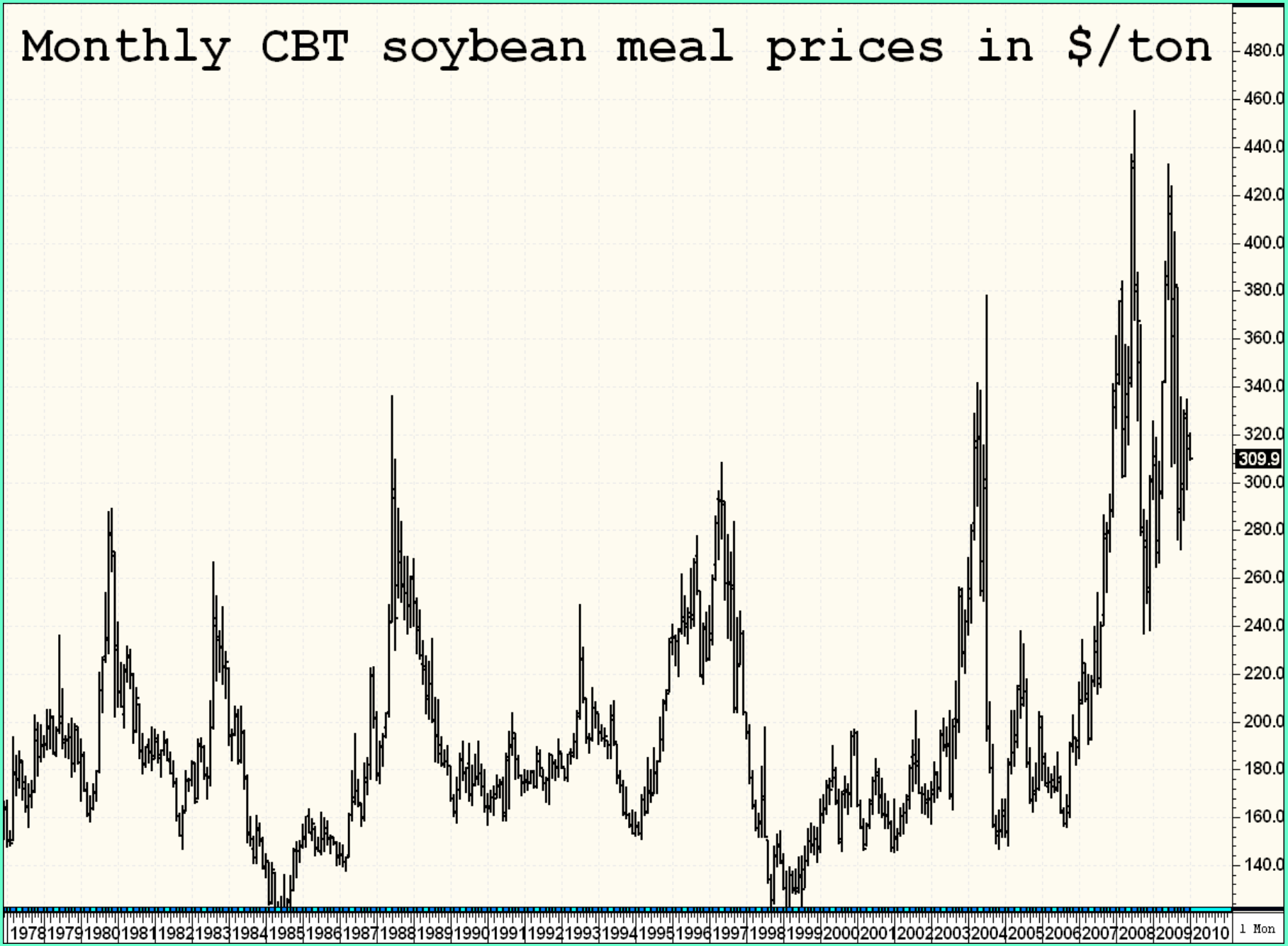
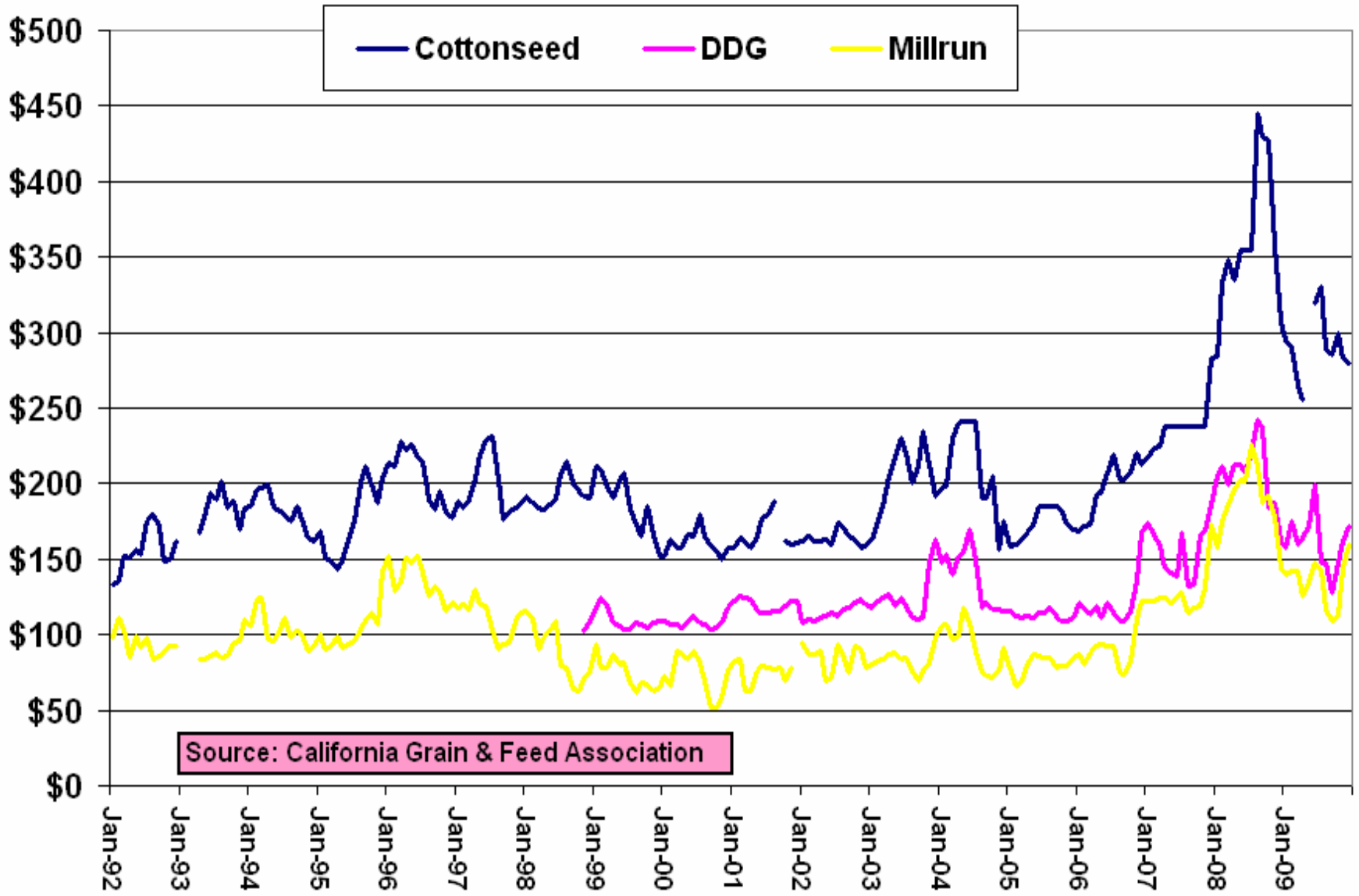
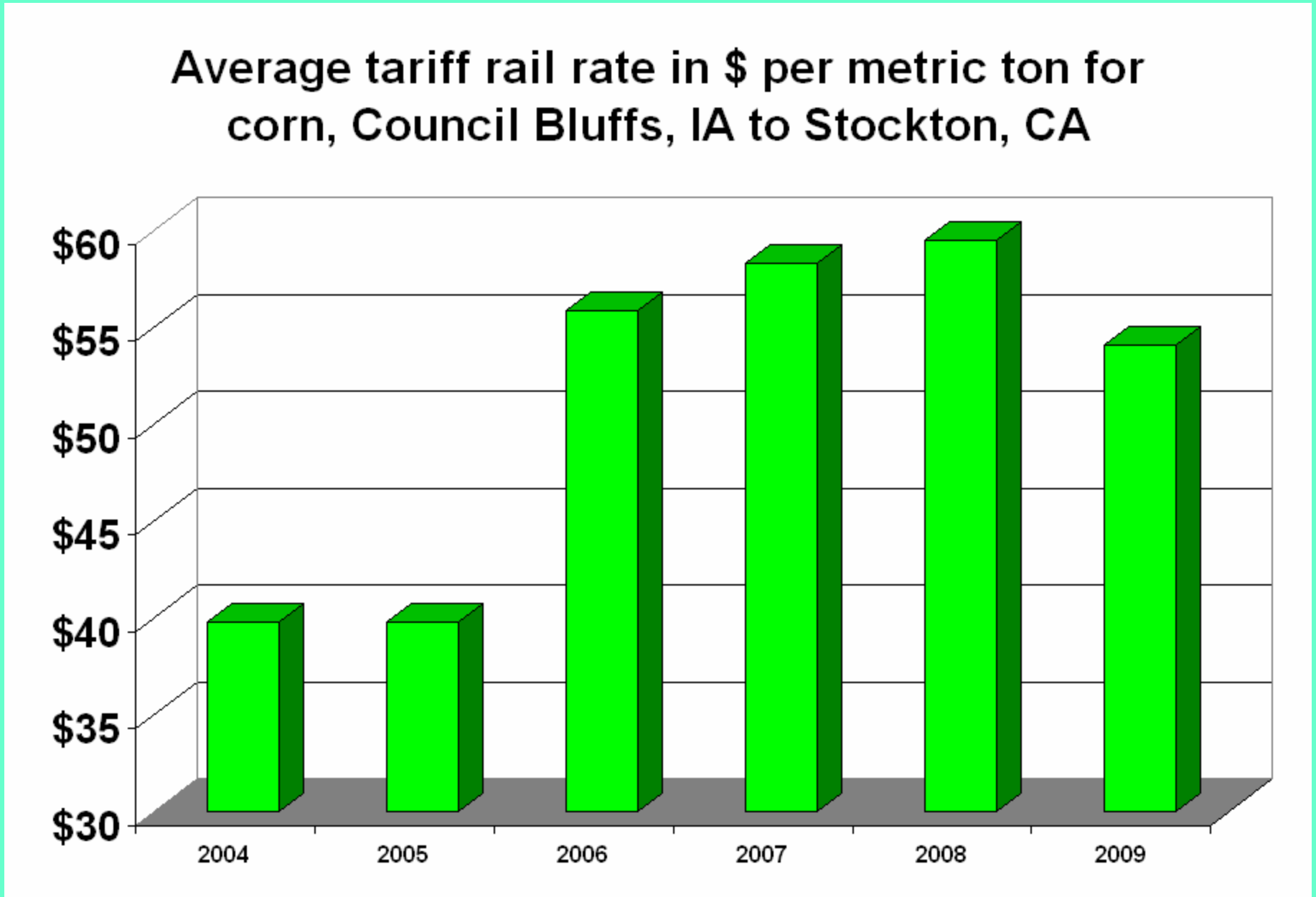
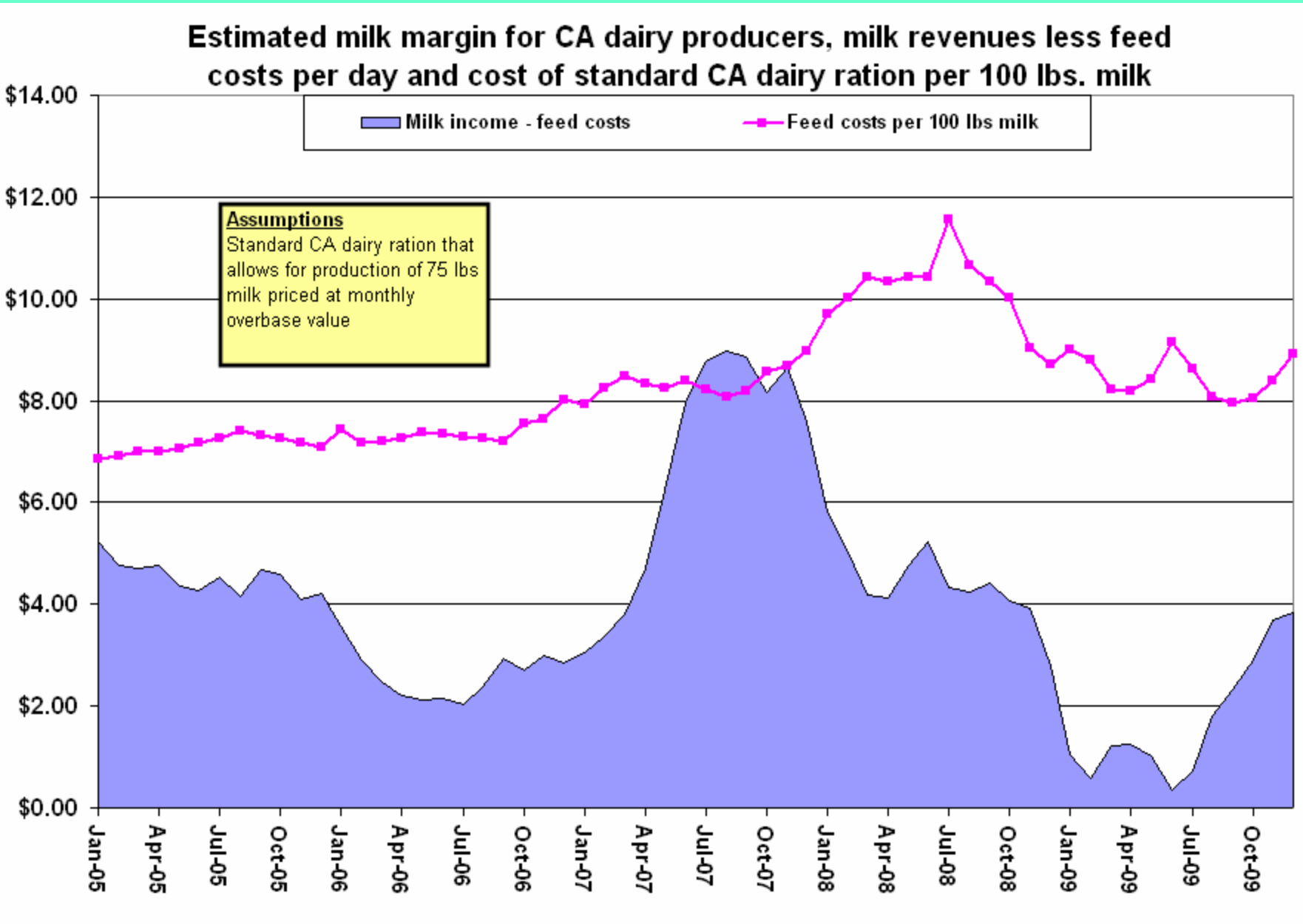
Apr-09
Aug-09
Dec-09


Monthly CBT soybean meal prices in $/ton
480.0
460.0
440.0
420.0
400.0
380.0
360.0
340.0
320.0
309.9
300.0
280.0
260.0
240.0
220.0
200.0
180.0
160.0
140.0
1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010
1 Mon

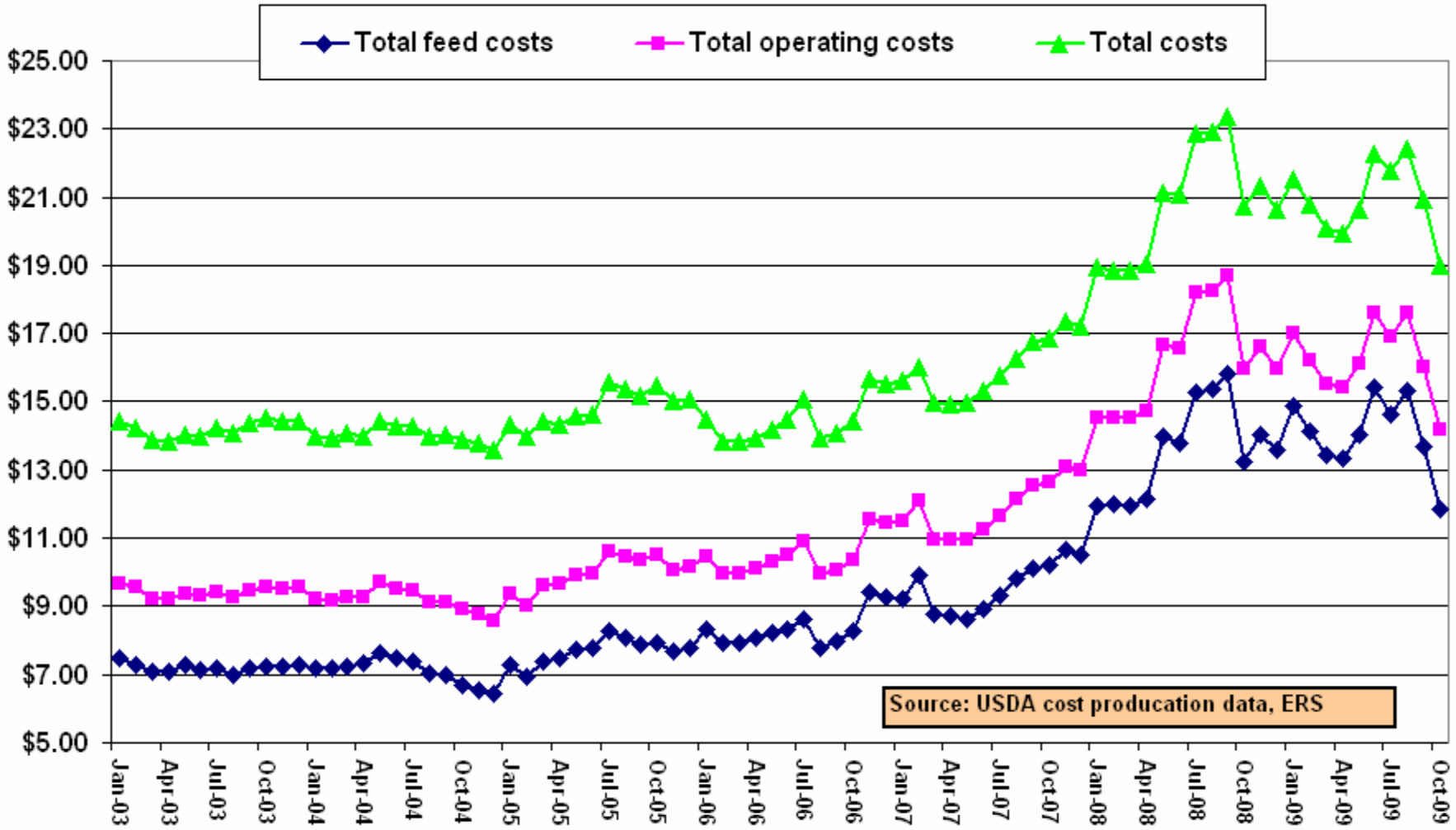
# Price history of common feed ingredients in $/ton



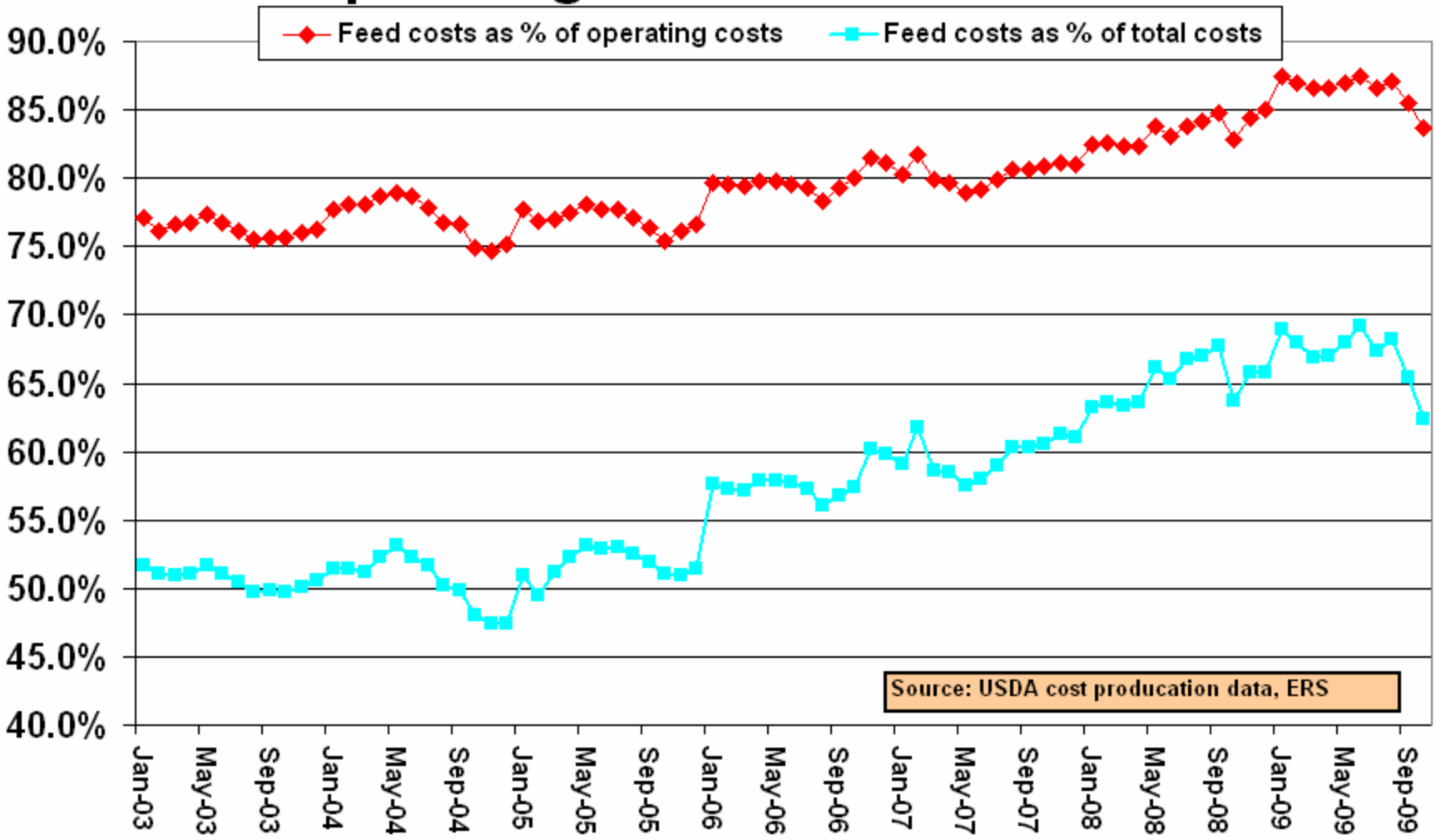

Average tariff rail rate in $ per metric ton for corn, Council Bluffs, IA to Stockton, CA
$60
$55
$50
$45
$40
$35
$30
2004
2005
2006
2007
2008
2009


Estimated milk margin for CA dairy producers, milk revenues less feed costs per day and cost of standard CA dairy ration per 100 lbs. milk
Milk income - feed costs
Feed costs per 100 lbs milk
Assumptions
Standard CA dairy ration that allows for production of 75 lbs milk priced at monthly overbase value
$14.00
$12.00
$10.00
$8.00
$6.00
$4.00
$2.00
$0.00
Jan-05
Apr-05
Jul-05
Oct-05
Jan-06
Apr-06
Jul-06
Oct-06
Jan-07
Apr-07
Jul-07
Oct-07
Jan-08
Apr-08
Jul-08
Oct-08
Jan-09
Apr-09
Jul-09
Oct-09

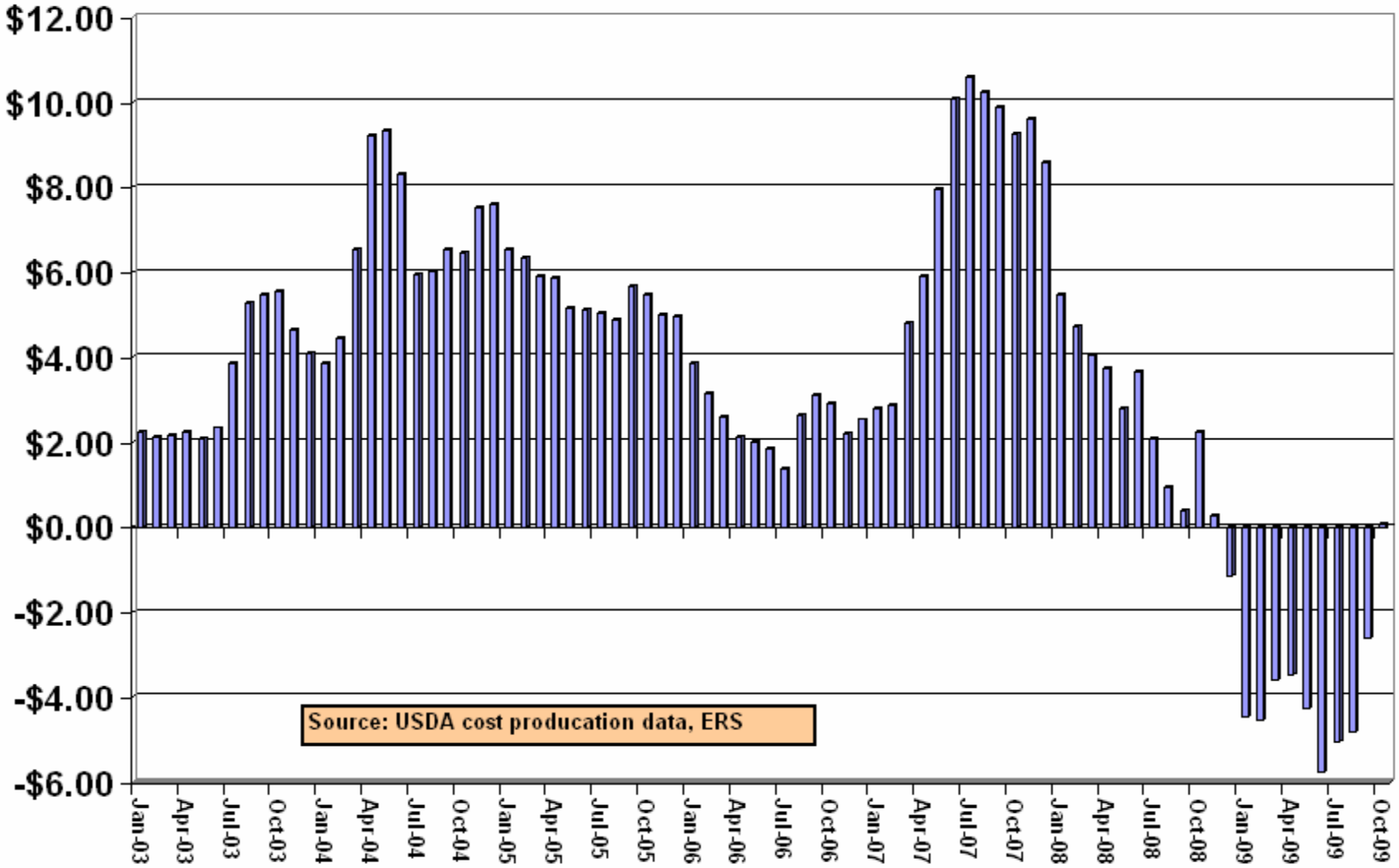
# USDA's California cost of production figures per hundredweight of milk



# CA dairy feed costs as % of total operating costs and total costs



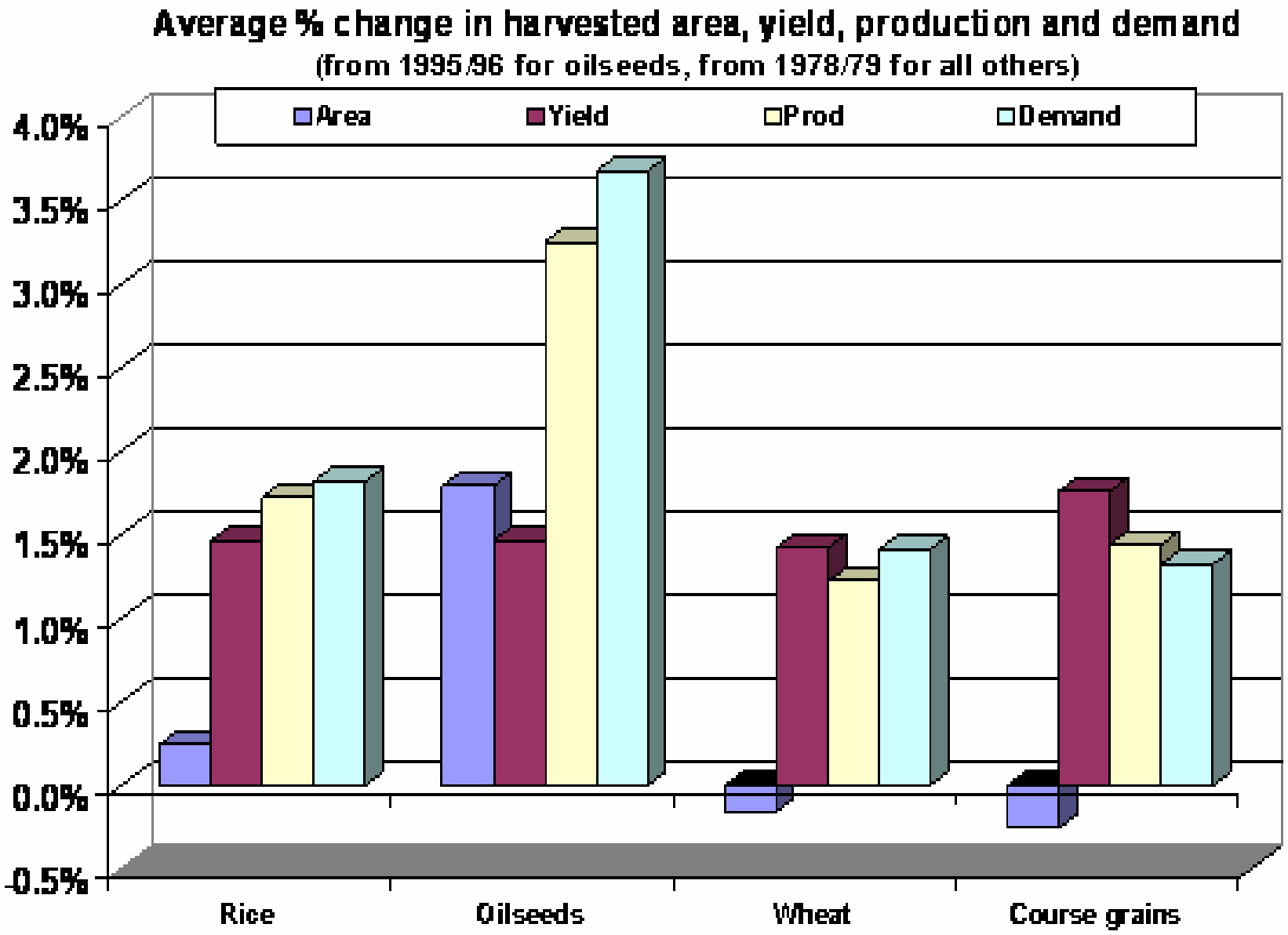
# CA overbase - feed costs, both in $/cwt



# Why Are Feed Prices So High?

- For 25 years, grain prices were flat to lower providing little financial incentive to increase production via higher acreage or invest in research for higher yielding hybrids.
- Rise in world GDP growth especially in developing countries (China, India, Brazil, Russia) has translated into rising personal incomes with change in diet to one featuring increased consumption of meat and dairy protein. This necessitates more feed grains and protein meals to feed cattle, hogs, and poultry.
- For many reasons, big push for renewable fuels and this increases competition for bulk commodities.
- Steady depreciation of dollar has helped buoy prices for a number of commodities that are valued in greenbacks.
- Dollar weakness has also undermined performance of traditional portfolio instruments like stocks and bonds. With money managers looking for alternatives, commodities are being seen as a separate asset class and a large amount of capital have poured into commodity index based funds helping buoy values of corn, soybeans, and wheat along with crude oil and gold.

# Over years, demand has exceeded production

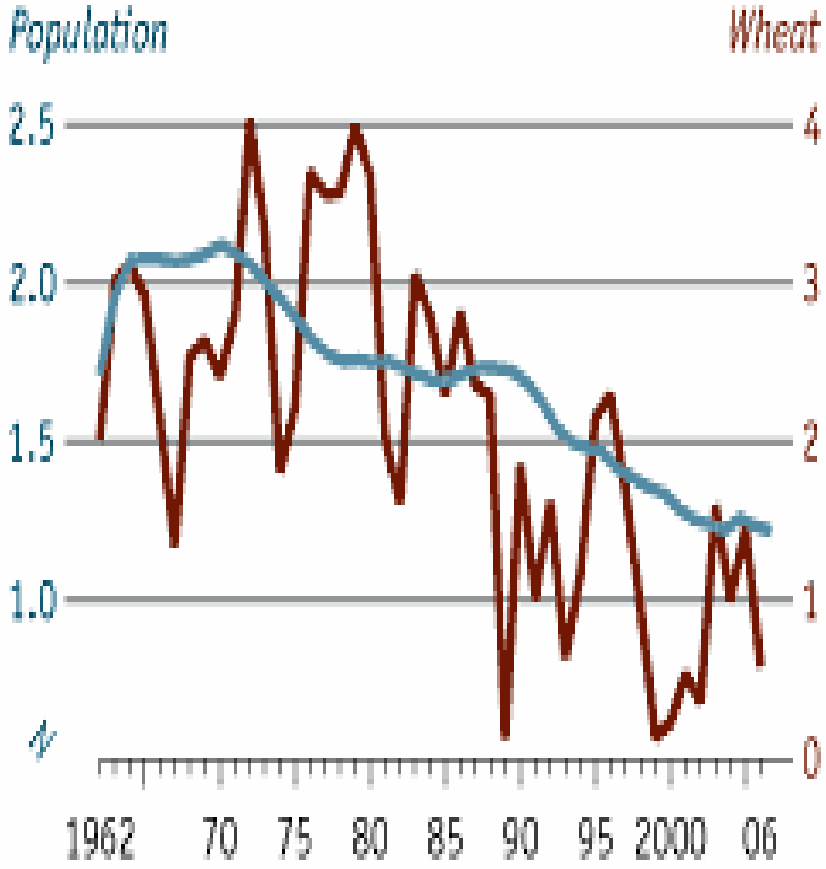


# More people, more grain; more money, more meat

1

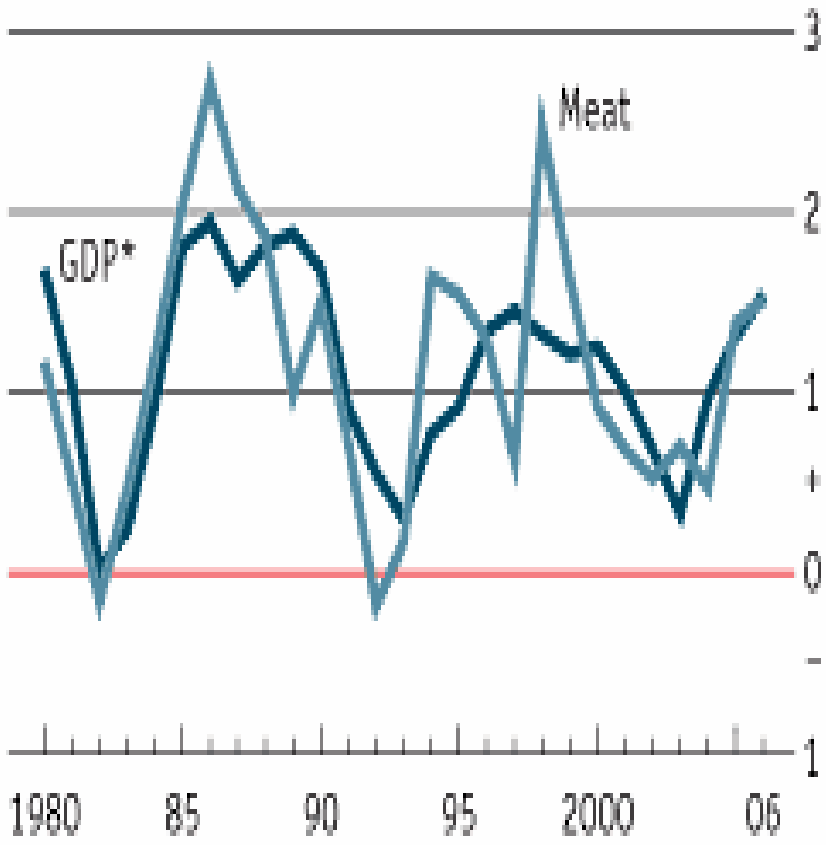
## World wheat demand and population growth

% increase on previous year




## World meat consumption and GDP growth*

% change on previous year



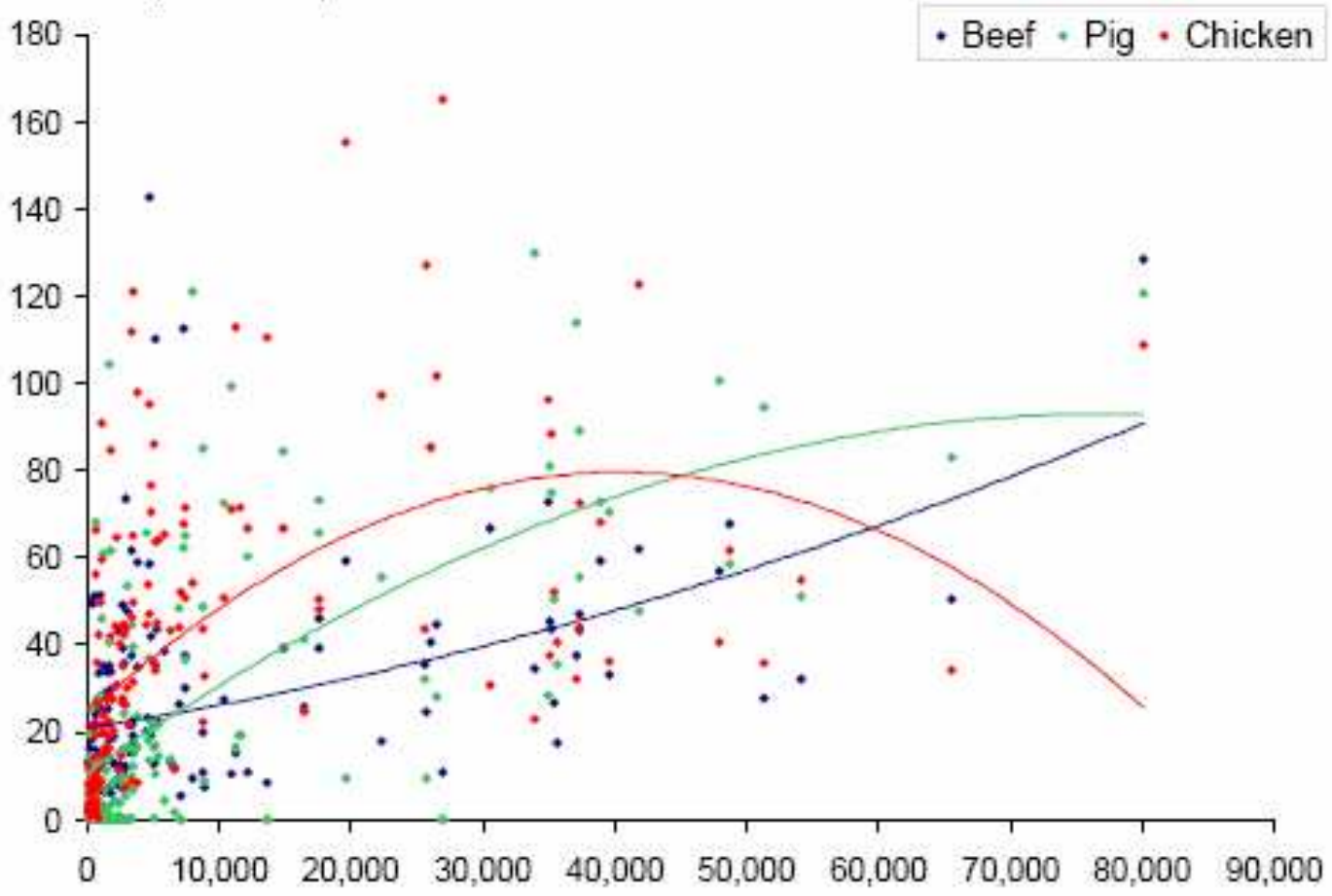

Source: Goldman Sachs

*Estimates based on GDP per person

Exhibit 6

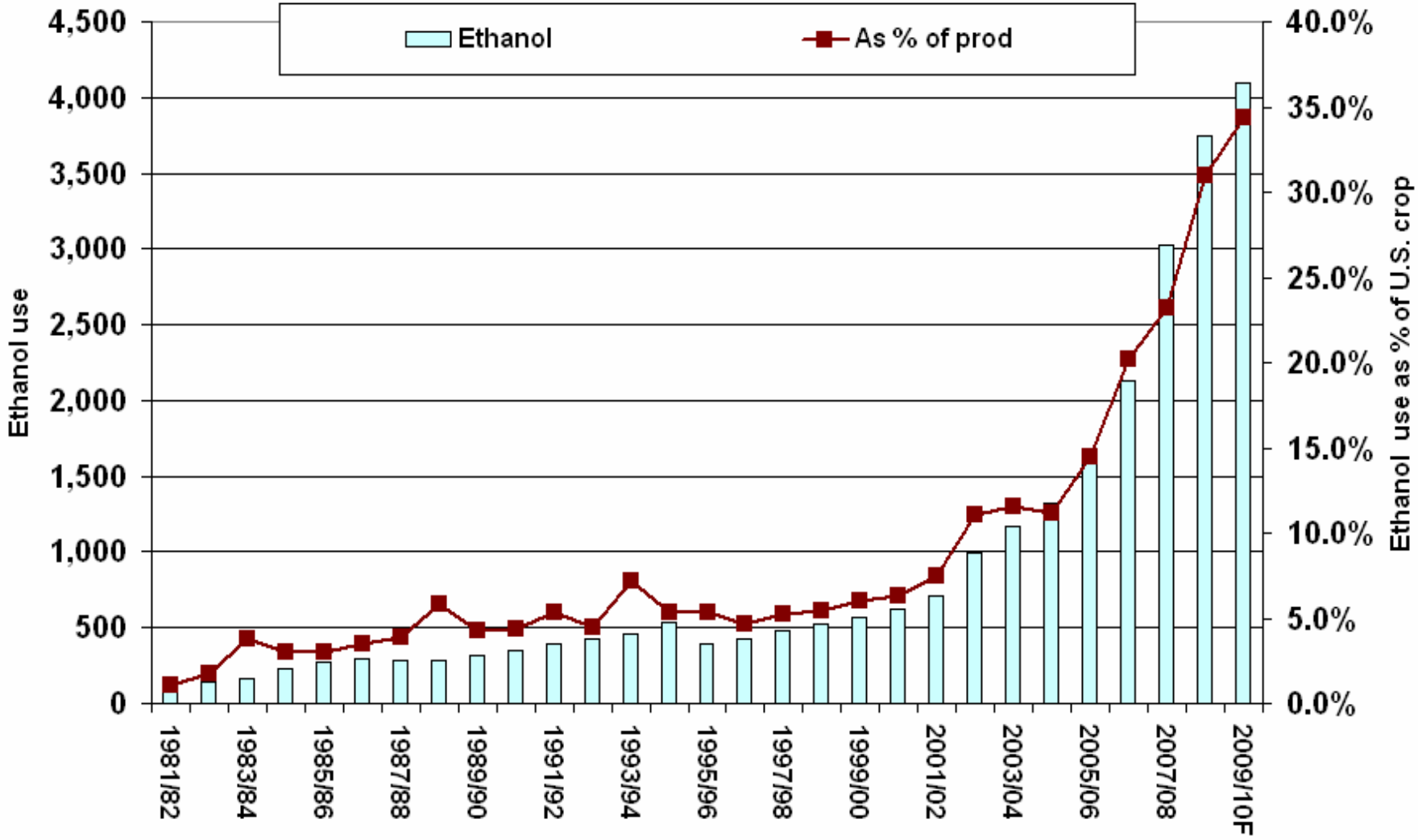
# Meat Consumption Rises with Income, Taking Corn Demand Higher

(Vertical axis: meat consumption, grams/capita/day; horizontal axis: income/capita, USD)

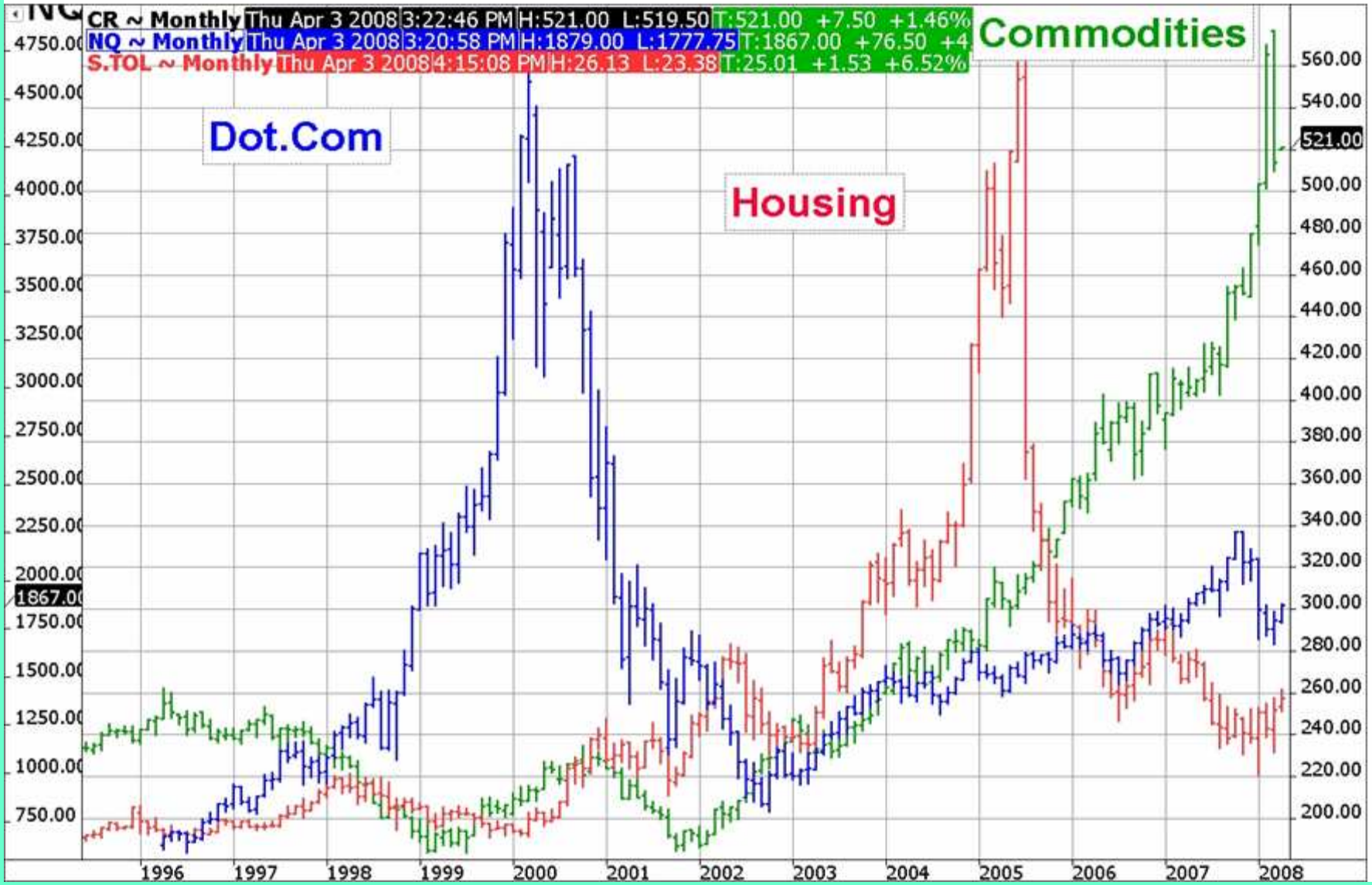



Source: IMF, FAO, Morgan Stanley Research

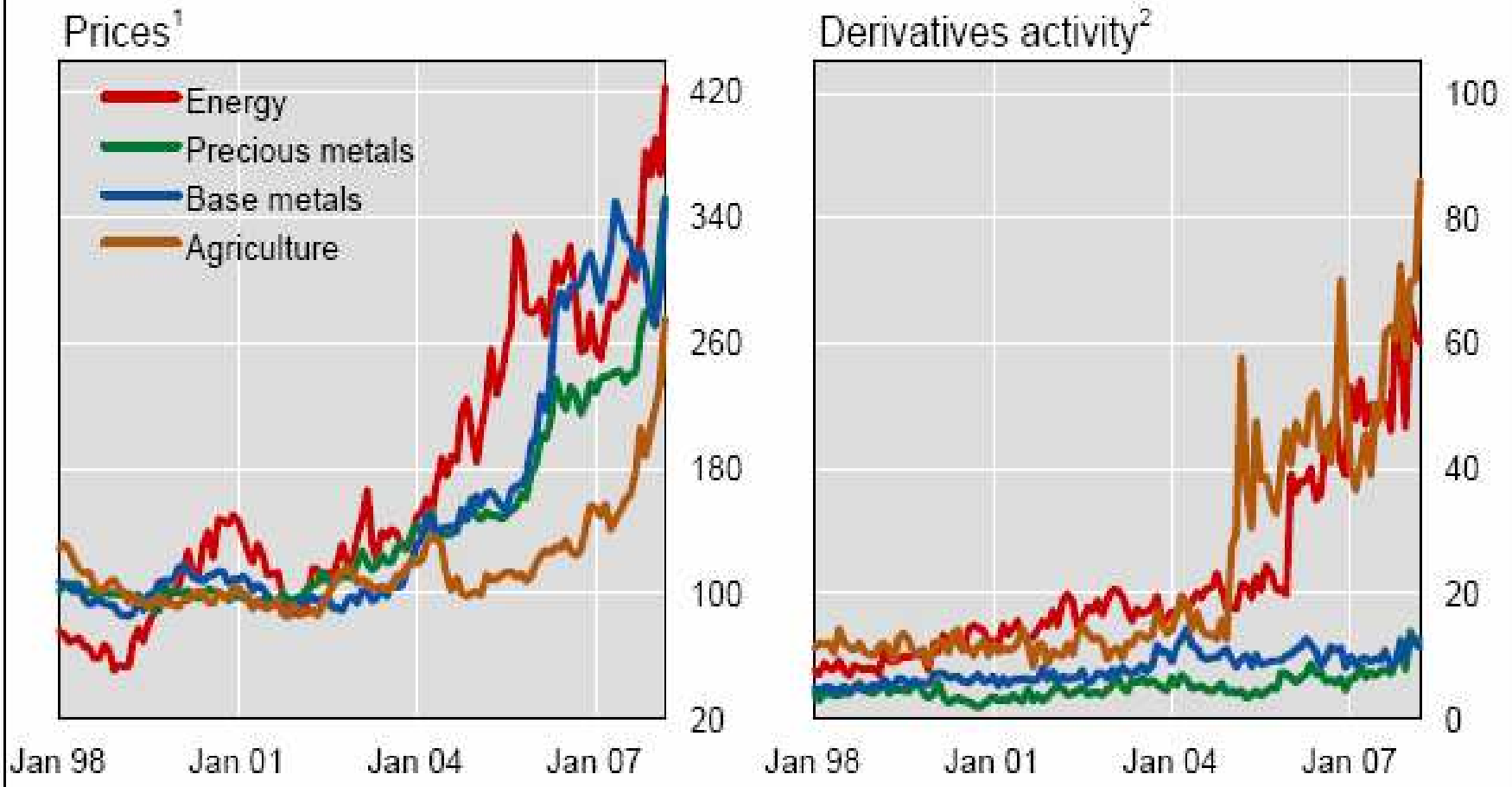
# U.S. corn used production of ethanol in million bushels and as % of production



# After tech stocks and real estate, commodities has been hot new investment



# Commodity prices and derivatives activity

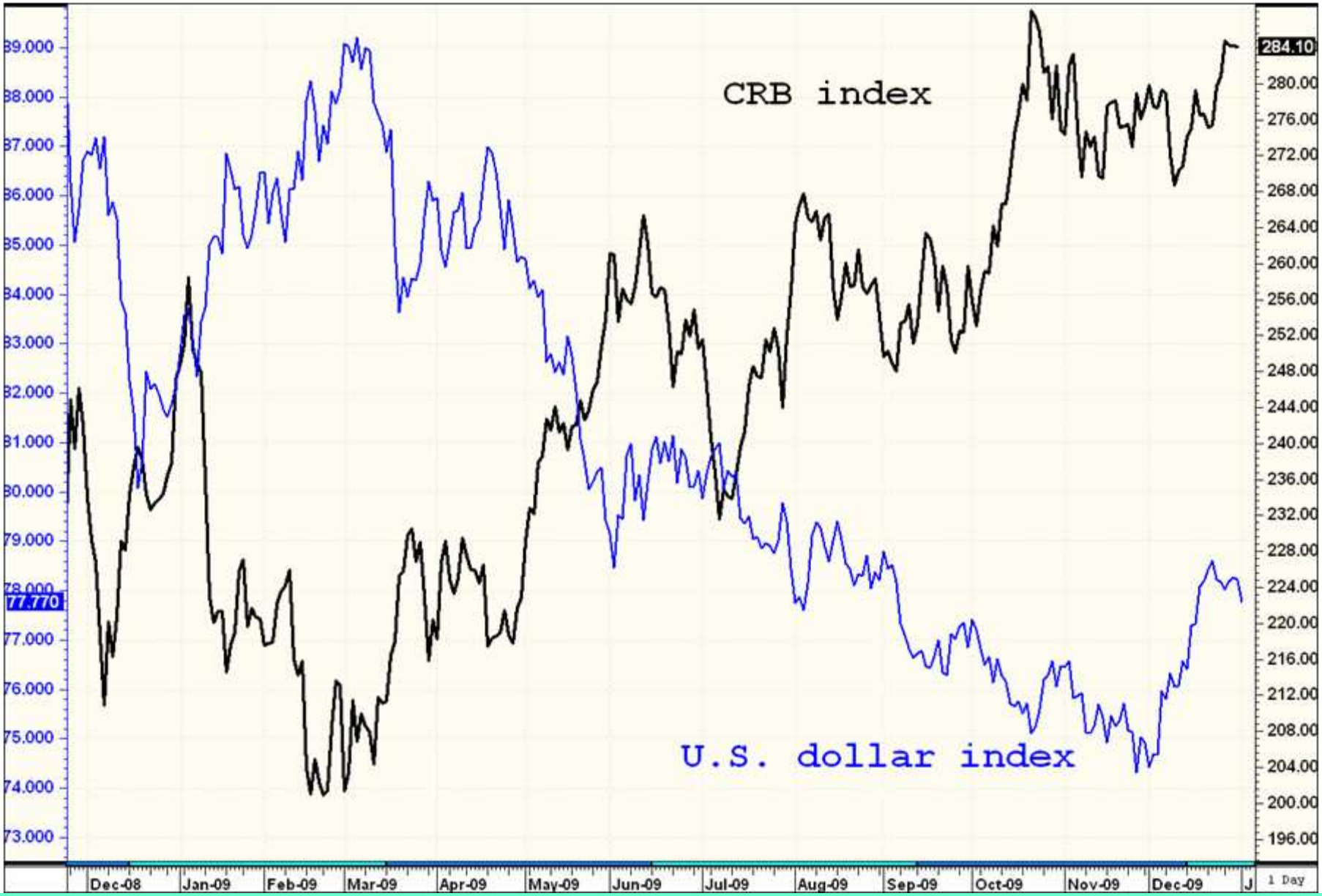



[1] S&P GSCI Commodity Index subindices, monthly averages; 1998–2002 average = 100. [2] Exchange-traded derivatives; number of contracts traded, in millions.

Sources: Datastream; BIS.

Graph 5

# Inverse relation between dollar and commodities



**Inverse relation between dollar and commodities**

- Relation between dollar and commodities inversely related with correlation even tighter over past year at -0.926
- Day dollar topped out the CRB index bottomed
- Most commodities valued in dollars so lower greenback means commodity prices have to move higher to equate values
- Falling dollar seen as inflationary lending strength to more “hard assets”

# BIOGRAPHY FOR LEO VAN WARMERDAM
# DAIRYMAN

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Leo Van Warmerdam is a dairyman from Galt, California. He is part of a 2nd generation family farm established in 1953 that today includes his father and two brothers. His father, Ben, emigrated to the U.S. from Holland following WWII after distinguishing himself with the Dutch Resistance against the Nazis, rescuing downed Allied pilots.

Leo is responsible for managing the Grade A Holstein dairy of approximately 900 head of milk cows and a similar number of youngstock. The farm also includes 1,000 acres of crop land used primarily to raise feed for the dairy herd. Mr. Van Warmerdam is a board member of the Sacramento County Farm Bureau, Chairman of the Sacramento County Farm Bureau Dairy Advisory Committee, District 4 Chairman of the Dairy Farmers of America cooperative, and Chairman of the Galt Irrigation District board. Mr. Van Warmerdam attended Delta Junior College and Fresno State University.

BIOGRAPHY FOR KEVIN MASUHARA
DIRECTOR, CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
MARKETING SERVICES DIVISION

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Kevin Masuhara was appointed Director of CDFA's Marketing Services Division in 2009. The Marketing Services Division administers the Dairy Marketing programs, Milk Pooling, and provides oversight to the various commodity boards, commissions and councils. Other assignments with CDFA have included County/State Liaison and program management over fruit and vegetable inspection programs.

# BIOGRAPHY FOR DAVID IKARI
# CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
# BRANCH CHIEF

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David Ikari began his career with the Department of Food & Agriculture, Marketing Branch in 1974 as an Assistant Agricultural Economist serving as the principal Departmental liaison with the California Milk Producers Advisory Board, Manufacturing Milk Producers Advisory Board, and the Dairy Council of California. He transferred to the Dairy Marketing Branch in 1982.

He has served as the Branch Chief since July 1985. David is also an active member of the International Association of Milk Control Agencies, serving as a past president and is currently board member.

David is a graduate of California Polytechnic College, Pomona, with a Bachelor of Science in Agricultural Economics, and holds a Master of Science in Agricultural Economics from the University of Nevada at Reno.

News Release

CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

**Media Contacts:**
Michael Jarvis, CDFA Public Affairs (916) 6541-9914

Arnold Schwarzenegger, Governor
A. G. Kawamura, Secretary

# STATE APPROVES TEMPORARY INCREASE FOR STRUGGLING DAIRY FARMERS

Release #09-100

*Adjustment to Minimum Price of Milk for January through March*

SACRAMENTO, December 16, 2009 — California's struggling dairy farmers will receive a temporary adjustment in the minimum price of milk, the Department of Food and Agriculture announced today.

The decision comes after testimony from dairy farmers at a hearing in Sacramento on November 9 to consider numerous proposals to adjust minimum milk price levels. CDFA is increasing the minimum prices of all milk usage by varying amounts for a temporary three-month basis from January through March 2010.

The adjustment includes three cents per gallon on fluid milk products. The temporary adjustments on other dairy product classifications will cost less than one cent per container in production costs but are unlikely to have an effect on consumers at the retail level.

California dairy farmers are in the midst of a financial crisis brought about by recession in the global economy and a sizeable reduction in consumption of milk and dairy products. In 2009 the prices that dairy farmers receive plummeted, dropping by over half the level they were in 2008. Dairy feed costs have kept milk production costs at levels that greatly exceeded farm milk prices. As a consequence, California dairy farmers lost an estimated $1.4 billion dollars in the first nine months of 2009.

More importantly, California's annual milk production in 2009 suddenly reversed its 30-year trend and is running almost four percent lower than the total for 2008. Additionally, a growing number of California dairy farmers exited the industry in the latter part of 2008 and into 2009. For the first time in decades, the state's milk production will be less than the total needs of its processing plants.

While the temporary price adjustment is not designed to recover the financial losses that California dairy farmers incurred over the past twelve months, it is designed to help dairy farmers sustain their operations as milk prices begin to return to near profitability. Farm prices for fluid milk began to adjust in September after national milk supplies declined. The temporary adjustments end on March 31.

**-30-**


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California Department of Food and Agriculture Office of Public Affairs
1220 N St., Ste. 214, Sacramento, CA 95814
916-654-0462, www.cdfa.ca.gov

# The Public Hearing Process
## *A Basis for Establishing the Milk Price Formulas*

Many people are mystified by the process that establishes minimum milk prices and their corresponding pool quota and overbase prices. Some assume that each month the Department of Food and Agriculture (Department) assesses the conditions faced by the dairy industry in California and sets the minimum farm prices accordingly. However, this is an inaccurate depiction of how milk prices are established.

Minimum farm prices are determined according to mathematical formulas that are based on market prices for manufactured dairy products. These formulas were established through a public hearing process in which interested parties offered testimony and evidence relating to the proposed formulas. Revisions to these pricing formulas, other provisions of the Stabilization and Marketing Plans for Market Milk, and provisions of the Pooling Plan for Market Milk are made only after a public hearing has been held. Most hearings are initiated by entities representing milk producers, cooperatives, or milk processors; and require formal submission of a hearing petition. Occasionally, the Department will call a hearing on its own motion.

### Petition

The petition submission process is formal, and a valid petition must contain:

- Specification as to which plan(s) to change. The plans are:
  - Northern California Milk Stabilization and Marketing Plan for Market Milk, and
  - Southern California Milk Stabilization and Marketing Plan for Market Milk
    - The Stabilization plans specify the pricing formulas the Department uses to establish minimum prices.
  - Pooling Plan for Market Milk
    - The Milk Pooling Plan specifies how the revenues generated from milk sales are distributed to producers.
- A brief written description of the requested changes.
- An explanation of why the petitioner recommends the proposed change, including relevant analysis and data.
- A specification of what code sections are relevant to the call of the hearing.
- A revised plan with implementation language.
- A specified implementation date.
- The signature and printed name of the petitioner, the date the proposal was signed, the mailing address, phone number, and if available, the fax number and e-mail address of the petitioner.

### Prehearing

The Department must accept or deny a request hearing to amend the stabilization and marketing plans within 15 days after receiving a petition from an interested party. A

petition that represents the sentiments of 55 percent of all producers and not less than 55 percent of the total production of the marketing area results in a mandatory hearing. For the termination of the Milk Pooling Plan however, a petition needs only 25 percent of all producers with not less than 25 percent of total production.

There is no typical time span that separates the notice of the hearing and the hearing itself. (The attached timeline is typical.) During this time however, a sequential series of events crucial to the process occur:

- First, alternative proposals to the petition are accepted.
- Second, the Department holds a pre-hearing workshop to review its analysis of the original petition and any other proposals received.
- Third, the Department may make revisions to the analysis of the proposals and makes the analysis and data available to the public based on discussions at the pre–hearing workshop.

**Hearing**

At the hearing, all interested parties may offer testimony to a hearing panel to present their views. Proposals not covered by the hearing notice, however, may not be implemented as a result of the hearing. Those presenting testimony are allotted a specific amount of time:

- 60 minutes for the original petitioner,
- 30 minutes for those who submitted alternative proposals, and
- 20 minutes for all others.

Cross–examination of those presenting testimony is not allowed by any interested party. The hearing panel, however, is allowed to question the witness to clarify points in the testimony.

**Posthearing**

At the conclusion of the hearing, there is no comment period. Any person providing testimony, however, may be allowed to submit a post–hearing brief that explains, amplifies, or withdraws that person's testimony within a period of time not to exceed 10 days from the close of the public hearing. Once the hearing record is closed, the hearing panel analyzes testimony and data, and prepares a recommendation for the Secretary.

If the Department determines that the proposed plan will tend to accomplish the purposes of the Marketing and Stabilization Plan, a Plan will be issued to all producers and handlers effective within 62 days of the date of the hearing. The final decision must be announced publicly 10 days prior to its implementation, making the effective announcement date 52 days following the close of the hearing.

Producer referendums are generally not required to institute amendments to the Stabilization and Marketing Plans. The amendments to the Milk Pooling Plans may require producer approval depending on the extent of the changes to the plans. A vote to reject amendments to the Milk Pooling Plan does not lead to elimination of the entire marketing order; the current Milk Pooling Plan remains in place. If there is a referendum pooling hearings may require additional time for implementation beyond the normal 62 days.

# BIOGRAPHY FOR STAN ANDRE
# CEO, CALIFORNIA MILK ADVISORY BOARD

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Mr. Stan Andre is Chief Executive Officer of the California Milk Advisory Board (CMAB) where he is responsible for overseeing the operations and programs of one of the country's largest commodity marketing organizations serving the interests of the California dairy industry, the nation's largest milk producing state.

Andre's background in the food industry spans 38-years, with extensive experience in general management, developing strategic marketing campaigns, market development, sales, advertising and public relations.

Andre joined the CMAB as CEO in January 2001, bringing extensive experience with the California dairy industry. Since 2001, the CMAB has helped the California dairy industry expand its dairy product distribution throughout California, nationally and internationally with the use of the Real California Milk and Real California Cheese seals.

Andre began his career with Carnation Company (Fresh Milk and Ice Cream Division) in 1972. He worked previously for the CMAB from 1986 to 1992 as Director of Manufactured Products where he created all marketing and promotional programs for the then new Real California Cheese. Andre has since invested 28 years of his 38-year career serving the California dairy industry.

Andre holds a Bachelor's Degree in Marketing from California State University at Fullerton. He resides with his family in Dublin, CA.

# Assembly Ag Committee Presentation

Stan G. Andre, CEO
California Milk Advisory Board
January 13, 2010

# Economic Impact of Dairy

- Milk producers and dairy processors generate billions of dollars of economic activity and create thousands of jobs
  - Producing milk
    - Jobs and inputs to build and operate milk production facility
  - Moving the milk to plants
  - Processing the milk into consumable products
  - Moving the dairy products to market
    - Warehousing, distribution
    - Other food manufacturers
    - Exports
      - Out-of-state
      - International
  - Delivering products to consumers
    - Retail
    - Foodservice

# The Wow of the Cow

## Typical California Cow in 2008

◊Generated $34,165 of economic activity

◊ Generated $6,616 of additional household earnings for California families

◊ Every 4 cows created a job in the state

# The Wow of the Cow

## In 2008, Typical California Dairy

◊Generated $33.1 million worth

of economic activity

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◊ Created 232 jobs in the state

◊ On-the-farm: 10

◊ Beyond the farm: 222

# Total Impact of Dairies & Plants

Economic Output: $63.0 billion

Household Earnings: $12.2 billion

Jobs Created:

35,045 directly employed

408,529 due to economic output

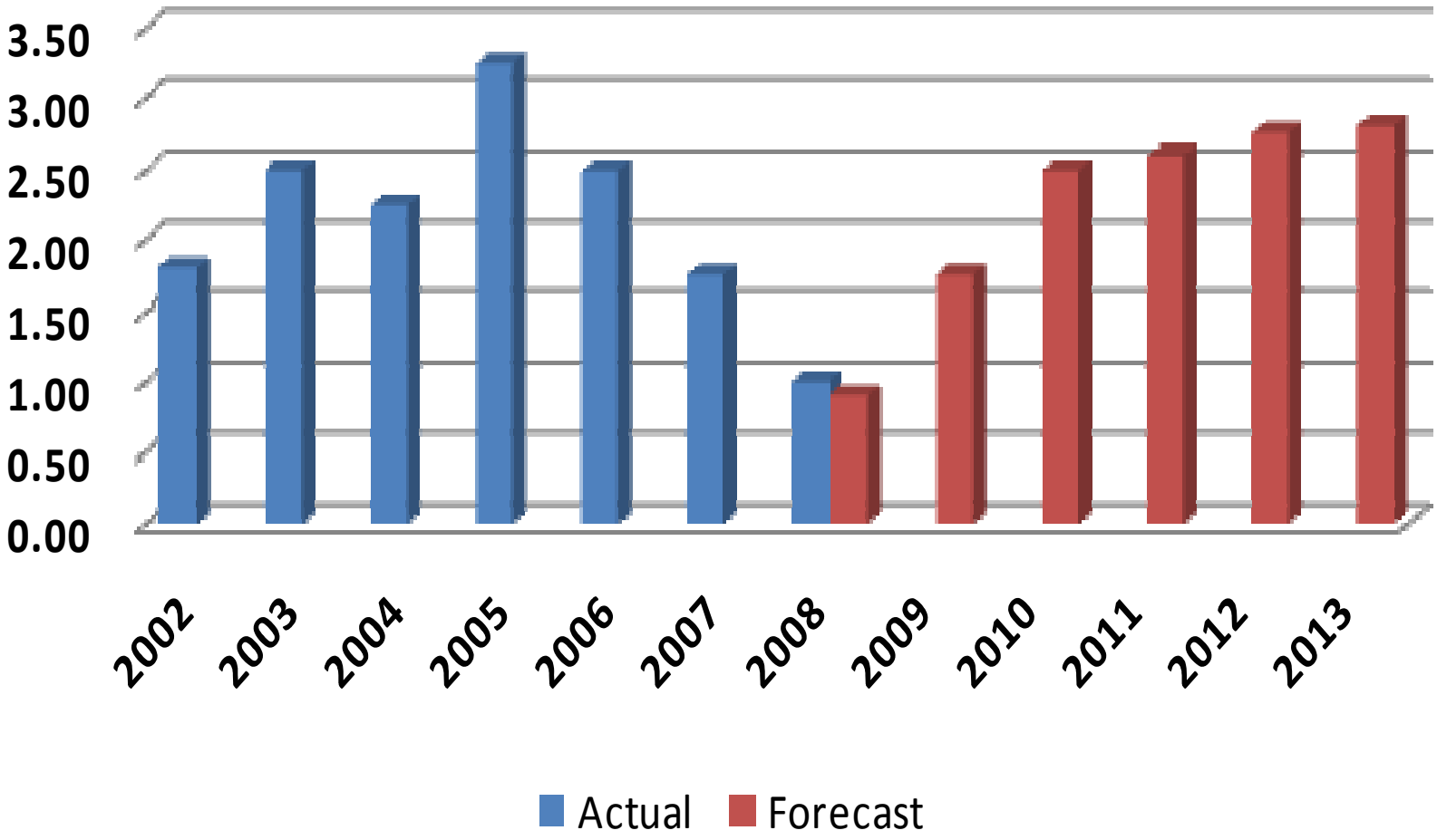
443,574 California jobs

About 3% of the jobs in the state

# Recent History – McKinsey & Company

- McKinsey said….
  - California would grow milk production @ 2-4% per year
  - Consumer demand would grow at 2.3%
  - Future demand would come from three primary areas:
    - International sales @ .3% per year (Assuming European subsidies in place)
    - Increase in western US consumption of approximately 1.2% per year
    - .8% per annum from growth in eastern markets

# % Growth in World Dairy Demand



# Current Situation

- In 2008, California alone now sold 40% of all US dairy product exports.
- World trade volumes of most dairy products were above 2008 levels during 2009.
- However, California has not fully participated in the international market demand growth for four basic reasons:
- Wrong Products
- Volatile Pricing
- Inadequate Packaging
- Marketing agreements/arrangements

**We aren't: Adding Value: Making & Marketing What the Customer Wants**

**We aren't: Getting close enough to the consumer**

# Conclusions

- It will take California milk producers an extended period of time to thoroughly recover from the 2009 economic downturn.
- Opportunities abound in domestic and international markets for California Dairy products – average growth 2.3% per year and much more dependent upon international market development.
- Key to prosperity is in meeting consumer needs in new markets (dairymen, processors, marketers and California government) nationally and internationally.
- As needs are met, the California dairy industry, government and the consumer will benefit.

# Economic Impact of the California Dairy Business

Prepared for

# California Milk Advisory Board

# The Wow of the Cow

Jerry Dryer
J/D/G Consulting Inc
02 Dec 2009

# Economic Impact of Dairy

- Milk producers and dairy processors generate billions of dollars of economic activity and create thousands of jobs
  - Producing milk
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    - Other food manufacturers
    - Exports
      - Out-of-state
      - International
  - Delivering products to consumers
    - Retail
    - Foodservice

# Economic Impact of Dairy

- Milk Production
  - Value of milk
  - Jobs created at the dairy
  - ***Economic Impact***
  - ***Household Earnings***
  - ***Jobs Created*** beyond the farm gate
- Milk Processing
  - Value of products produced
  - Jobs created in the plant
  - ***Economic Impact***
  - ***Household Earnings***
  - ***Jobs Created*** beyond the plant

# Economic Impact of Dairy

- Putting the ***Economic Impact*** in perspective
  - Examine dairy business growth
    - Review growth
      - Benchmarks: 1998 thru 2008
      - Gains since the previous analyses: 2004, 2007, 2008
  - Detail how this ***Economic Impact*** moves through communities
  - Supports the total economy of the State of California and beyond

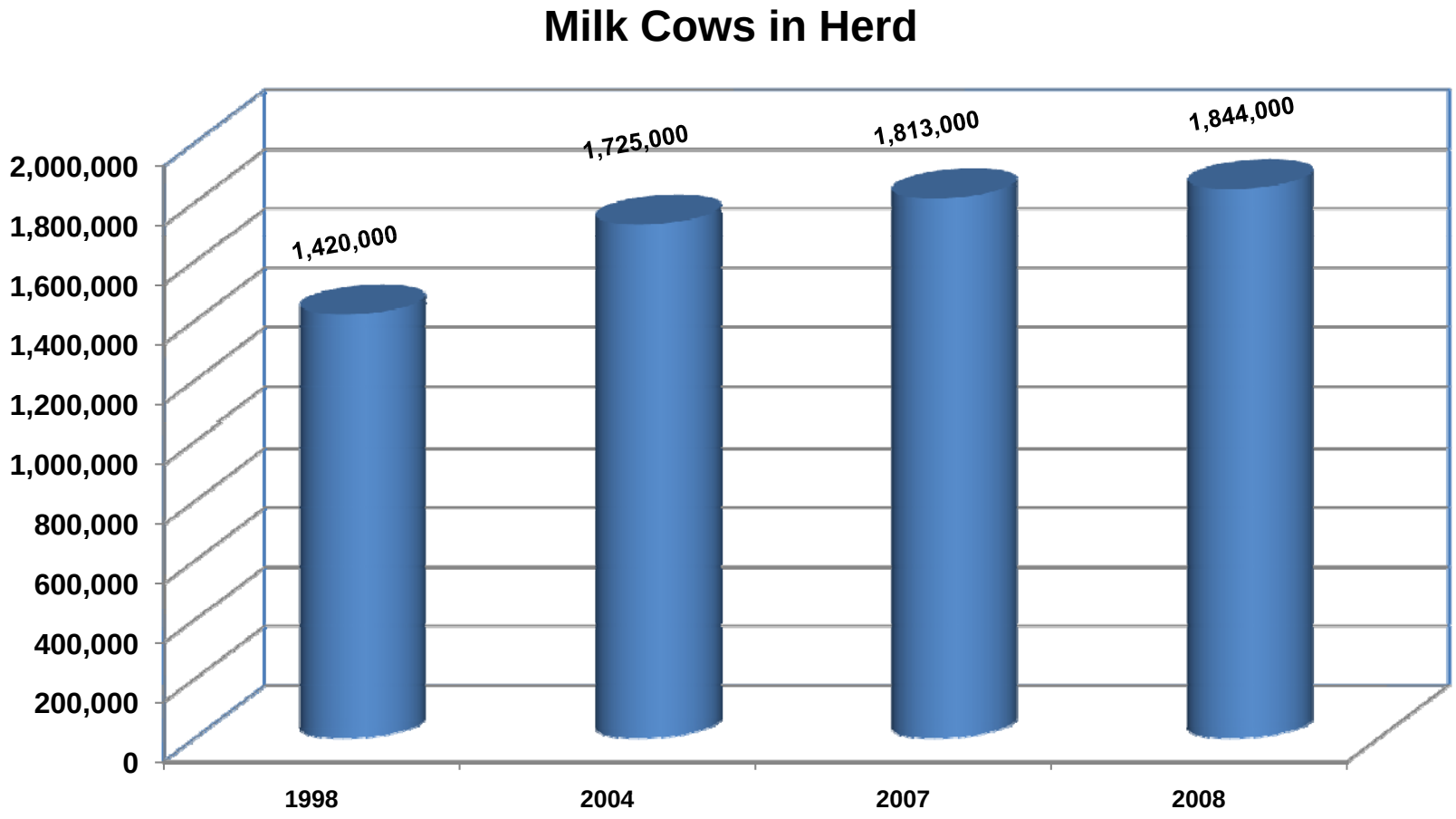
# Basis of the Analysis

- How much was produced?
- How many employees were needed?
- What was the value of the finished products?
- Data sources include:
  - California Department of Food & Agriculture
  - California Employment Development Department
  - US Department of Agriculture
  - US Bureau of Economic Analysis
  - US Census Bureau
    - Census of Manufacturers
    - Economic Census

# The Wow of the Cow

- Milk production trend lines
  - Milk cow numbers
  - Production per cow
  - Total production
  - Production per dairy
  - Other milk production detail

# The Wow of the Cow



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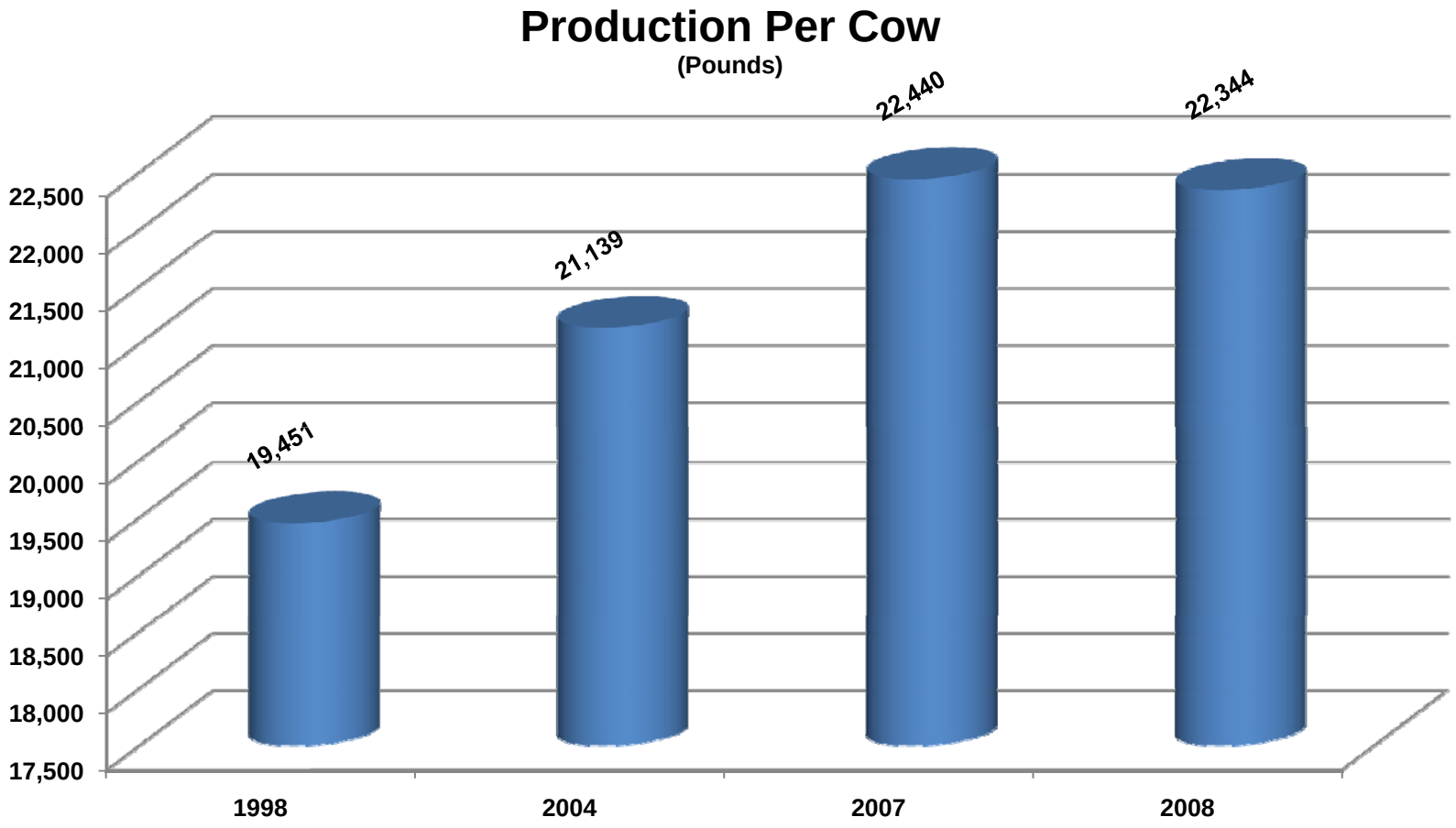

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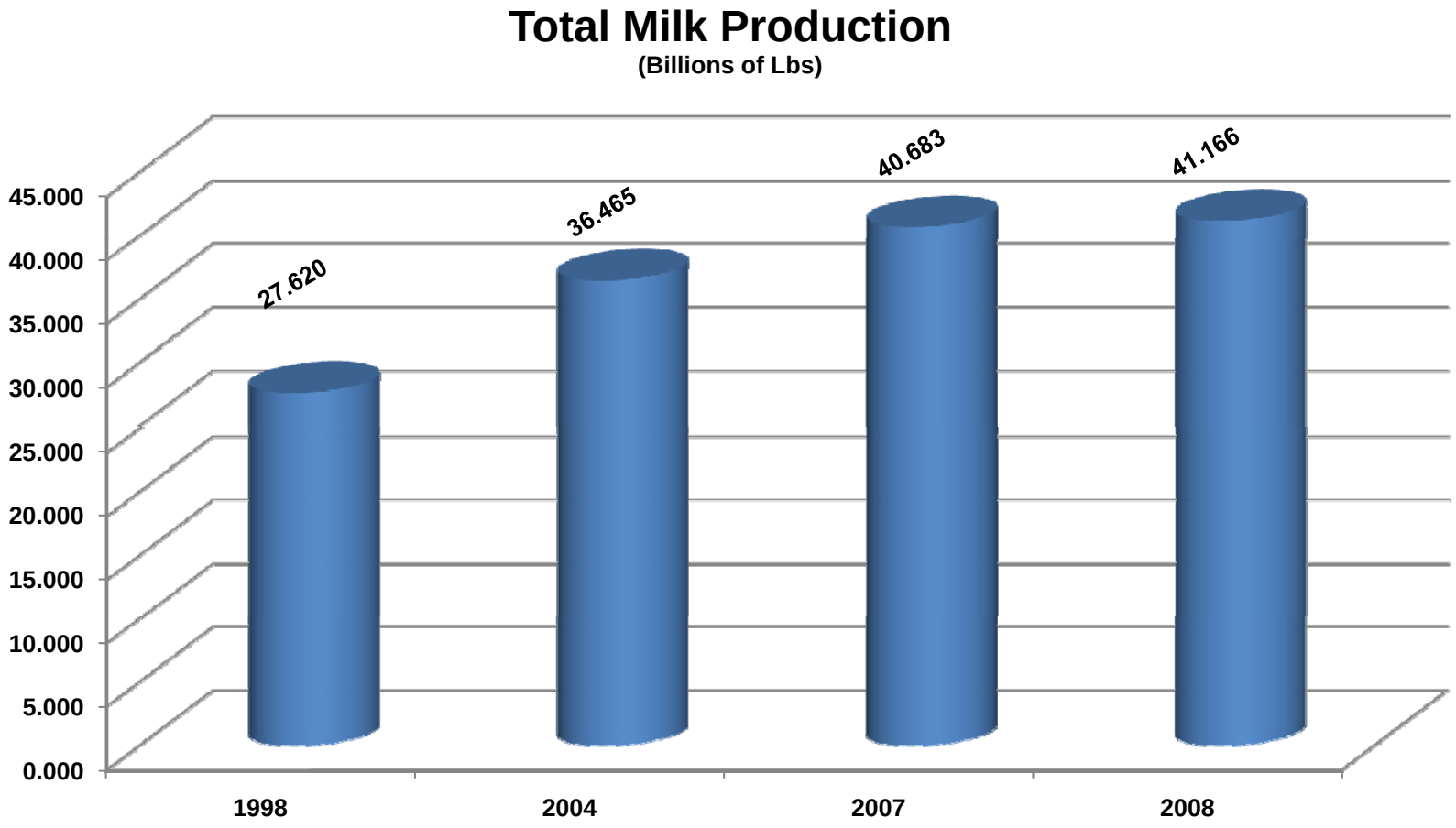

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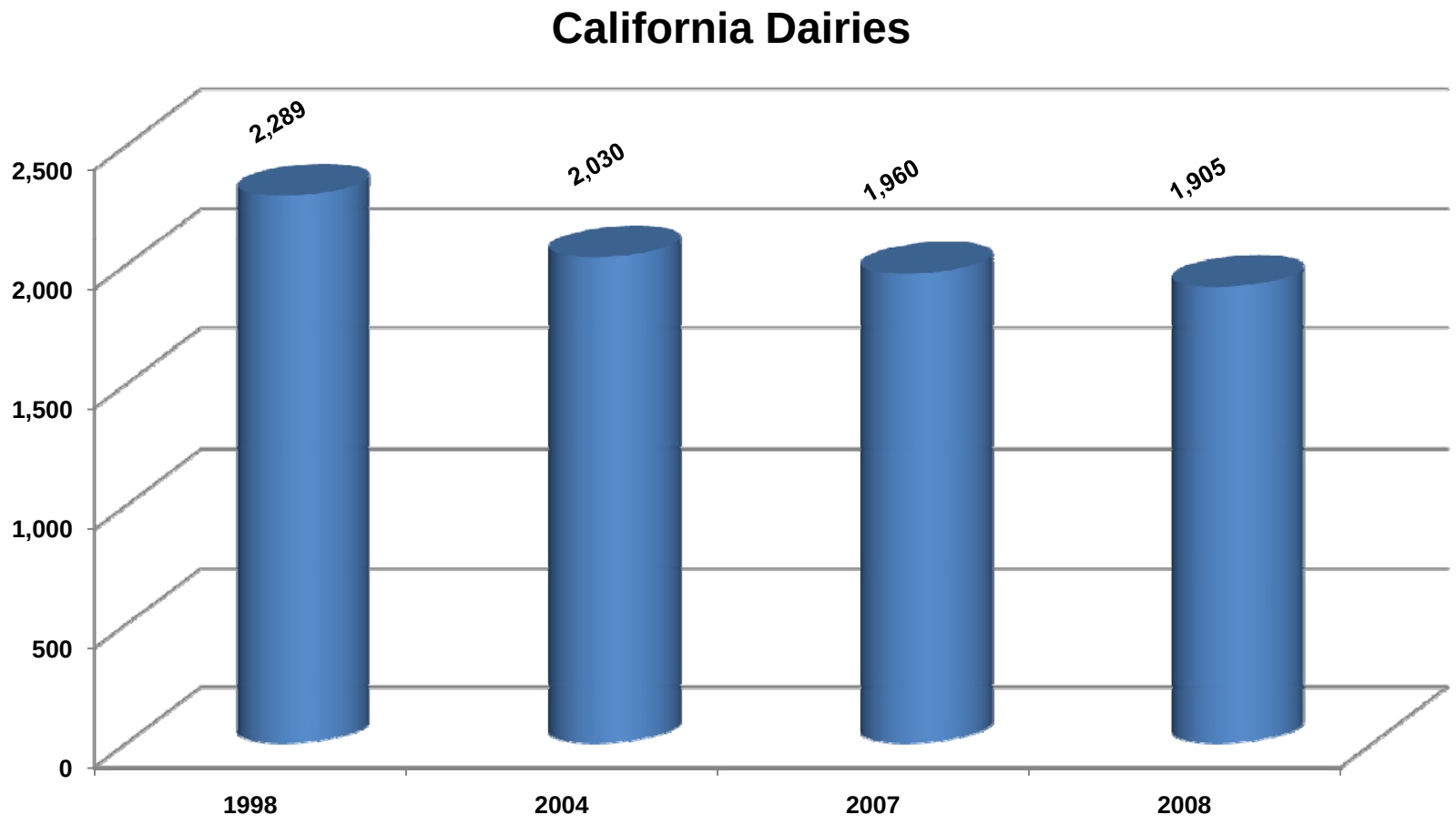

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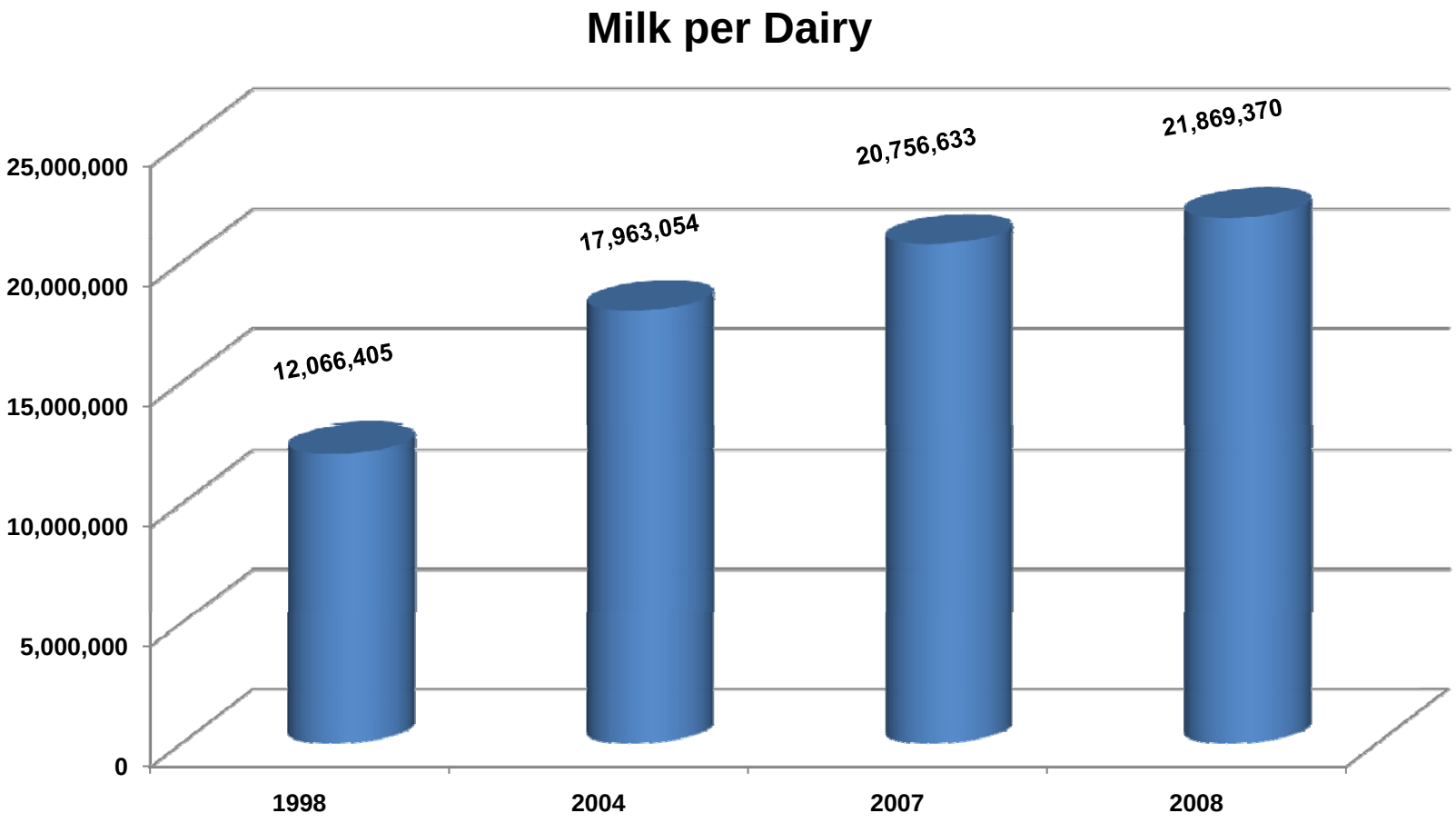

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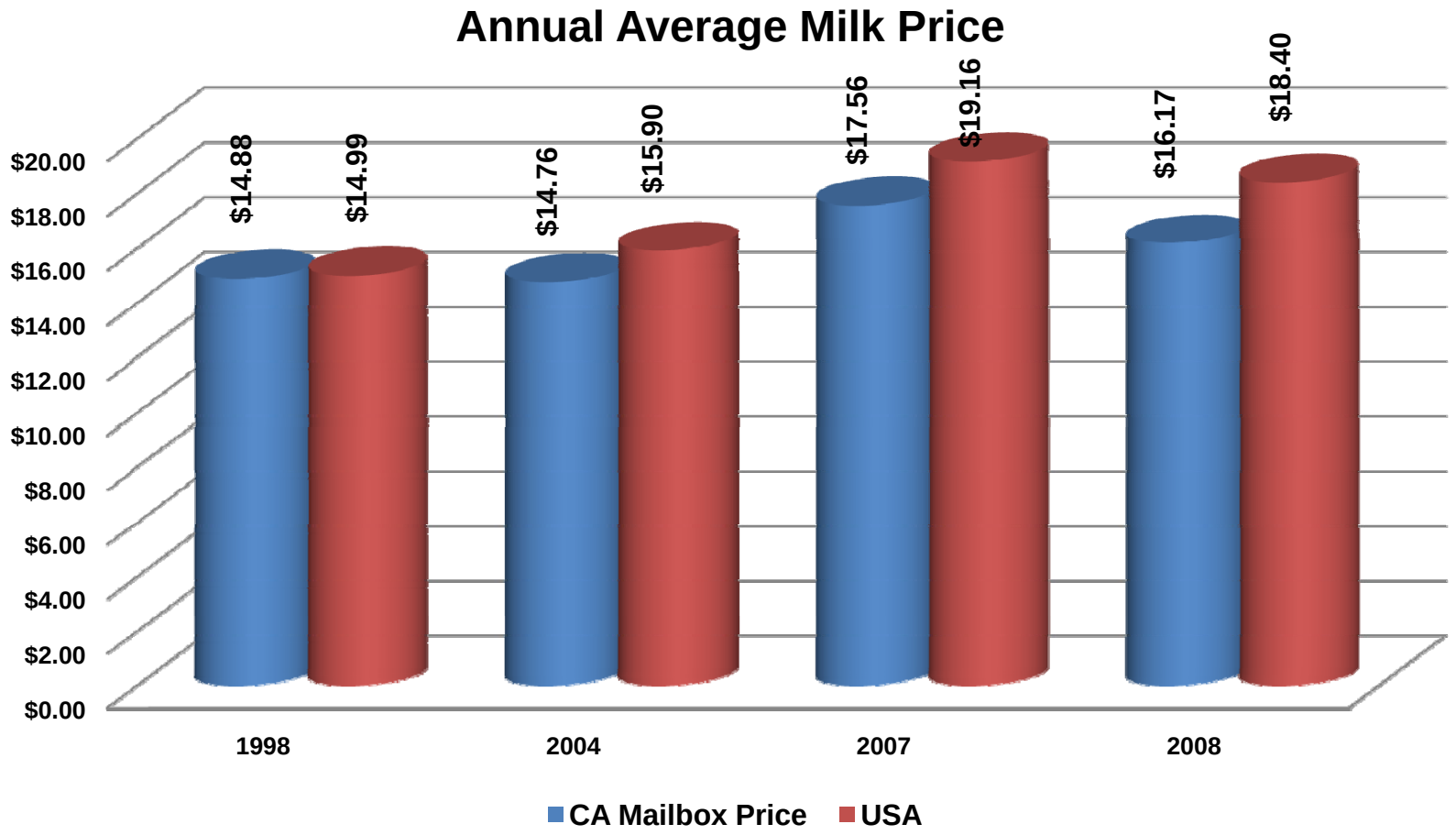

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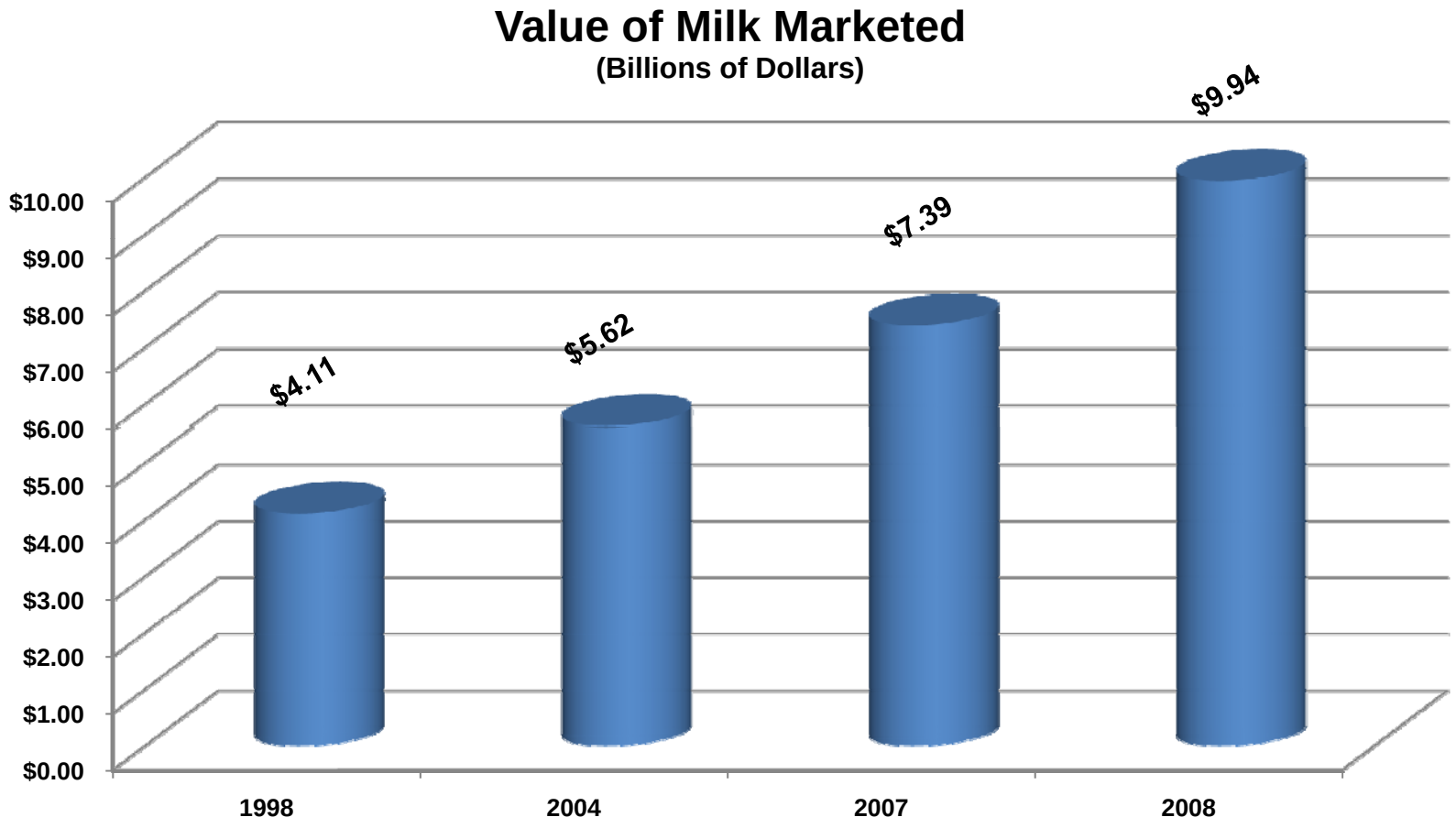

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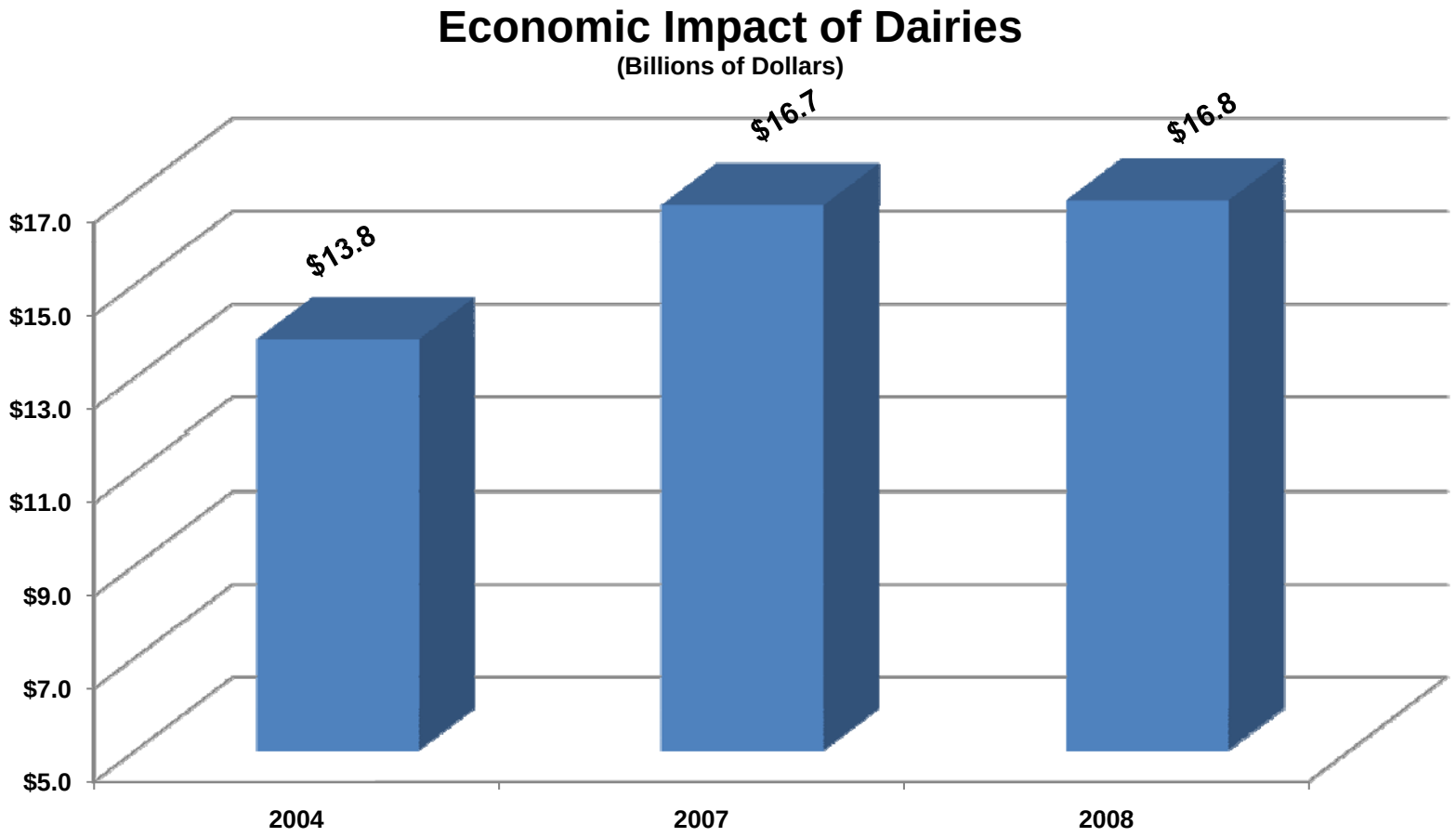

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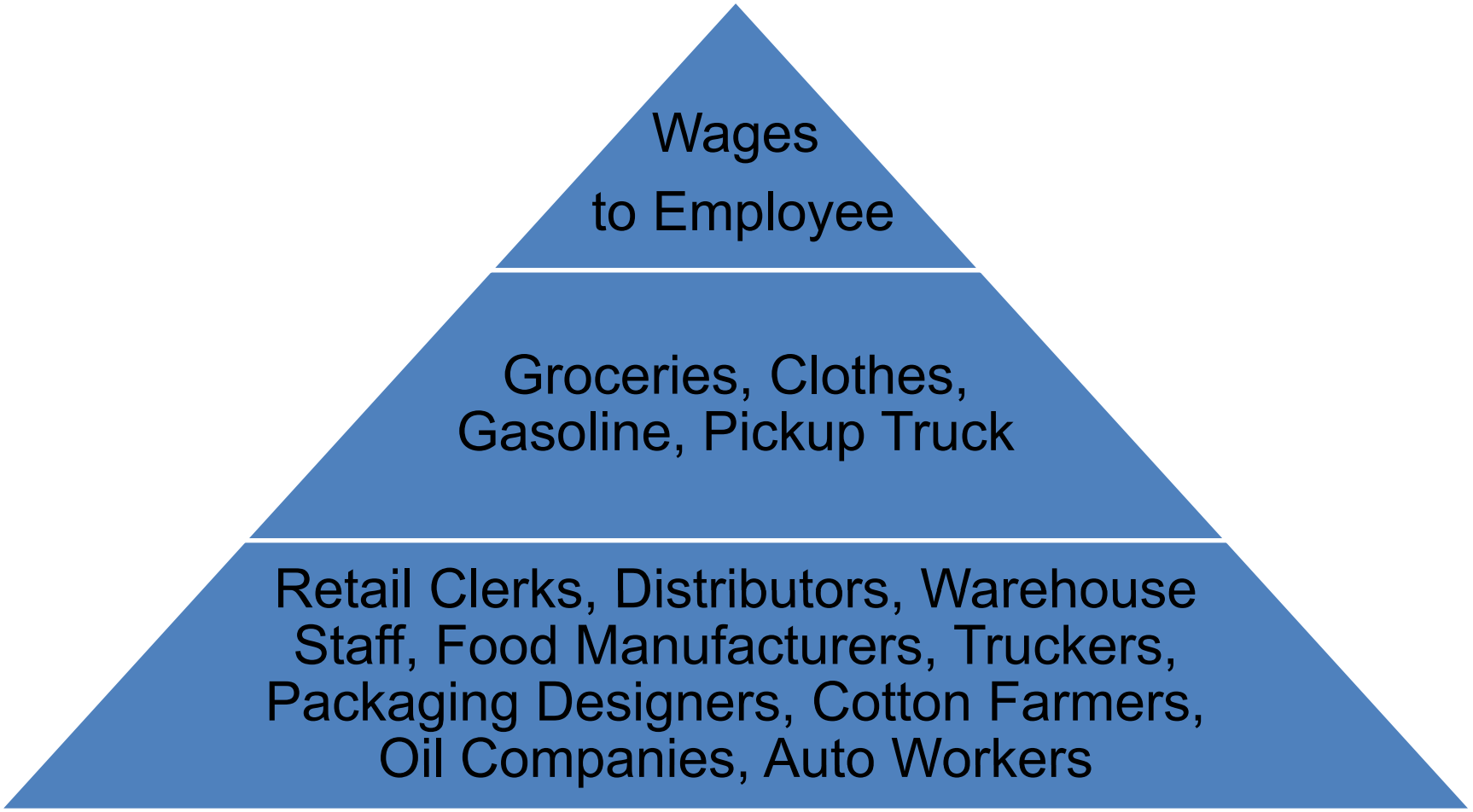

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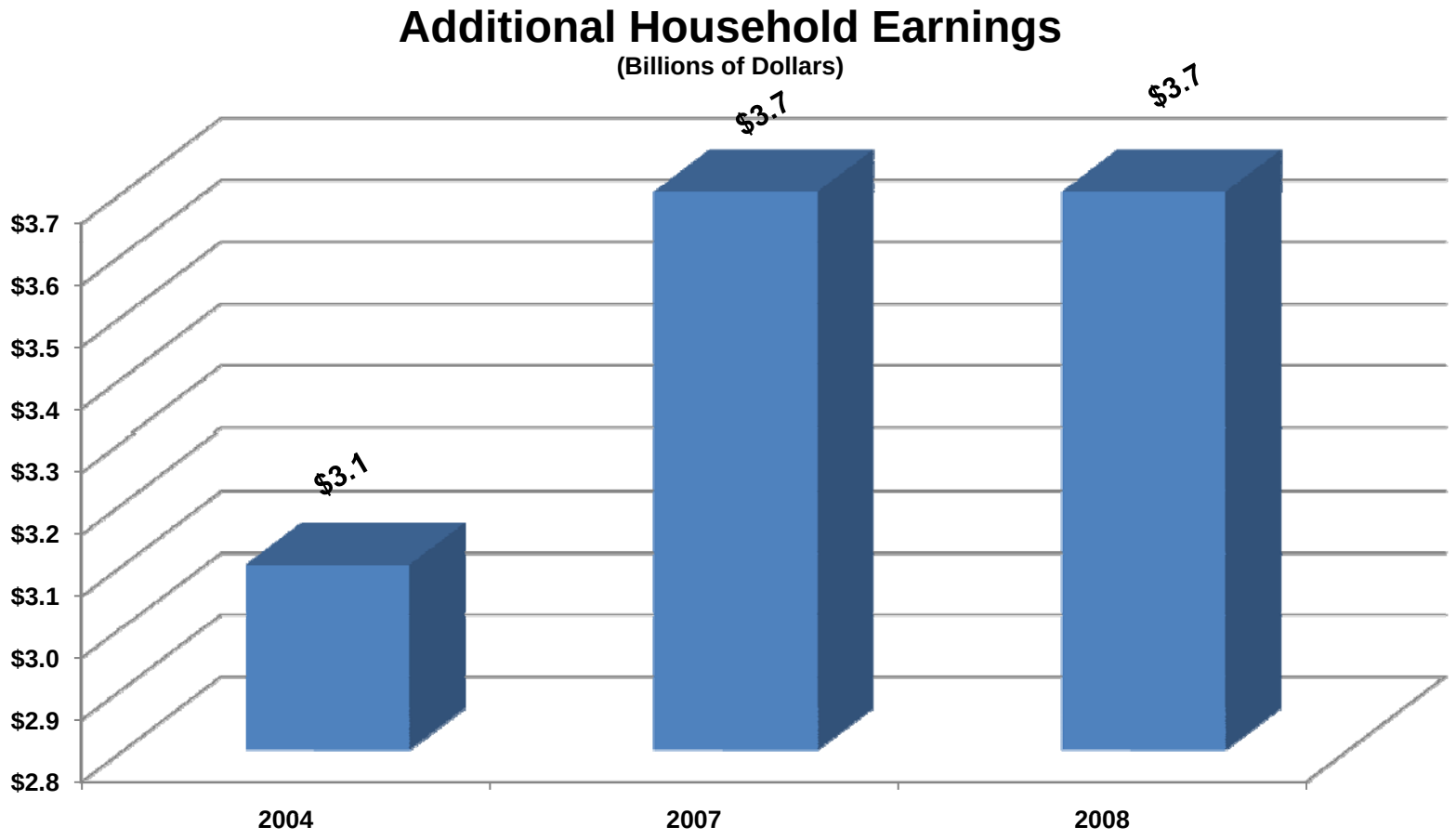

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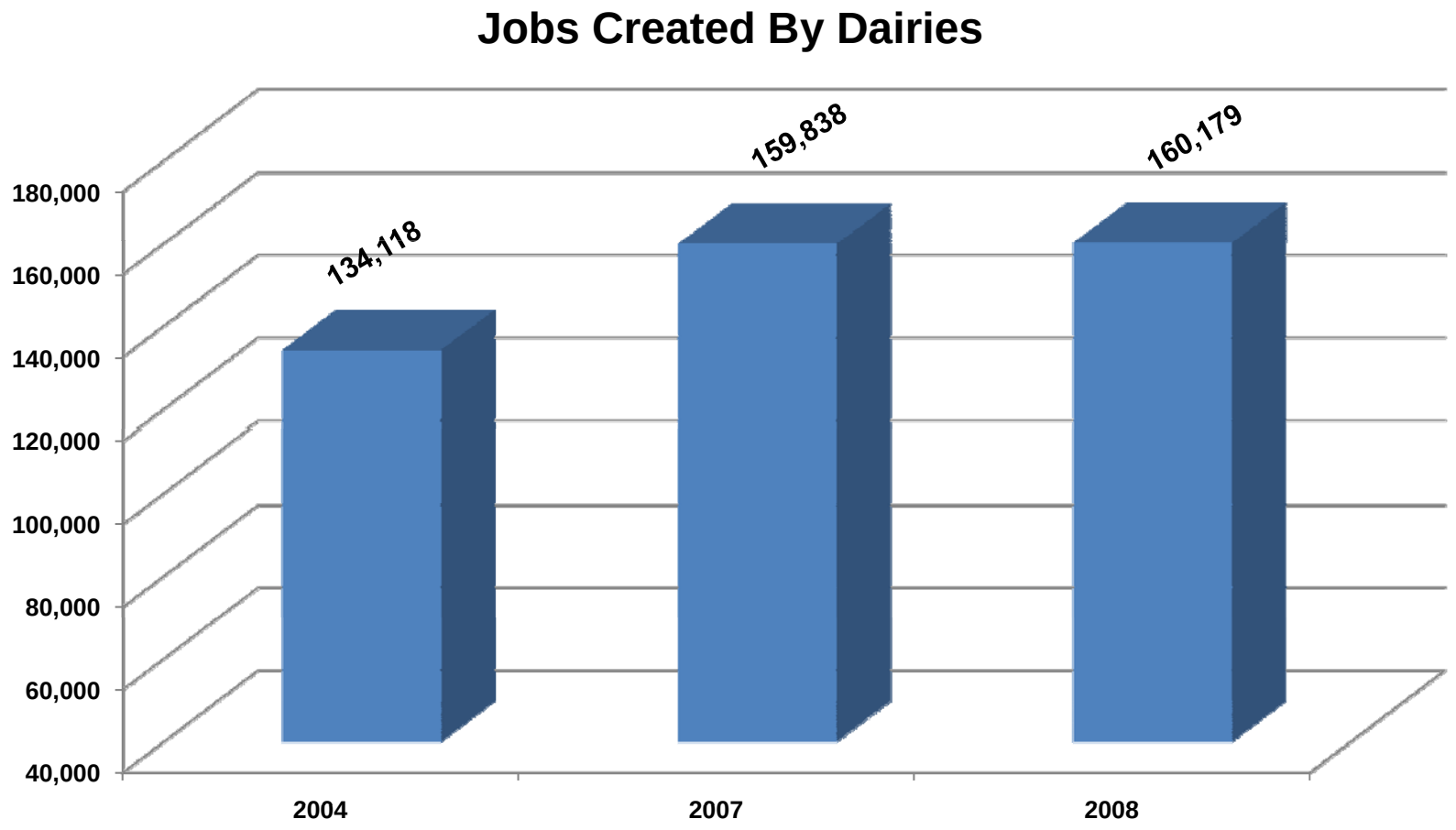

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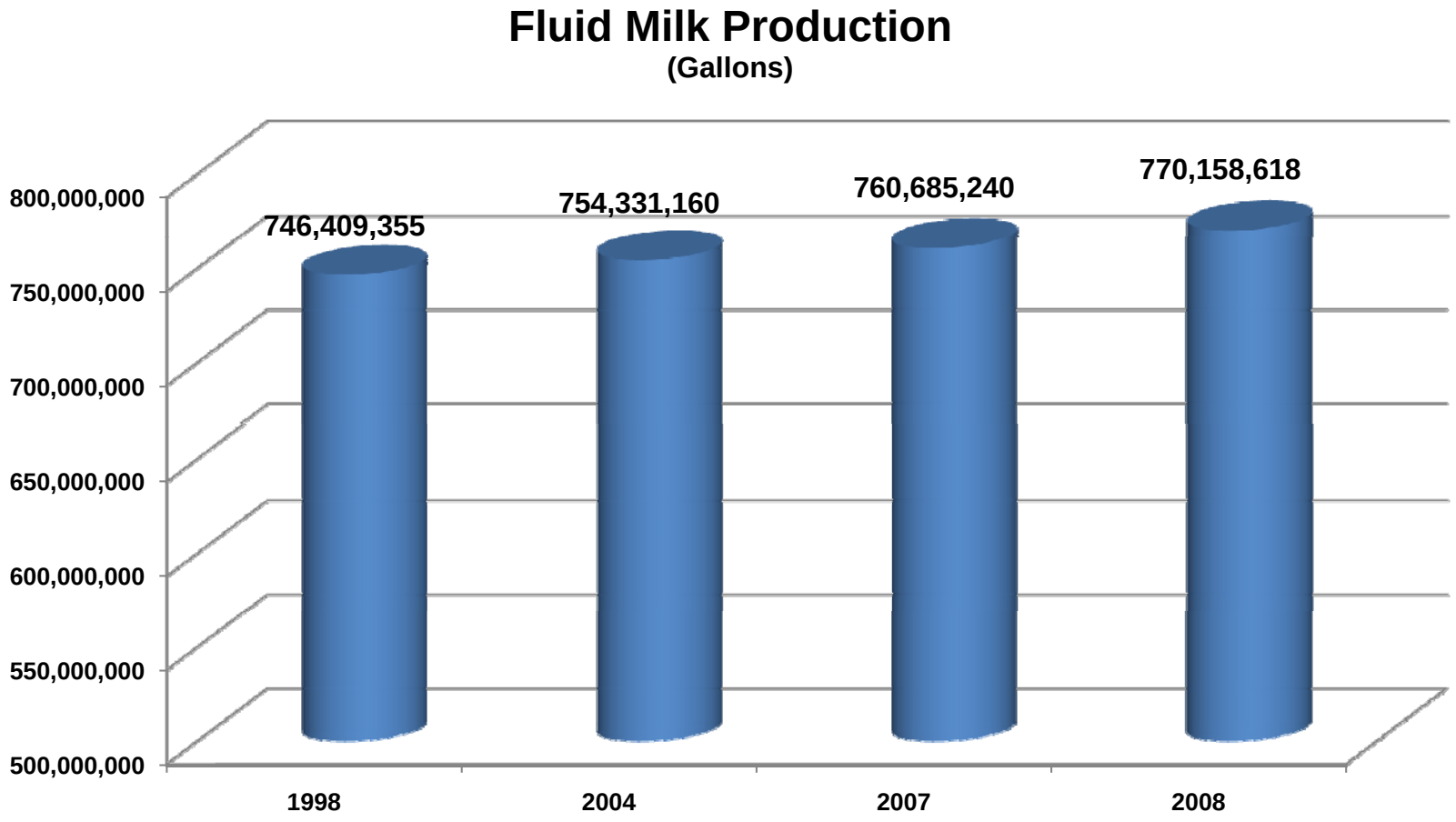
# Impact of Dairy Processors



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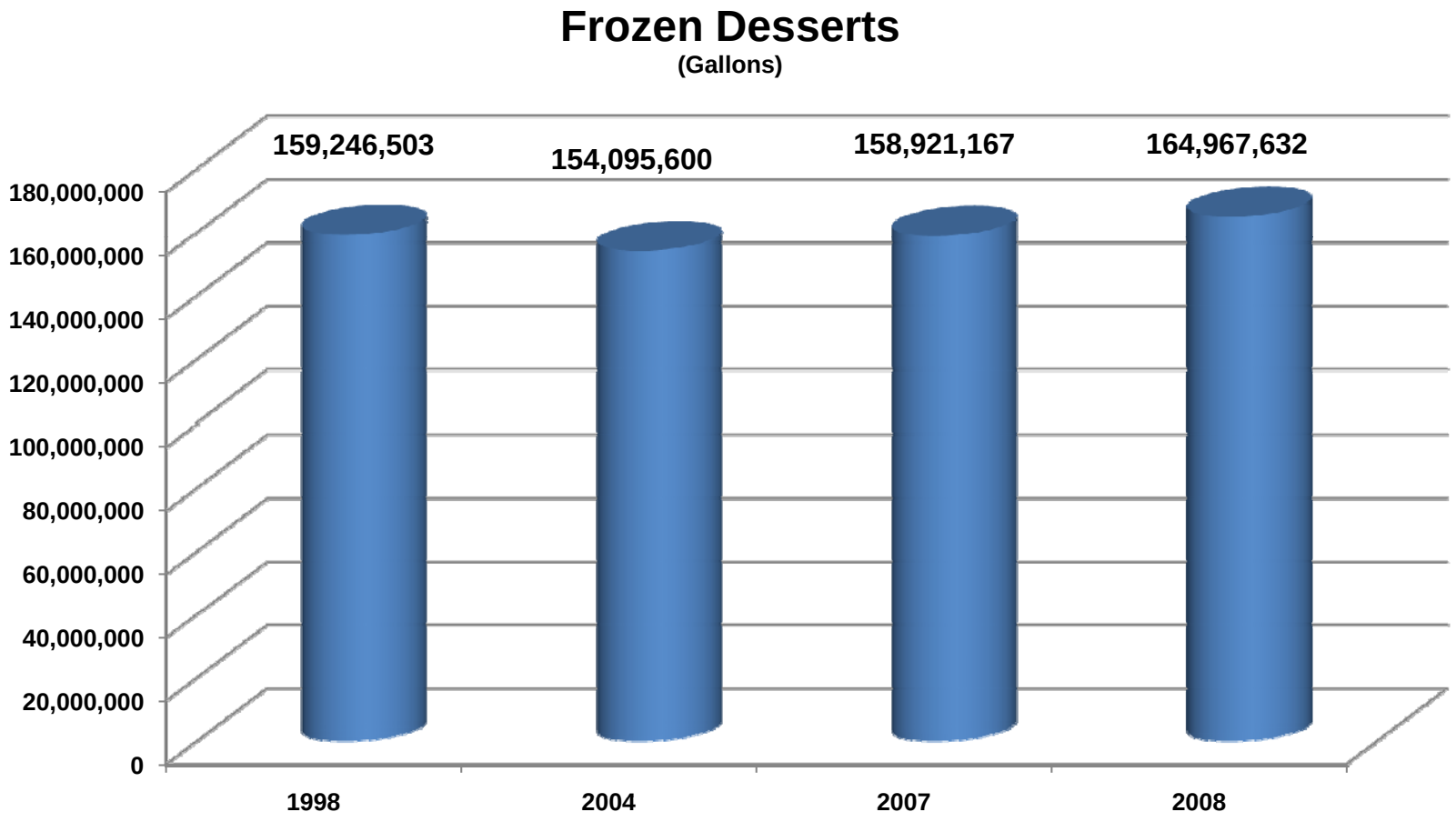

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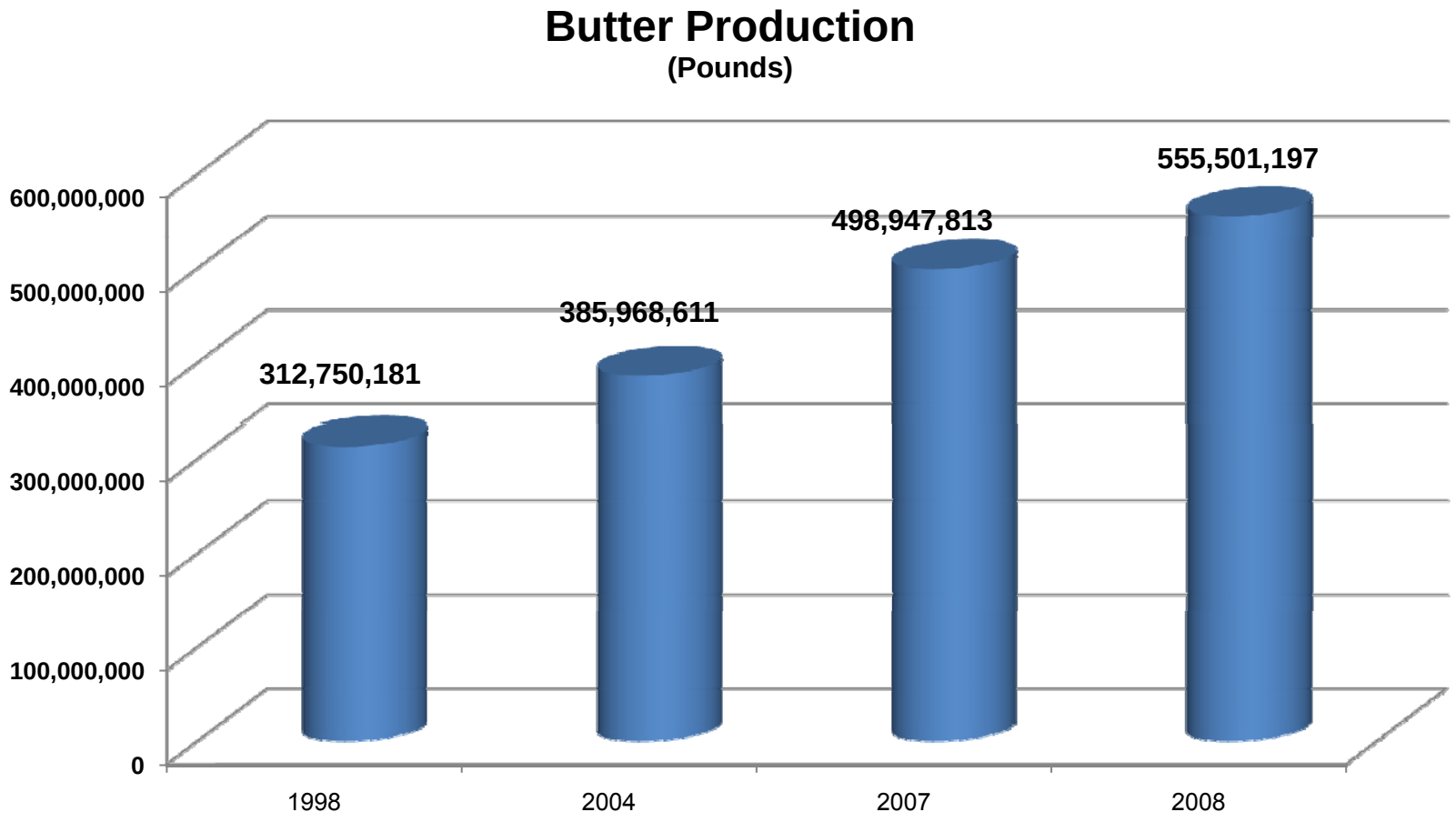

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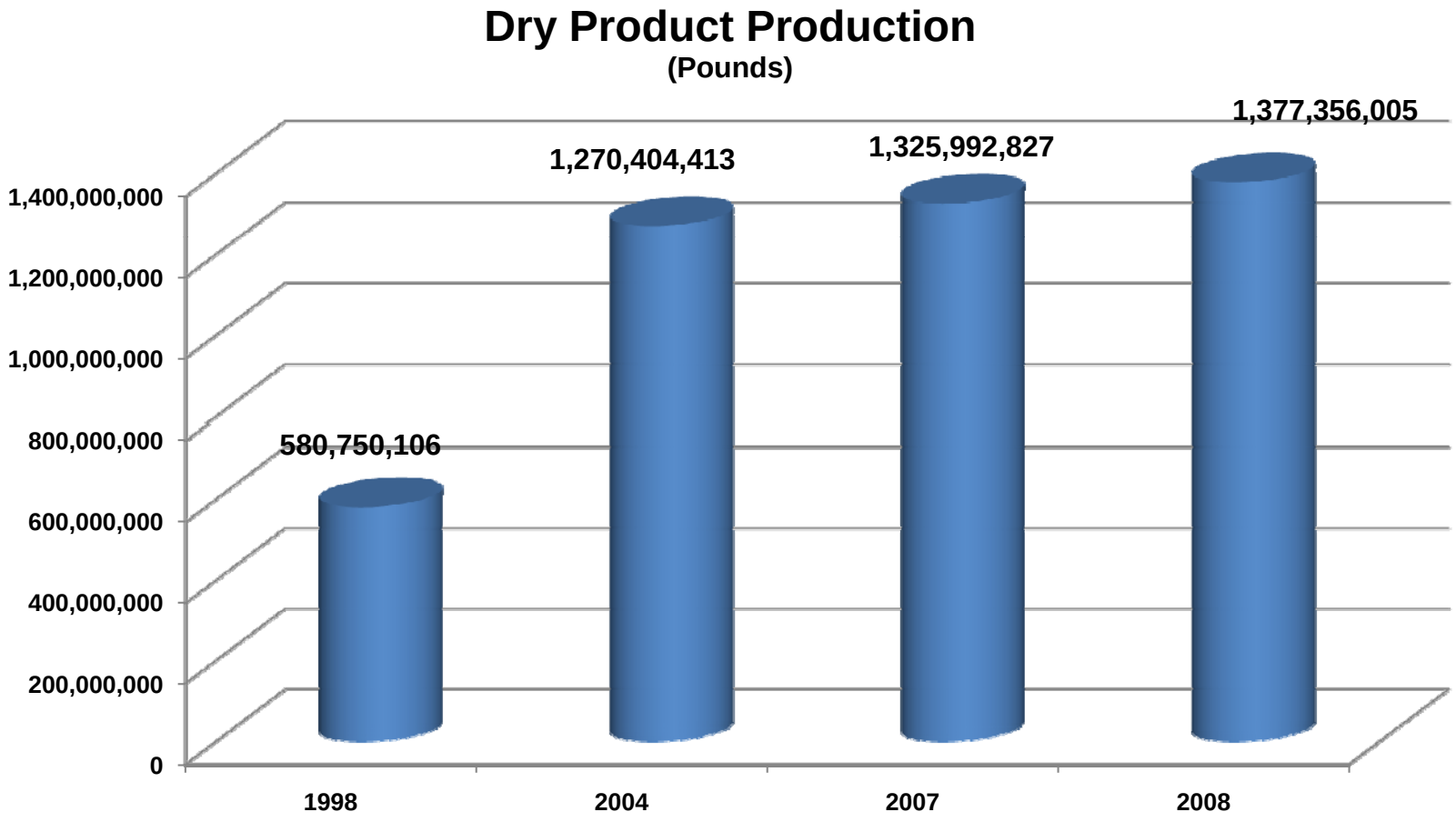

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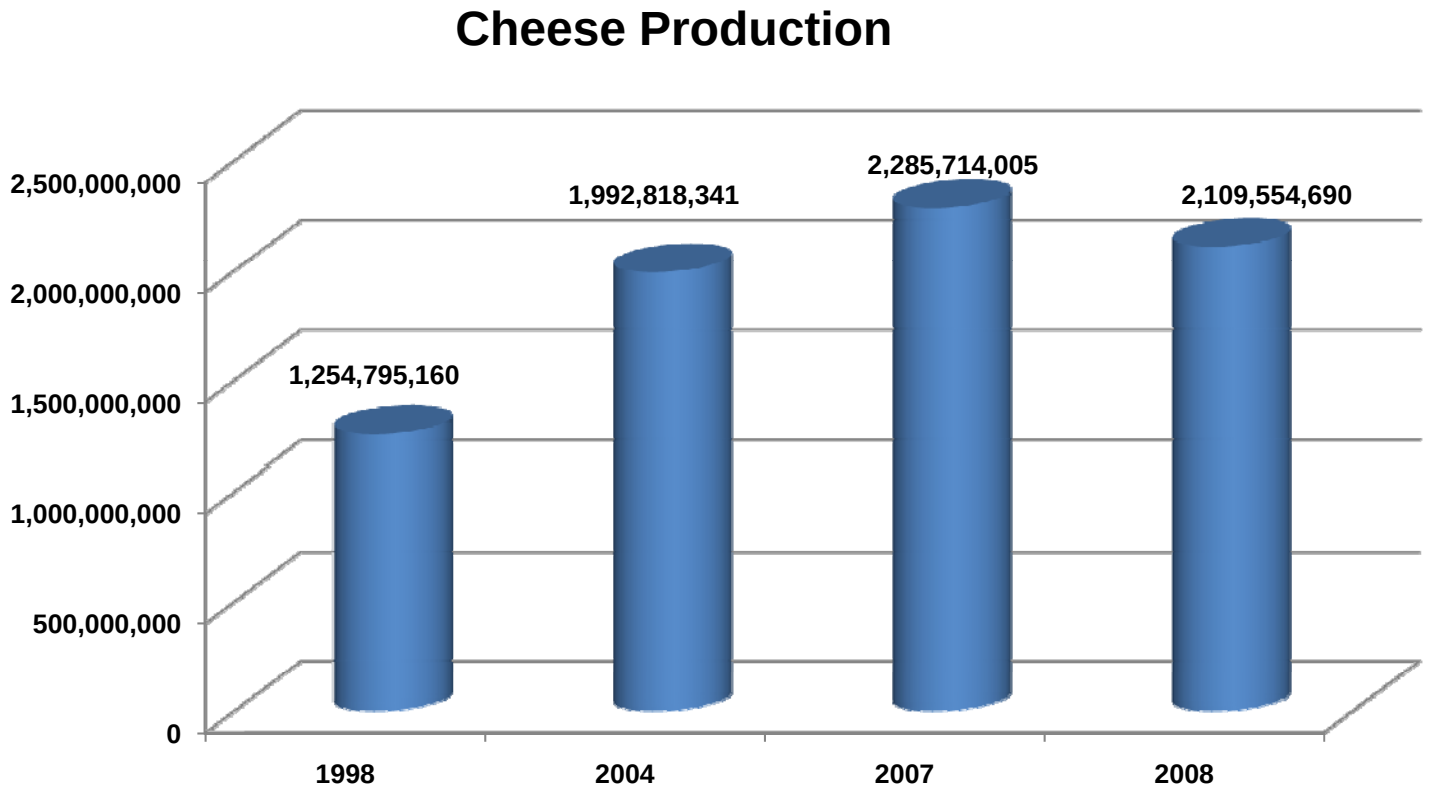
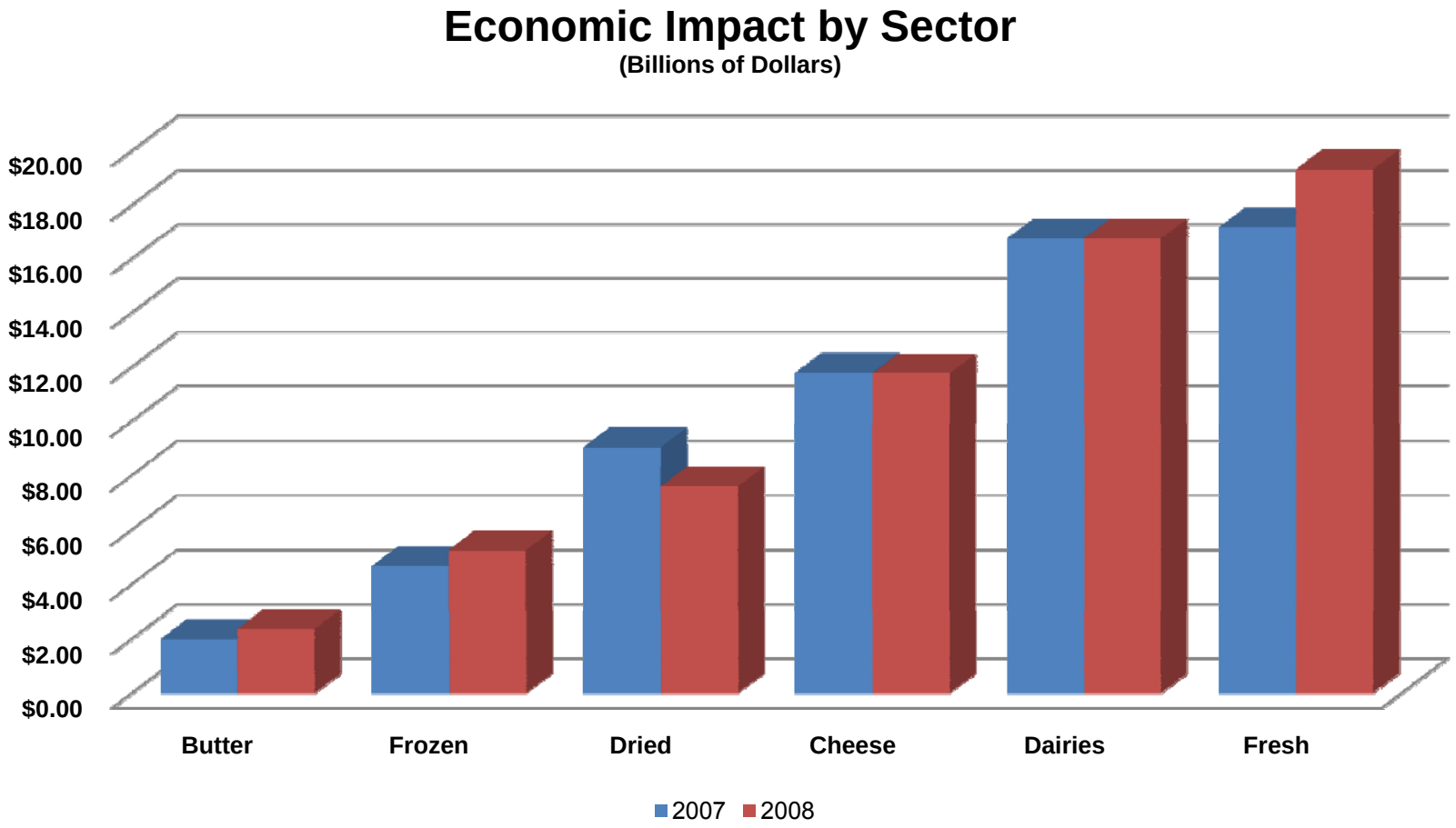


# Economic Impact by Sector



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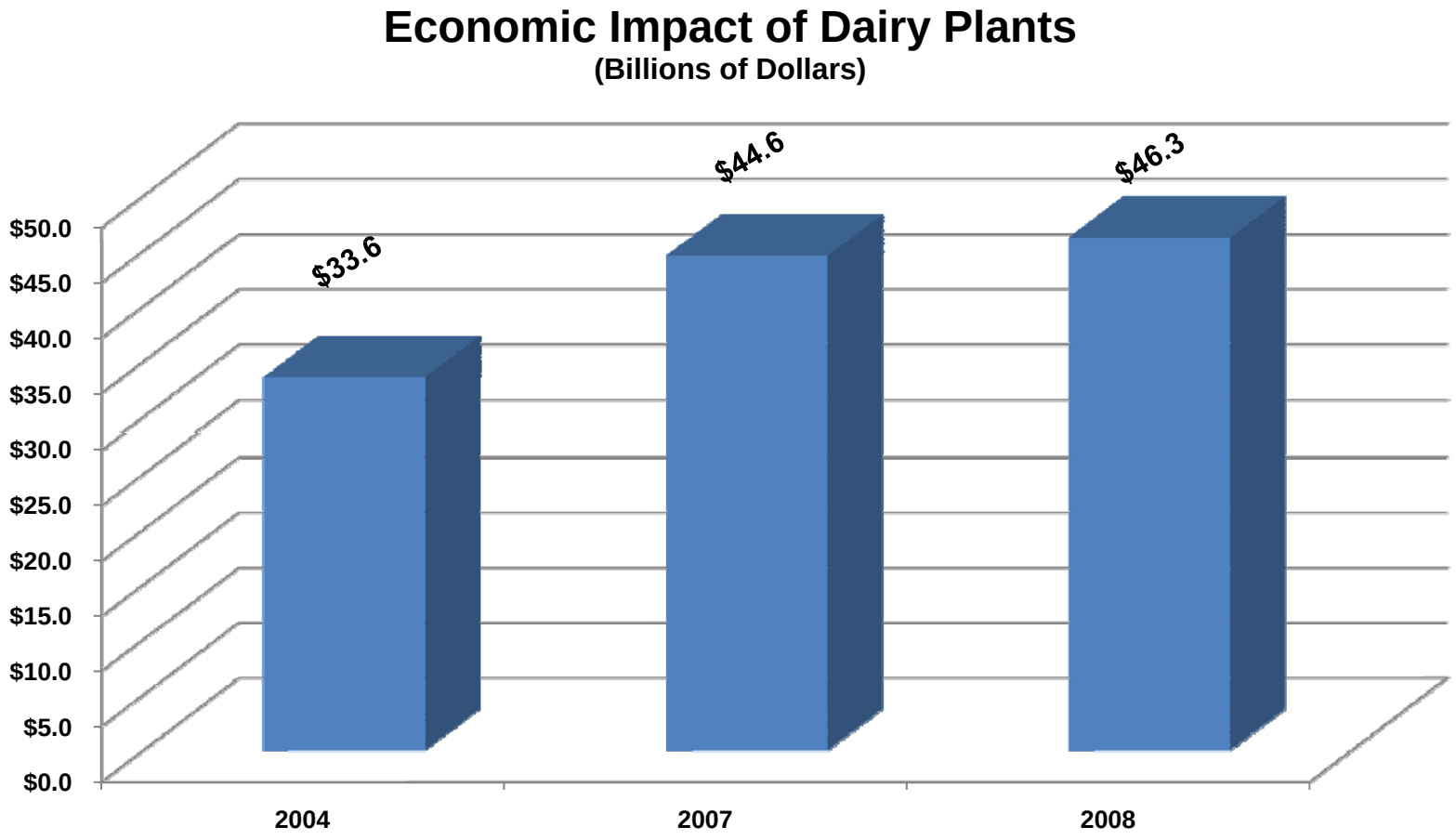

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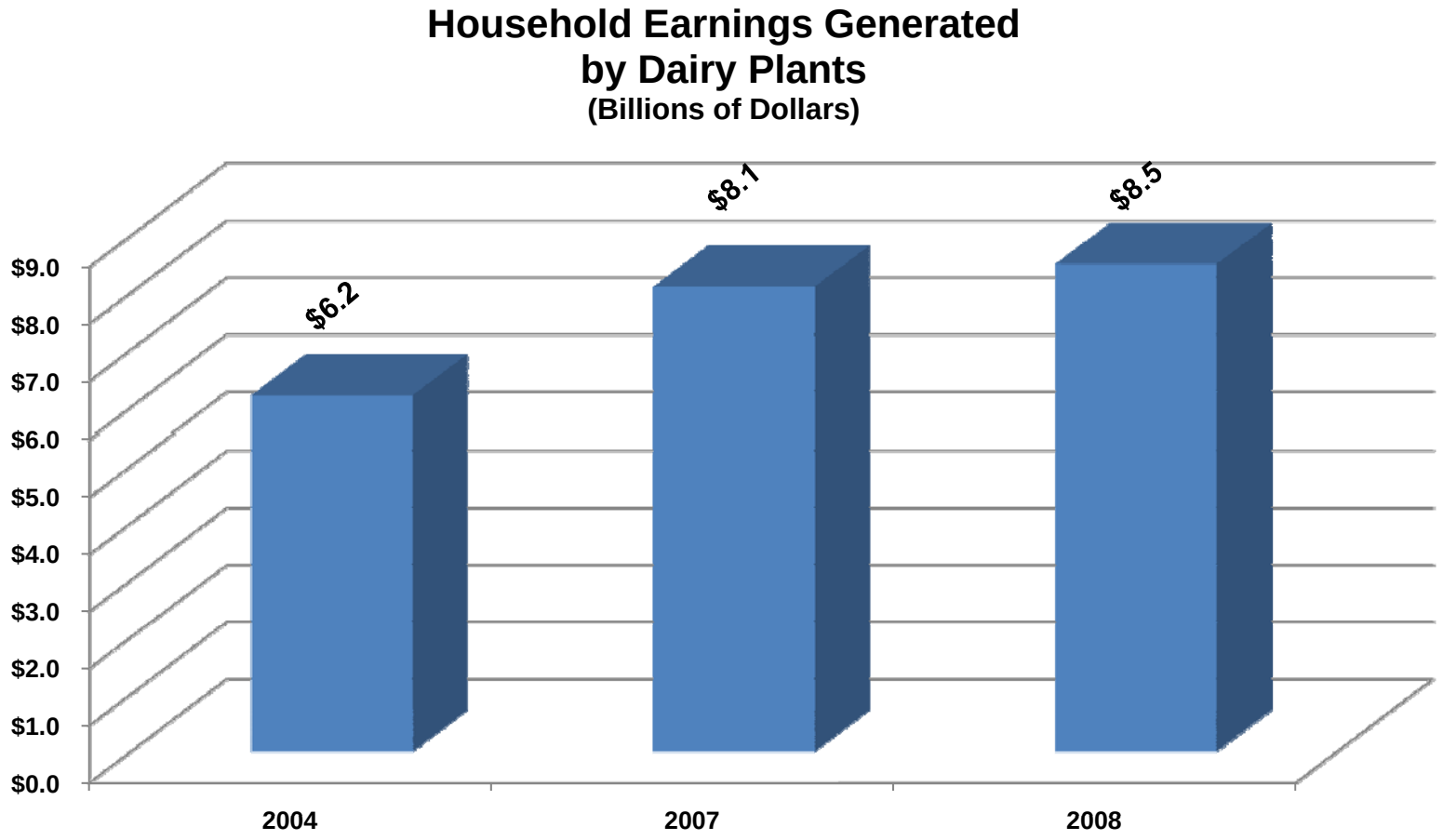

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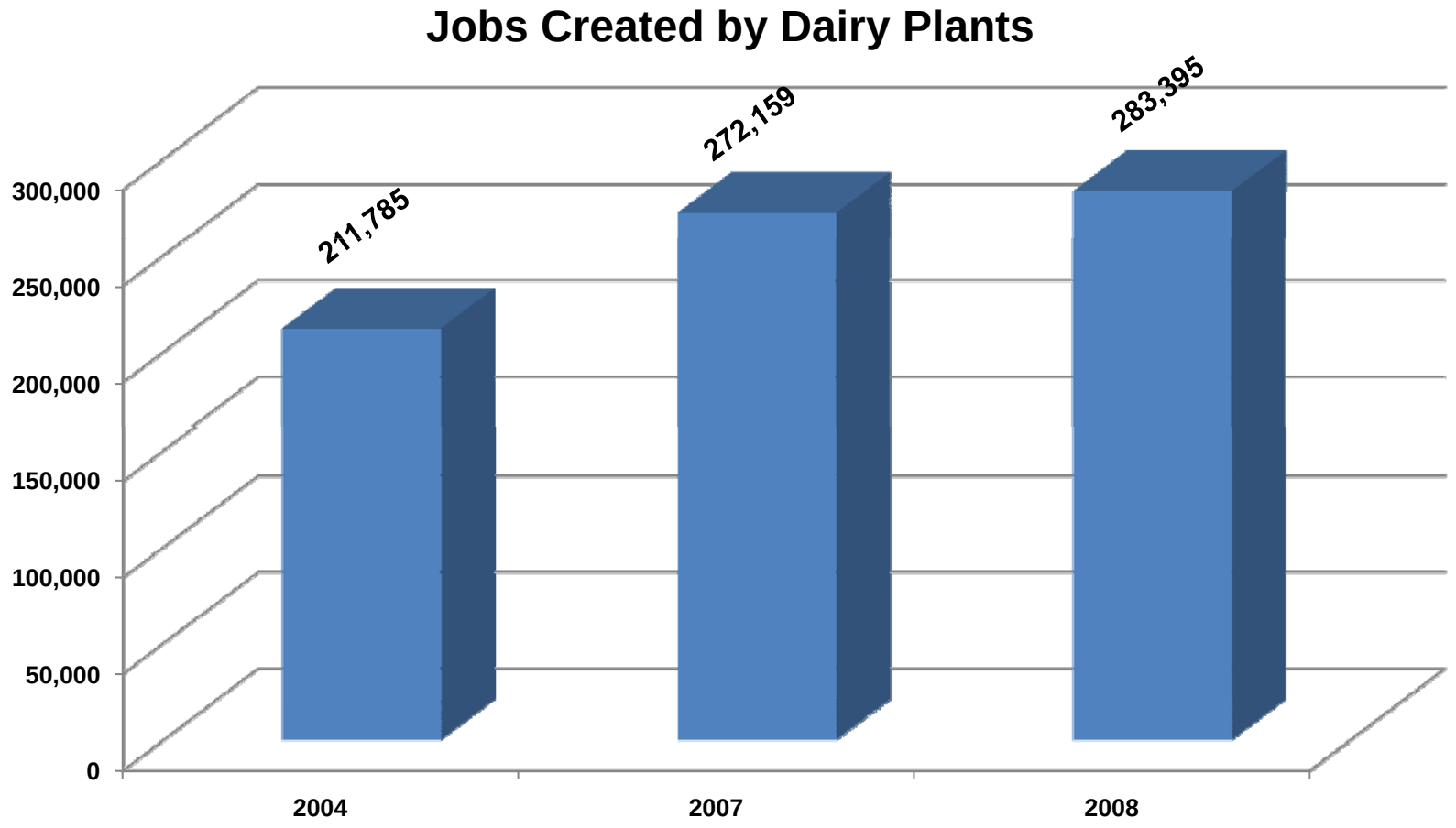

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About 3% of the jobs in the state

# The Wow of the Cow

Prepared for California Milk Advisory Board

**By Jerry Dryer, J/D/G Consulting Inc**

**02 Dec 2009**

# California Dairy Industry's Economic Competitiveness

Informational hearing Jan 13, 2010

## *Future Feed Cost Impacts*

Joel Karlin

Commodity Manager/Market Analyst

Western Milling

# Feed Prices will remain high 1

- For a variety of reasons, feed costs in California will remain high with prices of most ingredients well above levels seen from 1999-2006
- Prices surged due to increased demand as opposed to production shortfalls as seen in past
- Future feed price escalations will be moderated either by reduced demand and/or higher production linked to combination of greater planted area or more likely higher crop yields
- If feed prices remain high, California dairy producers will need higher milk prices to offset increased cost expenditures

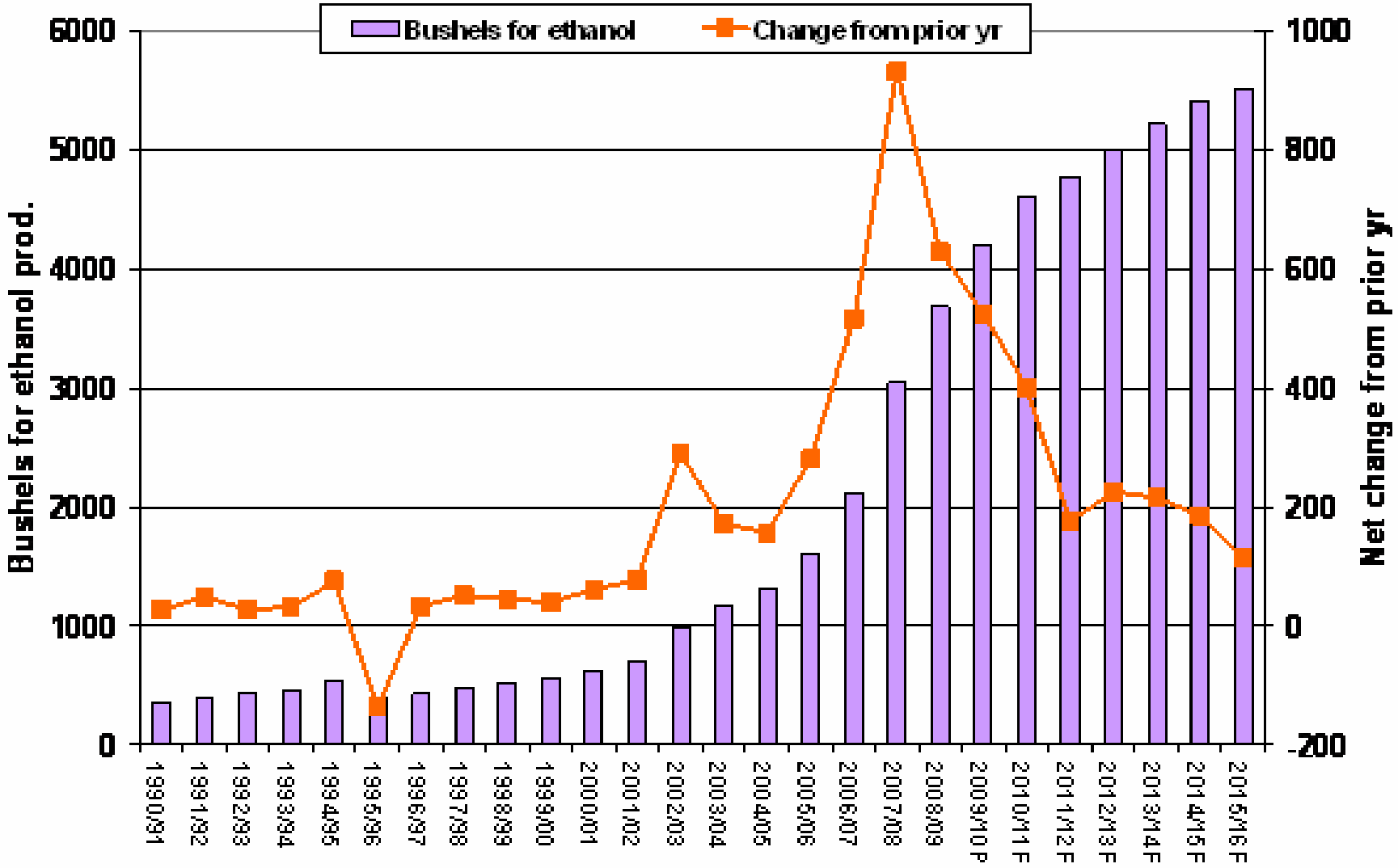
# Feed Prices will remain high 2

- Huge appetite for raw commodities from China as their meat and dairy protein consumption increases
- Limited ability for U.S. to increase acreage given shrinking farm base and land in Conservation Reserve Program
- Yields can increase though individual traits now being desired (high starch, high oil) as opposed to just higher yields
- Increased backlash against some of the genetically modified seeds that have helped fuel yield increases in recent years
- As in U.S., water increasingly a major concern throughout the globe

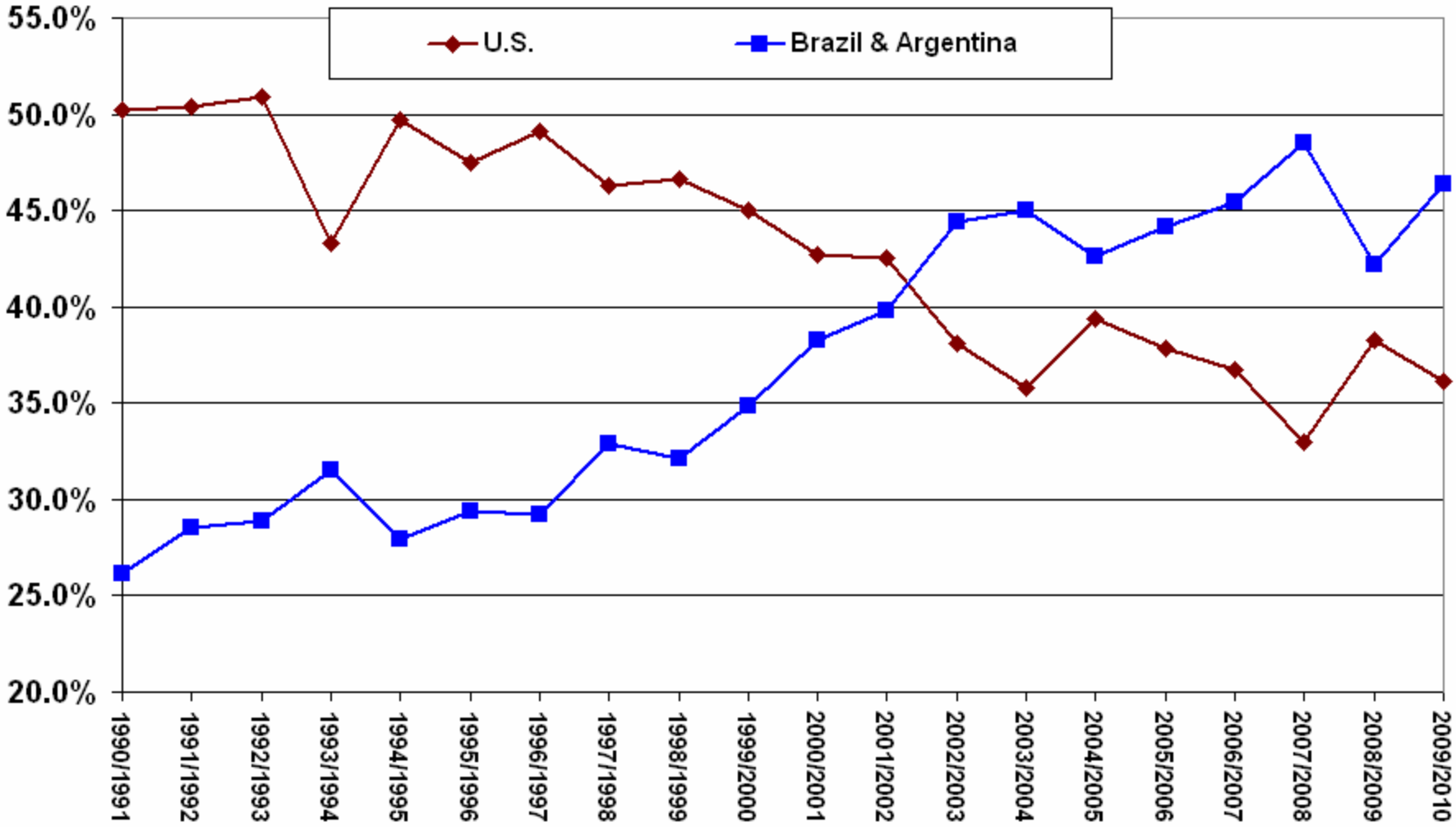
# Signs of hope?

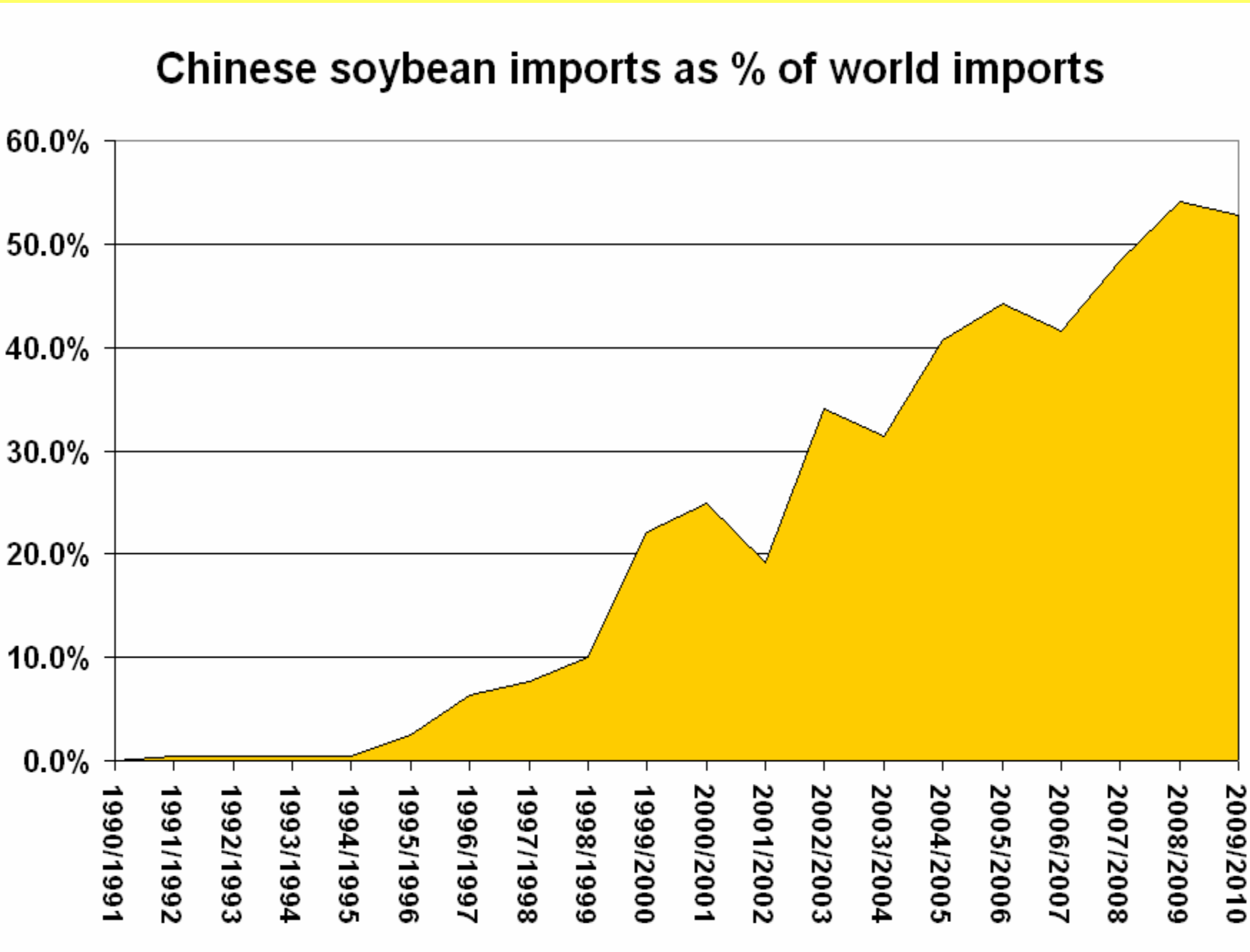
- On backside of huge increased demand for corn in ethanol though what about 20 billion gallons of cellulosic ethanol?
- South America has great potential to be a large provider of bulk agricultural commodities
- Perhaps increased regulatory oversight into commodity speculation that has been blamed for part of run-up in key goods such as grains and crude oil

# Amount of corn used in production of ethanol and net change from prior year in million bushels



# Share of world soybean production, U.S. vs. Argentina and Brazil combined




Chinese soybean imports as % of world imports
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
1990/1991
1991/1992
1992/1993
1993/1994
1994/1995
1995/1996
1996/1997
1997/1998
1998/1999
1999/2000
2000/2001
2001/2002
2002/2003
2003/2004
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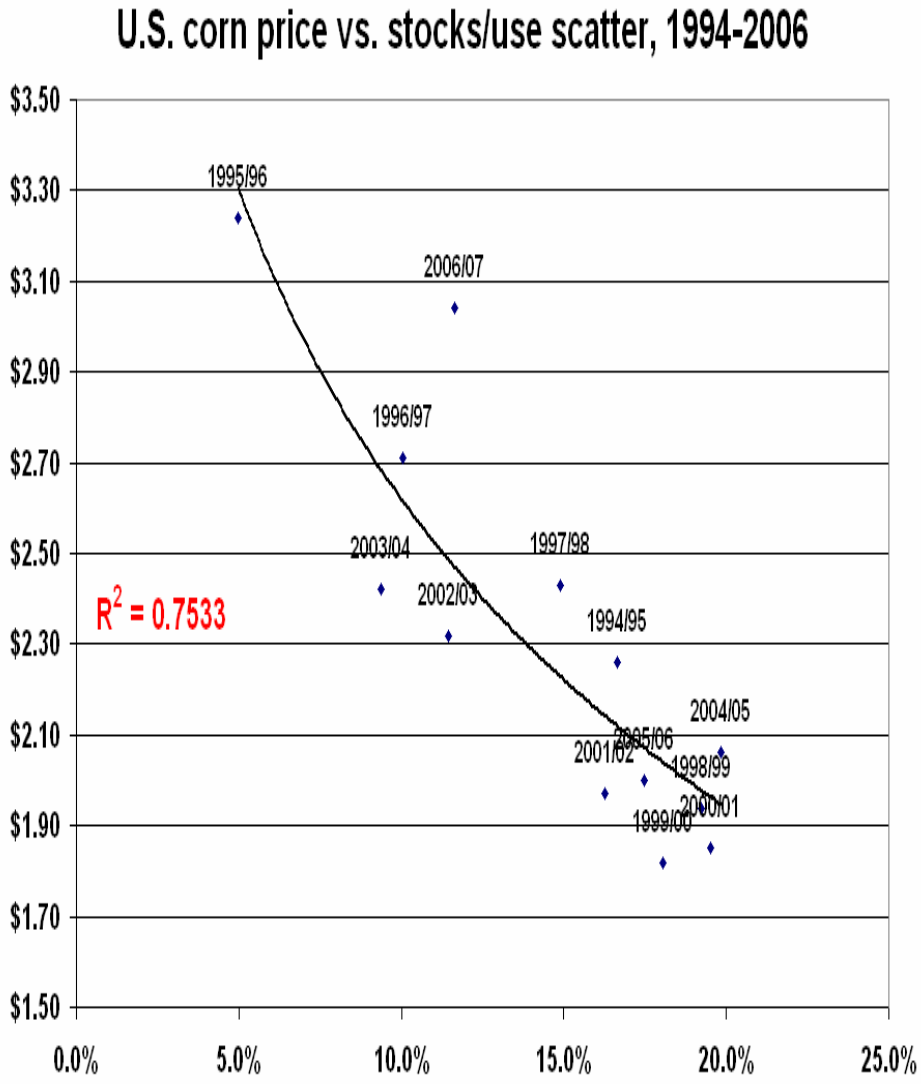
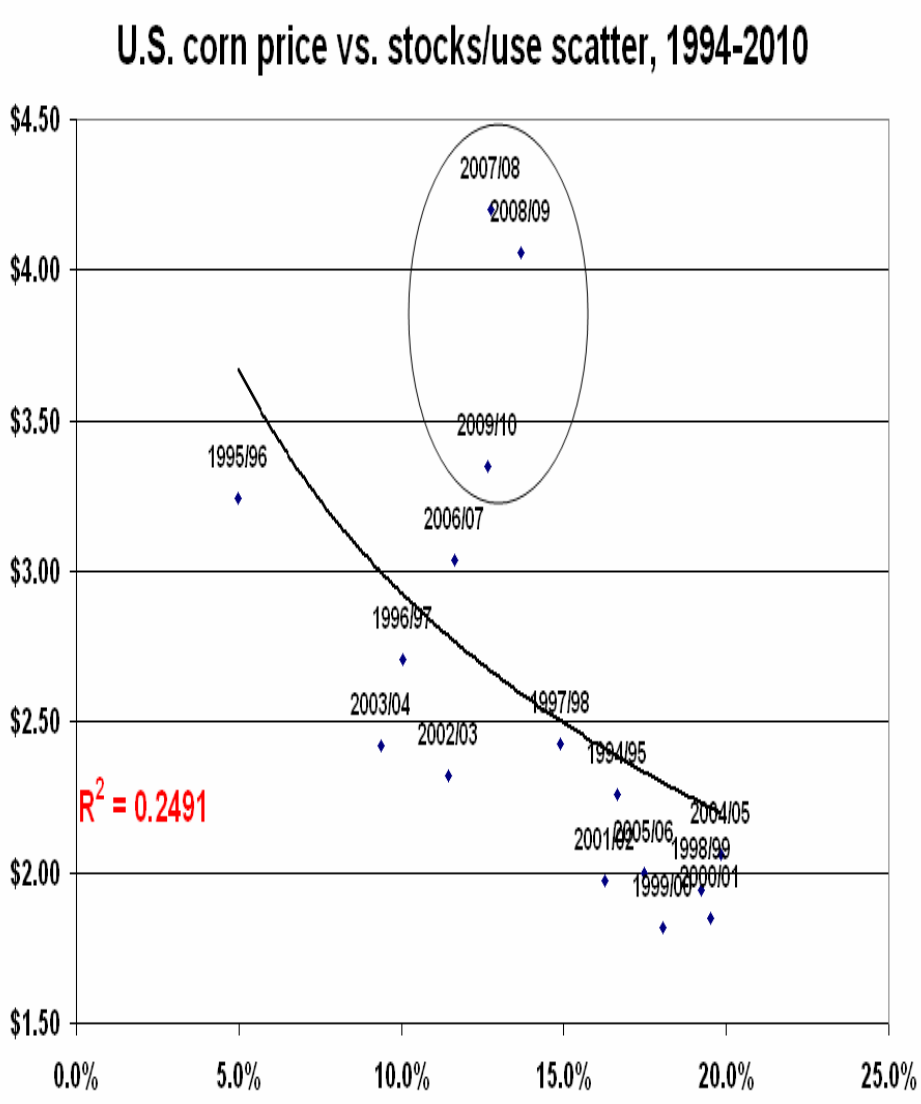
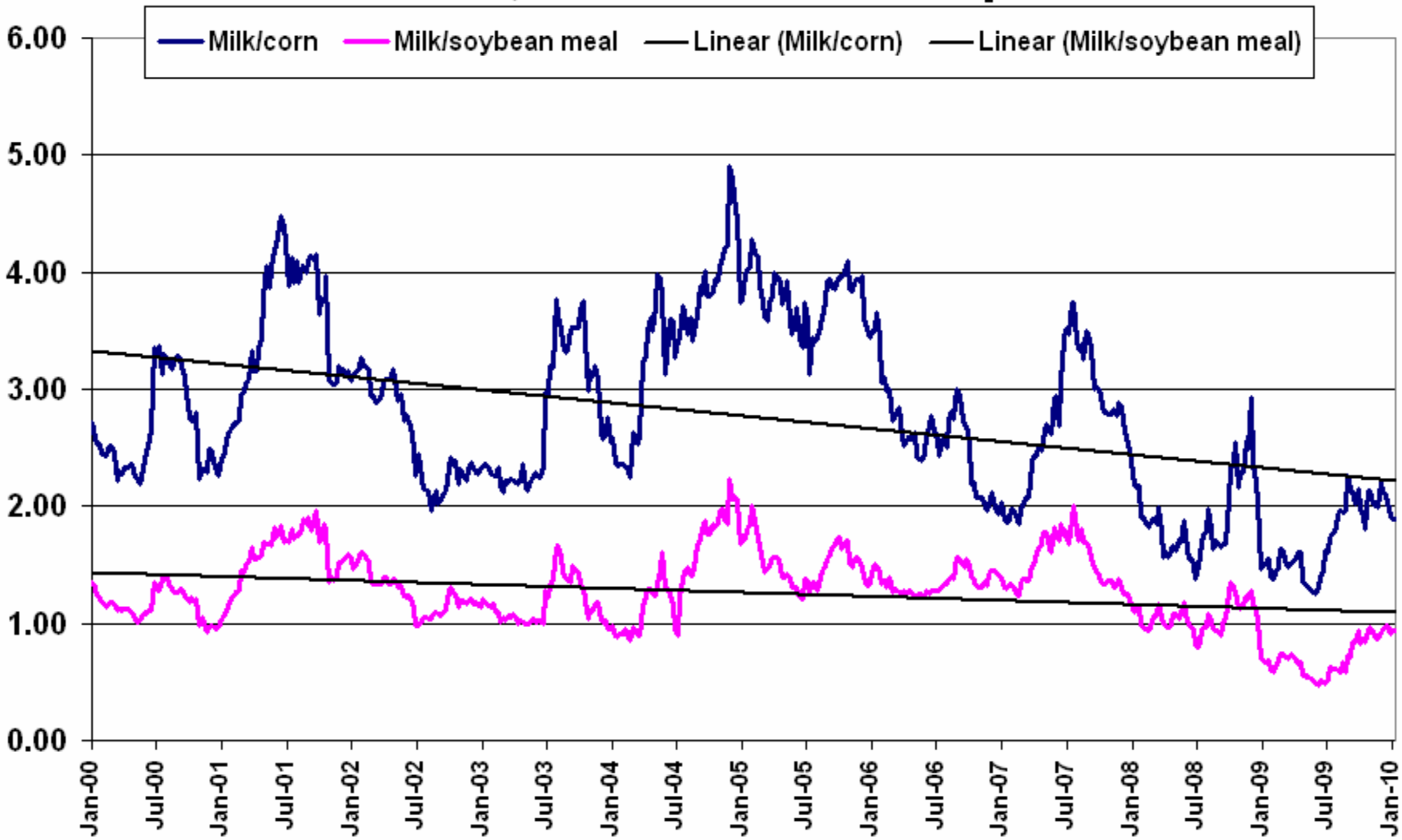
2006/2007
2007/2008
2008/2009
2009/2010

# Corn prices trade at higher levels than prior



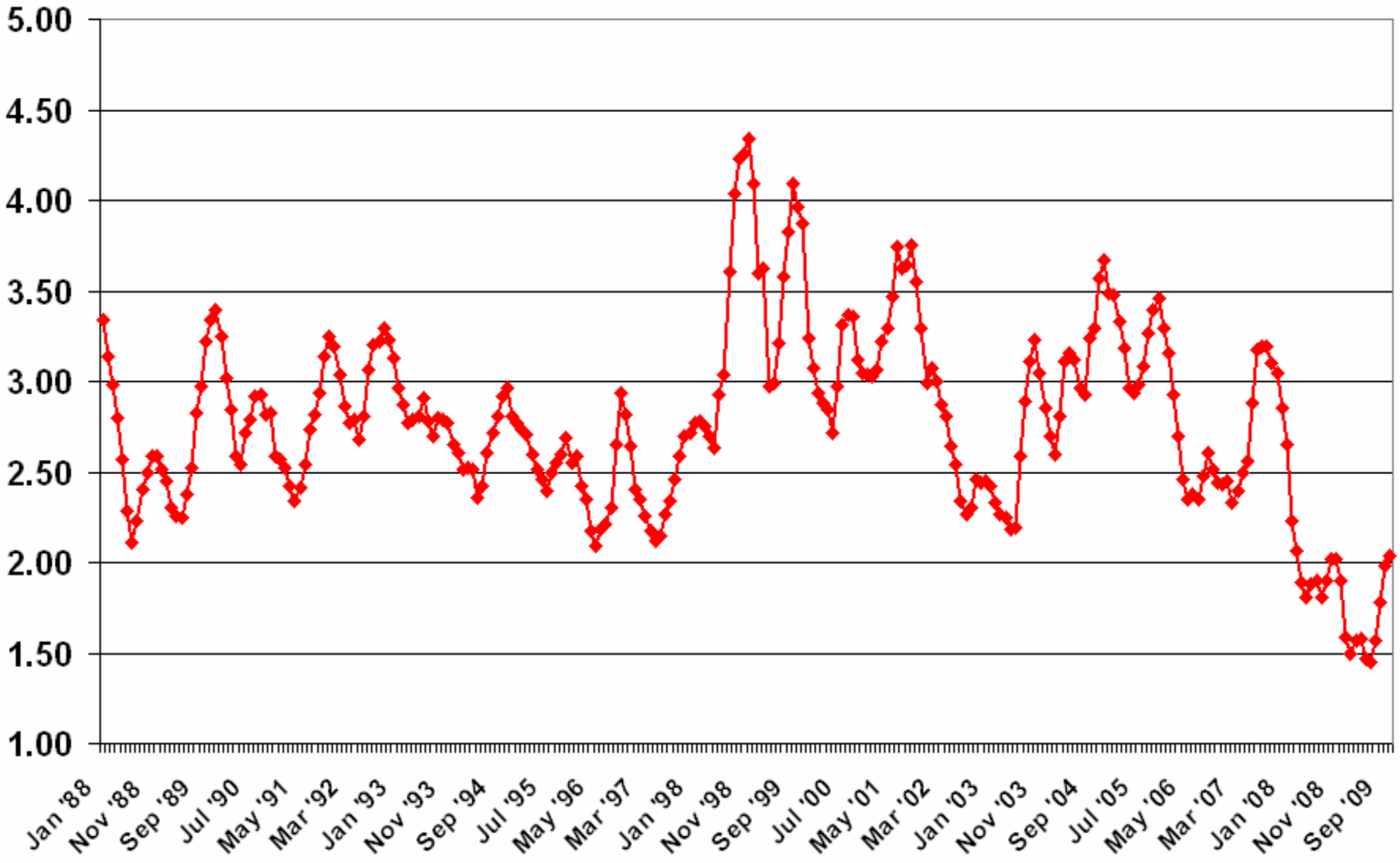



# Milk-corn and milk-soybean meal ratios with trend, all based on 100 pounds



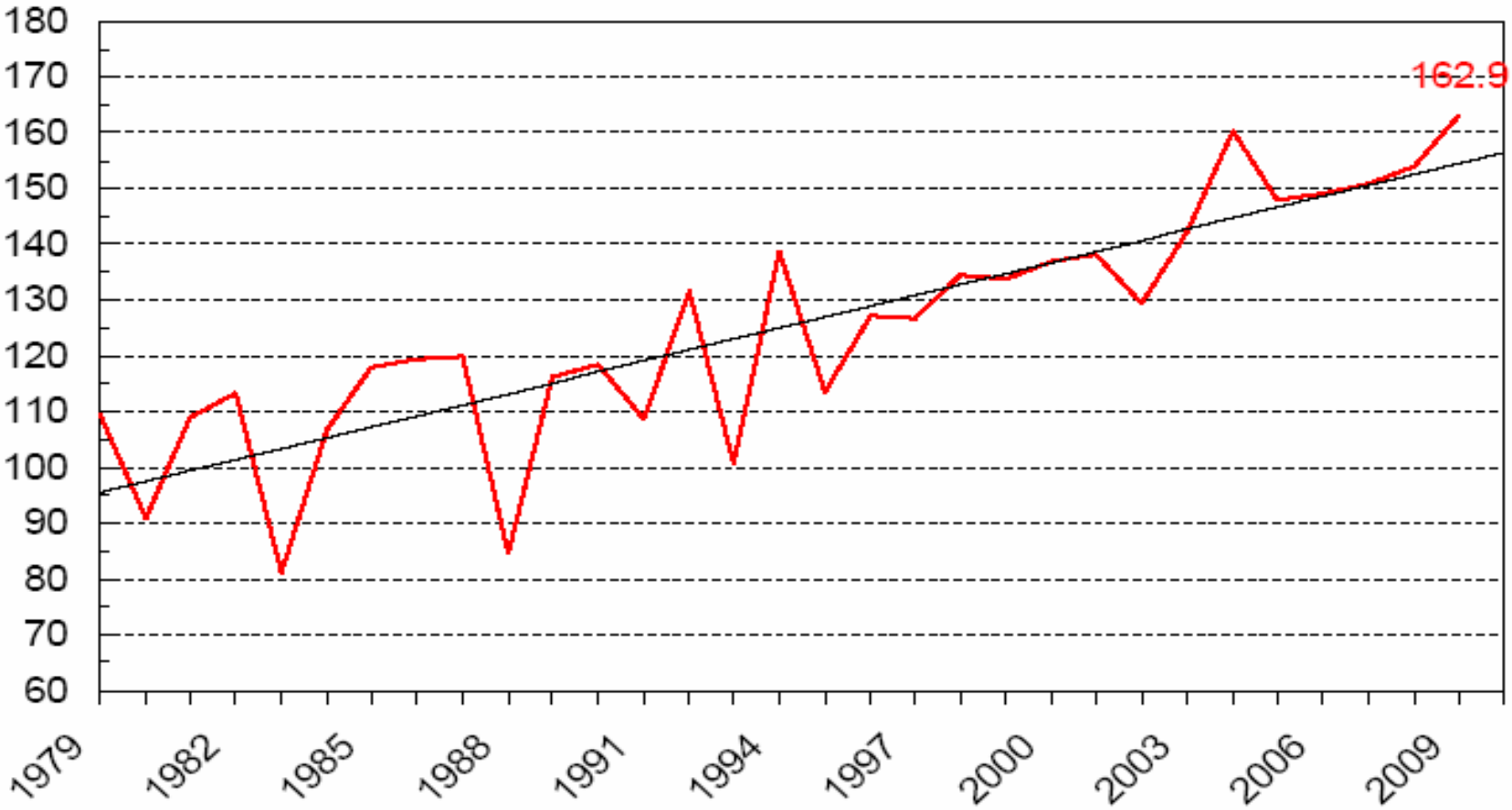
# Milk-feed ratio

( Pounds of a 16% mixed dairy feed that can be purchased from receipts of one pound of whole milk)



# U.S. Corn Yield

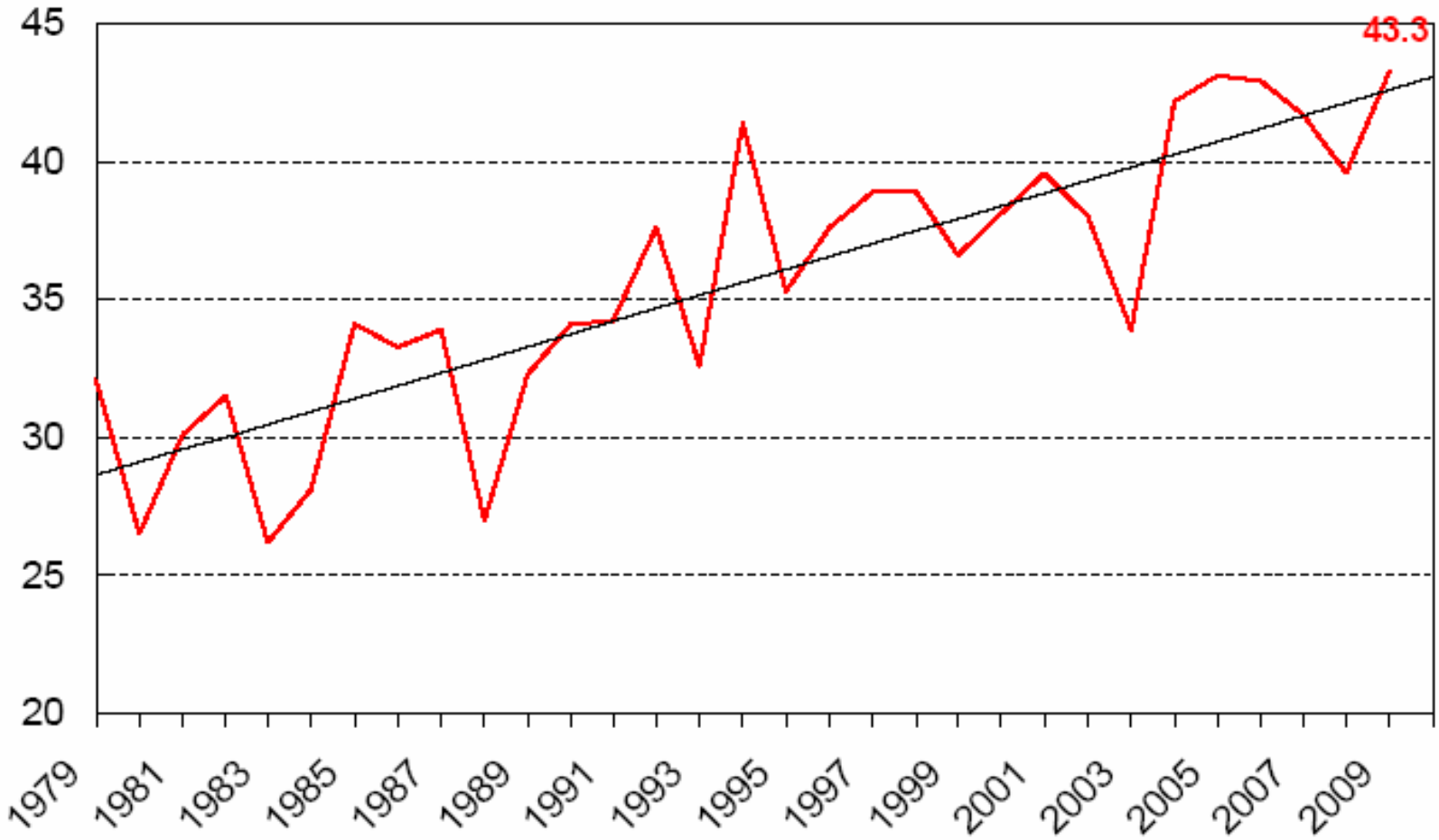
Bushels/Acre




USDA-NASS
11-10-09

# U.S. Soybean Yield

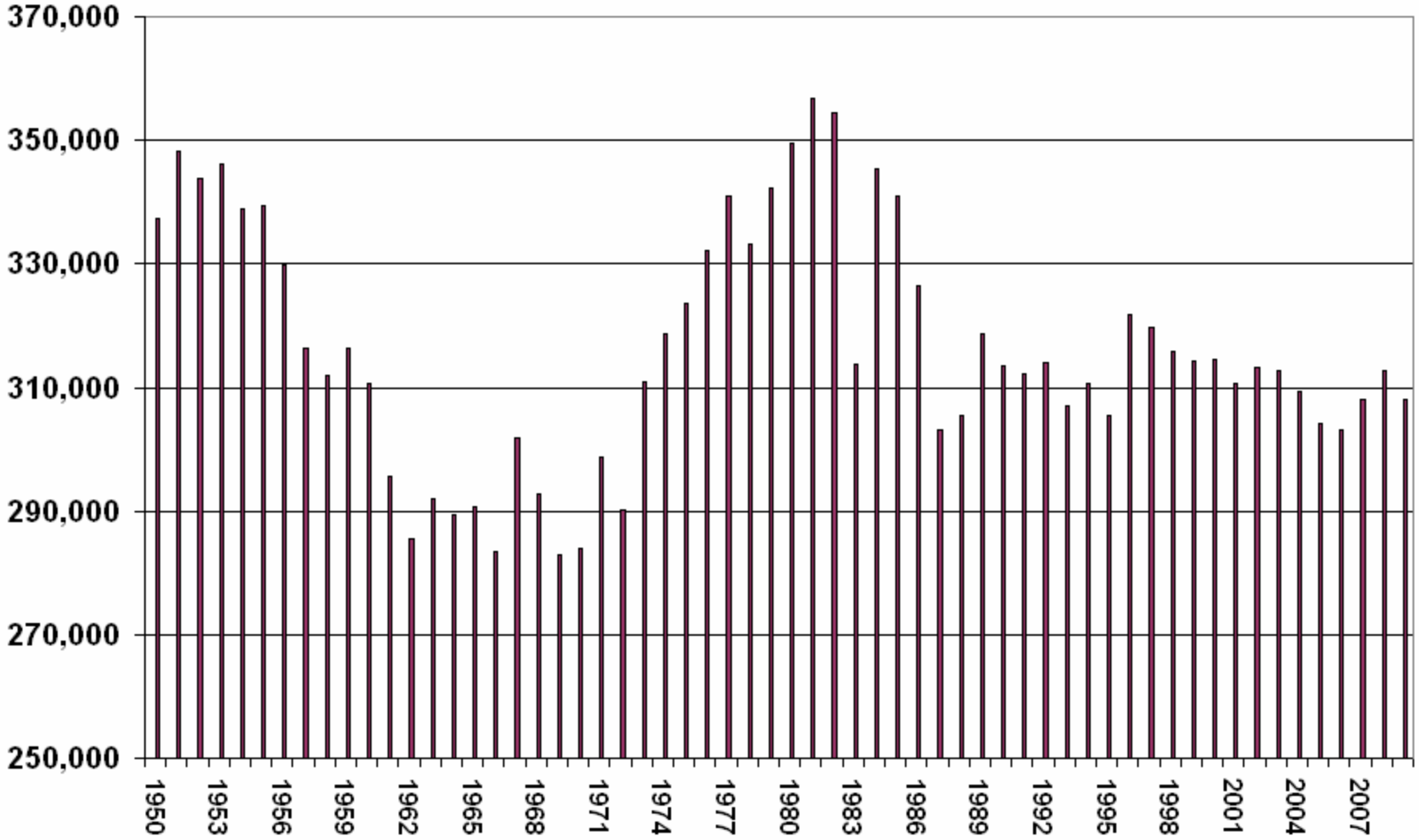
Bushels/Acre

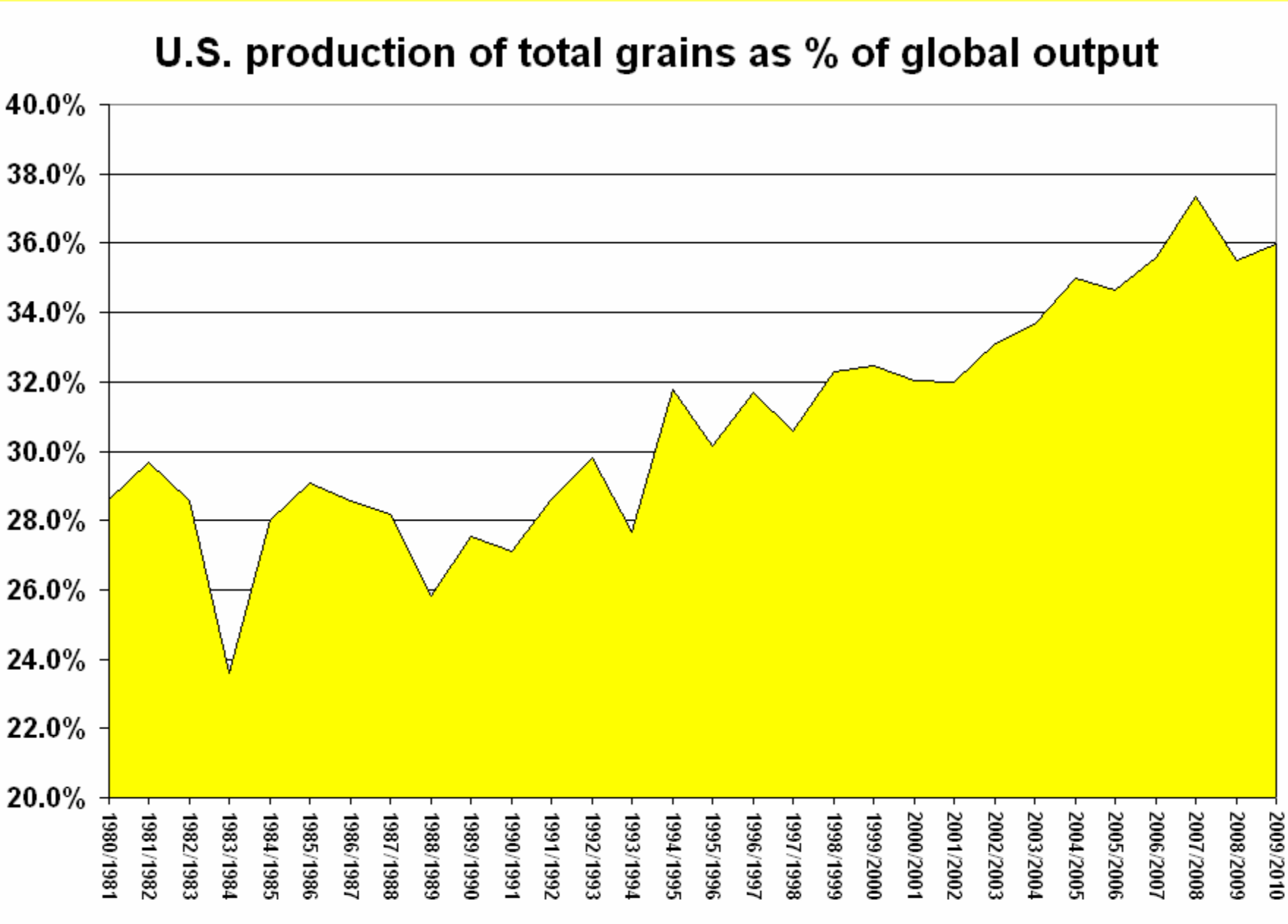



USDA-NASS
11-10-09

# Total acreage of major U.S. crops in 1000's since 1950

(wheat, corn, soybeans, sorghum, oats, barley, cotton, sunflowers, and all hay)




U.S. production of total grains as % of global output
40.0%
38.0%
36.0%
34.0%
32.0%
30.0%
28.0%
26.0%
24.0%
22.0%
20.0%
1980/1981
1981/1982
1982/1983
1983/1984
1984/1985
1985/1986
1986/1987
1987/1988
1988/1989
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1998/1999
1999/2000
2000/2001
2001/2002
2002/2003
2003/2004
2004/2005
2005/2006
2006/2007
2007/2008
2008/2009
2009/2010

# Outlook for future feed prices uncertain

- U.S. and foreign weather influenced by global warming, impact on acreage and yields
- What will dollar do going forward. Will countries shift away from greenback toward a basket of currencies
- U.S. share of world grain production has been increasing at a time when our output has stagnated. World sees U.S. as residual supplier
- What of food vs. fuel debate. Will corn and soybean oil continue to be used for energy
- What is scope for additional production overseas, arable land, yields, migration from rural to urban areas
- Global trade has suffered due to world recession and ag has fared the worst. What is outlook for economic growth going forward and in era of high feed prices will governments continue to enact trade restricting practices that limits production increases and keeps prices inflated

| CA Milk Pool Price Jan 08 to Nov 09 | | | | | |
|---|---|---|---|---|---|
| Month | Year | Month Number | Year Month | Quota CWT | Base CWT |
| Nov | 2009 | 11 | 2009.11 | 14.83 | 13.13 |
| Oct | 2009 | 10 | 2009.10 | 13,61 | 11.91 |
| Sept | 2009 | 9 | 2009.09 | 12.74 | 11.04 |
| Aug | 2009 | 8 | 2009.08 | 12.18 | 10.48 |
| July | 2009 | 7 | 2009.07 | 11.30 | 9.60 |
| June | 2009 | 6 | 2009.06 | 11.32 | 9.62 |
| May | 2009 | 5 | 2009.05 | 11.46 | 9.76 |
| Apr | 2009 | 4 | 2009.04 | 11.57 | 9.87 |
| Mar | 2009 | 3 | 2009.03 | 11.54 | 9.84 |
| Feb | 2009 | 2 | 2009.02 | 11.28 | 9.58 |
| Jan | 2009 | 1 | 2009.01 | 12.10 | 10.40 |
| Dec | 2008 | 12 | 2008.12 | 14.11 | 12.41 |
| Nov | 2008 | 11 | 2008.11 | 15.97 | 14.27 |
| Oct | 2008 | 10 | 2008.10 | 17.14 | 15.44 |
| Sept | 2008 | 9 | 2008.09 | 17.92 | 16.22 |
| Aug | 2008 | 8 | 2008.08 | 18.01 | 16.31 |
| July | 2008 | 7 | 2008.07 | 19.05 | 17.35 |
| June | 2008 | 6 | 2008.06 | 19.12 | 17.42 |
| May | 2008 | 5 | 2008.05 | 18.47 | 16.77 |
| April | 2008 | 4 | 2008.04 | 17.56 | 15.86 |
| March | 2008 | 3 | 2008.03 | 17.71 | 16.01 |
| Feb | 2008 | 2 | 2008.02 | 18.42 | 16.72 |
| Jan | 2008 | 1 | 2008.01 | 19.14 | 17.44 |

| COMMODITY PRICES | CURRENT CLASS PRICES | |
|---|---|---|
| **Date**: 1/5/2010 | **Class 1 Price**: Jan 2010 | **Class 4a Price**: Dec 2009 |
| CME 40 lb. Cheese: $1.4400/lb. | No. California: $18.22/cwt. | Statewide: $14.76/cwt. |
| CME Grade AA Butter: $1.3300/lb. | So. California: $18.49/cwt. | |
| **Western Dry Whey:** (Week Ending) | | **Class 4b Price**: Dec 2009 |
| 1/1/10: $0.40125/lb. | **Class 2 Price**: Jan 2010 | Statewide: $15.04/cwt. |
| | No. California: $13.02/cwt. | |
| **CWAP Nonfat Dry Milk** | So. California: $13.26/cwt. | **Pool Prices**: Nov 2009 |
| Week Ending: 12/25/09 | | Quota: $14.83/cwt. |
| Price: $1.3152/lb. Sales: 5,551,796 lbs. | **Class 3 Price**: Jan 2010 | Base: $13.13/cwt. |
| CCC Sales: 0 lbs. | Statewide: $12.97/cwt. | Overbase: $13.13/cwt. |

# Milk Class for the California Milk Pool

**Class 1**: Any market (fluid) milk product.
**Class 2**: Any manufactured market milk for sour cream, cottage cheese, soft fresh cheese, buttermilk or market cream used for manufactured products.
**Class 3**: All market milk or cream used to manufacture frozen dairy products.
**Class 4a**: All market milk used to manufacture butter, various powder milks, certain products sold outside of the 48 contiguous states, and other products sold outside of the United States.
**Class 4b**: All market milk used to manufacture cheese other than cottage cheese.

THE SACRAMENTO BEE sacbee.com

# Angry dairy farmers struggle with crashing milk prices

**jdowning@sacbee.com**

**Published Monday, Jun. 01, 2009**

Consumers have been enjoying the lowest supermarket prices for milk in years, but dairy farmers are so frustrated that some have urged their colleagues to pour out millions of gallons of their product.

Plans floated by a group of California dairies to dump the milk from 2 million cows last weekend fizzled. But there's growing support in the milk business for strong intervention to calm the industry's increasingly steep cycles of boom and bust.

"Each wreck has gotten more violent," said Geoffrey Vanden Heuvel, a Chino-area dairyman and vice president of the Milk Producers Council, a farmers group.

A run of high prices in 2007 and much of 2008 set up today's crash. For a while, a booming export market guzzled all the milk America's cows could make. Farmers expanded, swelling the national dairy herd to 9.3 million cows and yielding a record 22 billion gallons of milk in 2008.

When the economy faltered, though, so did dairy demand. Overseas markets for milk powder dried up. Pizza chains bought less mozzarella.

U.S. consumers are drinking slightly more milk than a year ago, but it hasn't been enough to offset the slowdown in other products. A record 914 million pounds of cheese filled the nation's cold storage warehouses at the end of April.

The nation's cows, meanwhile, kept making milk. Oversupply drove the California farm price of bottling milk down 35 percent in one month. Since February, California dairies have been losing 50 cents or more on every gallon of milk they produce, according to state figures.

Wholesale milk prices in California are tied more closely to commodity markets than prices elsewhere in the nation, so dairy farmers here were the first hit by the collapse.

The dairy industry is by far the biggest agricultural sector in the state, with farm sales last year of roughly $7 billion.

Milk prices are only a few pennies a gallon lower than in 2006. But the cost of corn and hay for feed – a dairy's biggest expense – has gone up substantially since then, making the

current crash more painful.

"I've seen the ups and downs, but I've never seen it like this," said George Simoes, 57, a second-generation dairy farmer south of Elk Grove.

Some say consolidation in the industry in recent decades has made the market more volatile. Bigger farms tend to have the money and ambition to grow rapidly in good times.

National dairy groups and the federal government have tried to ease the current oversupply. A farmer-funded herd-reduction program launched this month is sending 103,000 dairy cows to slaughter. Most will become hamburger.

Many dairy processors are paying farmers a reduced amount for milk above a set volume. The U.S. Department of Agriculture has been buying large amounts of milk powder at taxpayer-supported prices since December. Last week, the agency said it would subsidize bulk exports of milk powder, butter and cheese.

So far, though, nothing's having much effect on prices.

The crisis is pushing the fractious dairy sector into discussions about ways to avert this sort of glut in the future.

One plan, pushed by Vanden Heuvel's group and others, would fine dairies that grew faster than a set rate – 2 percent or 3 percent annually – and give the proceeds to farms that grew less, or not at all.

"It can knock down the peaks and fill in the valleys" of the price cycle, said Mark Stephenson, a Cornell University dairy market expert.

Average retail prices for milk, in theory, would rise only slightly – a few cents a gallon – he said.

Stephenson said nothing like it has been tried for an ag giant like dairy.

For now, the odds of such a plan being adopted nationally appear low. Congress would likely have to approve it, and experts doubt the industry can reach and hold a consensus long enough to sustain a bill.

Many farmers don't want to handicap their long-term expansion plans, said Leslie Butler, a dairy economist at the University of California, Davis. Others worry that some farmers would cheat the system.

Furthermore, Butler said, California dairies tend to be among the most efficient and best-capitalized in the nation. That means they have a better chance to survive until prices rebound – and less incentive to push for change.

Simoes, who with his son and six employees milks about 500 cows, expects to outlast the downturn. He didn't expand and take on new debt in the last boom. And he has kept his herd small enough that he can grow 85 percent of the alfalfa and corn his cows eat, insulating him from feed-price swings.

Still, Simoes said he'd support a policy to level out the milk market's cycles.

"I'd be 100 percent for something like that," he said. "I don't want to grow."

And he doesn't like the strain yo-yo prices put on the industry.

"We're losing good dairymen, good folks that have been working in this business all their lives," he said.

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*Call The Bee's Jim Downing, (916) 321-1065.*

12/30/2009 8:29:47 PM

# 10 Reasons For Dairy Producers to Say 'Good Riddance' to 2009

by Dairy Today editors

It's not enough just to say that 2009 hurt. It dragged on for far too long, stole jobs and livelihoods, and changed the way many regard their businesses, industries and lives. U.S. dairies were among the hardest hit.

As we step into a new year that beckons a little brighter for dairy, Dairy Today offers 10 reasons to say goodbye to 2009. (Let us know what you would add to this list.)

1. **Poor milk prices.** No matter how you slice it, milk prices fell to levels that hurt nearly every U.S. dairy. Overall, 2009 milk prices collapsed by 50% from 2008's levels. Many producers have told us their milk prices dropped $3/cwt. to $7/cwt. below their cost of production. More specifically:
   - The nation's all-milk price plunged to $11.30/cwt. in June and July, according to USDA. Compare that to the all-milk price of $20.50 in January 2008. California dairy producers averaged only $10.47/cwt. for the first six months of 2009.
   - 2009's average net dairy farm income is expected to fall a whopping 94% from 2008, according to USDA's Economic Research Service.

2. **High-priced feed.** The milk-feed price (MFP) ratio, a widely used indicator of dairy profitability, reached a 35-year low in June 2009. In California, feed costs accounted for $9.82/cwt. in the first quarter of 2009. New Mexico dairies paid $192/ton for hay and $222/ton for corn. The MFP ratio is improving, but costs for corn, cottonseed and other supplies remain high. Although not at their January highs of $4/cow/day, feed costs remain in the range of $3/cow/day.

3. **Lost equity.** Producers lost billions of dollars as a result of the year's poor milk prices and high input costs. Struggling to stay afloat, they burned through their equity and reserves, wiping out what had taken years to build. In some areas, like the Upper Midwest, 2009 losses reached $100/cow/month, says Greg Steele with AgStar Financial Services. It was worse in California's San Joaquin Valley, home to the nation's largest milk shed. There, losses for 2009's first nine months totaled $133/cow/month, says Robert Matlick with the accounting firm of Moore, Stephens, Wurth, Frazer and Torbet. "Do the math on a 2,500-cow herd, and that's a $3 million loss in net worth," Matlick says. "The year has been a financial disaster."

4. **Weakened export market.** After five years of unprecedented growth, dairy exports plunged in early 2009. Billions of pounds of exports – which had helped drive recent dairy profits – vanished. Export shipments through October 2009 were off 46% from 2008, says the U.S. Dairy Export Council (USDEC). The good news is that the budding economic rebound in Asia and consequent upturn in dairy demand are encouraging for 2010, says USDEC's Marc Beck. "The worrisome news is that the sector has a long way to go before anyone could say, yes, we have recovered and left behind the crisis of 2009," he adds.

5. **U.S. and global recession.** Whether from Wall Street's greed or the housing meltdown, the economic downturn took hold and spread, reaching across the U.S. and the world. Unemployment rose, and consumption of many products and services fell. Consumer spending for dairy products dropped off too. Fortunately, China has maintained its dairy import appetite throughout the economic crisis—largely because domestic consumers are flocking more than ever to foreign brands after the nation's melamine scandal in the fall of 2008.

6. **CWT was not enough.** Between the second half of 2008 and the end of 2009, Cooperatives Working Together launched five herd retirement rounds. USDA analyst Rachel J. Patton says the impact of the five herd buyouts wasn't as great as hoped. Sure, they helped boost prices by $1.54/cwt. by removing more than 250,000 cows and lowering production by 5 billion pounds of milk. Yet all that, says Patton, still didn't curtail production enough to make the kind of price-improvement impact that producers needed. Milk production will only decline by less than .5% -- yes, point 5 -- from 2008 to 2009.

**7. Little help from the top.** Many producers have expressed anger and frustration that their co-ops and trade associations did not act quickly or significantly enough to stop the bleeding at the dairy level. USDA did pump $1.3 billion into dairy coffers through the MILC and DELAP programs, and the Holstein Association USA lobbied hard – but unsuccessfully -- to get its supply management program accepted. Several co-ops distributed

patronage checks and payments ahead of schedule. But the efforts didn't quell producers' sense that their leaders provided too few solutions during the worst financial crisis in decades.

8. **No immigration reform.** For 15 years, agriculture has been calling for Congress to address the nation's immigration and guest-worker laws, says Craig Rugelbrugge of the Agriculture Coalition for Immigration Reform. But 2009 passed without needed reform. Instead, the Department of Homeland Security and its Immigration and Customs Enforcement (ICE) division shifted its enforcement focus from employees to employers. 2009 saw a record number of I-9 audits. At least four Vermont dairies received ICE notices in November that they would be audited over their hiring practices. The dairy industry, where immigrant labor makes up half of the workforce, urgently needs the proposed AgJOBS legislation, Rugelbrugge says.

9. **The West loses milk.** Regional shifts in milk production have many wondering who'll hold the dairy powerhouse title in the new decade. A year ago, California and Arizona milk production was running 10 million lb. per day and 315 million lb. *per month* higher (8.5%) than the combined Midwestern production of Michigan, Minnesota and Wisconsin. Since then, 98,000 cows have left the Western sunshine, largely thanks to the Cooperative Working Together program, sub-$10 milk in California, and historically high feed prices. In a surprising twist, California's milk supply dropped so sharply, the state's processors had to go looking for milk to fill their orders.

Meanwhile, the Midwest has added 10,000 cows over the last year (and 19,000 over the past two). Entrepreneurial Midwestern producers have learned how to milk cows in freestalls and parlors, and large foot-print, cross-vent barns are now becoming the facilities of choice. With new investment in large-scale processing plants and re-investment in existing facilities, the Midwest is regaining its competitive advantage in feeding the eastern half of the U.S. And new Texas dairies have turned the Lone Star state into a substantial milk producer.

The unanswered question: Can the West regain its footing?

10. **Cap-and-trade impasse.** Without cap-and-trade legislation in 2009, carbon credits' net to farmers continues to languish at just $3/ton. For Minnesota's Dennis Haubenschild, who has been operating a methane digester on his 900-cow dairy for the past 10 years, that isn't much. His digester captures 90 tons of carbon equivalent per week, or barely $1,000 per month in carbon credits.

But that could change in 2010, if Congress gets serious about cap-and-trade legislation. With passage, carbon credits could triple in value as energy producers try to offset their carbon emissions and bid for carbon credits on the Chicago Climate Exchange.

Other good news: In mid December, USDA and the Innovation Center for U.S. Dairy announced the signing of a memorandum of understanding to jointly work to reduce the dairy industry greenhouse gas (GHG) emissions by 25% by 2020. The agreement allows USDA to target and expedite existing programs such as EQIP and REAP toward greater energy efficiency and GHG reductions. The hope is that more dairy producers will install anaerobic methane digesters on their farms to produce methane gas, which in turn can be used to produce clean electricity.

Currently, fewer than 150 digesters operate on U.S. dairies. The new agreement could lead to more than 1,000 digesters being built.

Contact us at: cmerlo@farmjournal.com.

# Milk Producers Council

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*801 S. MOUNT VERNON AVENUE – BAKERSFIELD, CA 93306 – (661) 833-2549*
*E-mail: mpc@milkproducers.org Website: www.MilkProducers.org*

**DATE: December 31, 2009** **PAGES: 2**
**TO: DIRECTORS & MEMBERS** **FROM: John Kaczor**

**CHICAGO MERCANTILE EXCHANGE**

| | | |
|---|---|---|
| Blocks | *-$.1175* | $1.4500 |
| Barrels | *-$.0100* | $1.4300 |

**Weekly Average**

| | | |
|---|---|---|
| Blocks | *-$.1594* | $1.4800 |
| Barrels | *-$.0044* | $1.4306 |

**CHICAGO AA BUTTER**

| | | |
|---|---|---|
| Weekly Change | *N.C.* | $1.3275 |
| Weekly Average | *+$.0006* | $1.3275 |

**DRY WHEY**

| | | |
|---|---|---|
| **WEST MSTLY AVG** | w/e 12/24/09 | $.4013 |
| **NASS** | w/e 12/26/09 | $.3725 |

**NON-FAT DRY MILK**
**Week Ending 12/25 & 12/26**

| | | |
|---|---|---|
| Calif. Plants | $1.3152 | 5,551,796 |
| NASS Plants | $1.3327 | 8,920,437 |

**CHEESE MARKET COMMENTS:** The Big Spread (the price difference between blocks and barrels on the CME) is now history. It held above $.20 per lb for fifteen days, and the final price movement (blocks moving down) apparently was determined by last week's report that the amount of American cheeses in cold storage was moving in the wrong direction, which was upward. Prices for block cheese have now fallen $.25 per lb in five days of trading. **So far, this is only a "correction," not a collapse.** Corrections have a way of stabilizing the market. Let this one be one of those. The block-barrel price spread reported to NASS for sales made last week finally rose to the $.20 per lb level, lagging three weeks behind the CME. *Dairy Market News* (DMN) reports that cheese production has been higher over the past two weeks, which is normal and expected because of lower fluid milk usage from school closings (yes, milk sales to schools is that important) and lower production of "spoonable" dairy products. USDA's report on production of dairy products in November will be published on Tuesday. A report that cheese production is at least in line with expected seasonal trends would be very welcome.

**BUTTER MARKET COMMENTS:** Prices on the CME have held at $1.3275 for seven straight trading days. Retail sales into the holidays were reported to be good. Production of butter over the short term is reported to be higher because of the extra cream available. DMN continues to report that some butter destined for export is being produced. The price correction for butter on the CME occurred last week, and may have established a foundation for future increases.

**POWDER MARKET COMMENTS:** The powder market is ending the year on a quiet note. Prices for nonfat dry milk reported by the two major reporting agencies again are higher this week, on very low volume. DMN finds that many buyers are holding off on commitments until after the holidays. Current production rates are somewhat higher, with dryers handling the extra milk from bottling plants and others. Inventories are edging upward, but production over the winter months is expected to continue to be well below last year's levels. The news that milk output in Oceania is well below expected levels lends hope for continuing increases in U.S. powder prices and a tightening in the international supply-demand balance.

**WHEY PRODUCTS MARKET COMMENTS:** Usual holiday schedules and activity throughout: dryers are busy handling extra whey from cheese vats, and buyers are being offered temporary discounts to accept shipments now rather than later. DMN reports that negotiations for dry whey contracts for 2010 are well along. The "mostly" price in the central region was steady, and it rose again in the West. Some central region orders continue to be filled from western plants. The market for whey protein concentrate is firm, and prices continue to rise. The "mostly" price for WPC 34 is now double what it was a year ago, at $.89 per lb. Prices for lactose have been rising steadily, parallel with the 2006 pattern, but somewhat below last year's level. Production for WPC and lactose is rising, but inventories are not a concern.

***

**FRED DOUMA'S PRICE PROJECTIONS…**

| | | | | |
|---|---|---|---|---|
| **Jan 2010 Est:** | **Quota cwt. $ 15.60** | **Overbase cwt. $13.90** | **Cls. 4a cwt. $14.72** | **Cls. 4b cwt. $12.78** |
| **Dec 2009 Final:** | **Quota cwt. $ 16.13** | **Overbase cwt. $14.44** | **Cls. 4a cwt. $14.67** | **Cls. 4b cwt. $15.04** |

**RECOVERY IS UNDERWAY, BUT FAR MORE IS NEEDED:** *(By J. Kaczor)* This sorry, sorry, year ends with the powder and whey markets looking strong, the butter market stable, and the cheese market possibly back down to a point where buyers have enough confidence that current price levels fairly reflect current product values. Prices for all four of the basic dairy commodities that generate milk prices are substantially higher than where they were in the first two quarters of the year, and the expected levels of milk production over the next several months should provide a solid foundation for further price increases. But the futures prices on the CME for Class III milk, nonfat dry milk, dry whey, and butter, are virtually flat for the next twelve months. Those prices generate milk prices high enough for very few producers to break even, or even to earn a small profit. But for most, much higher prices are needed. Break even prices barely provide the basis to obtain extended credit, much less providing enough money to repay the enormous debt incurred this year. Far more is needed.

All eyes will be on the milk production numbers for the next two or three months. If the cow numbers edge a bit below where they were in November and stay there for a time, that could itself be sufficient foundation to begin to generate the kind of milk prices needed for profitability. The other things needed to build on that foundation: continuing growth in fluid milk, butter, and cheese consumption and a stronger export market for all dairy commodities, particularly nonfat dry milk. Following are some things that could help make that happen.

- Secretary Vilsack's Advisory Committee, independent of control by the industry's national organizations, making its first priority to seriously address how milk prices can be made more stable and predictable.
- The House Dairy Farmer Caucus opening itself up to input from all segments of the industry – and doing something other than saying (if indeed they have) "wait until 2011 or 2012."
- CWT getting serious about developing a robust program to support the export of U.S. dairy products, which means, at a minimum, shifting funds from herd retirement programs to export assistance programs. This could be the most important practical development, among all considered, needed to support U.S. milk prices.
- National Milk Producers Federation understanding that the necessary foundation for a robust export program is relatively stable milk prices. So far, they haven't seemed to have associated one with the other.
- NMPF's understanding that solutions to industry problems cannot wait until 2012. They understand that 2010 is an election year; what do they think that makes 2012?
- NMPF's understanding that true consensus is best reached by supporting programs that are needed, are workable, and are in the industry's best interests.
- Independent thinking by some of the large and small really great, well run, cooperative members of NMPF.

The above list of "things" that could help this industry recover has National Milk Producers Federation written all over it. That is because NMPF has assumed command and control of all things dairy. Okay, but do they really want to wait until the industry goes through another full cycle of rising and falling prices? What's the true consensus they're seeking on that question?

**LATEST CARES COLUMN POSTED ON OUR WEBSITE:** *(By Rob Vandenheuvel)* The December 2009 Dairy Cares Column has been posted to http://www.milkproducerscouncil.org/cares.htm. This month's column reflects on a year remembered not only for the devastating dairy economy, but a well-funded and unified attack on the way dairies care for their animals. Our industry leadership has responded to this growing threat by creating a national animal welfare standard, called the National Dairy FARM (Farmers Assuring Responsible Management) program. Many more details on the FARM program will be coming out in 2010, so stay tuned.

**REMINDER: STATE WATER BOARD FEES DUE BY JANUARY 8TH:** *(By Rob Vandenheuvel)* This is a reminder that your annual fees to the State Water Resources Control Board (SWRCB) must be paid by January 8th. For those of you interested in cutting that annual fee in half, the California Dairy Quality Assurance Program (CDQAP) has promised to make themselves available in the Spring to help get dairies environmentally certified, which carries with it the benefit of a reduced annual fee to the water board.

**MPC wishes each of you a blessed New Year!**

# Why is Milk Regulated?

Prior to state or federal governments' involvement in milk markets, a small number of large, well-organized processor-handlers controlled milk price negotiations. As a group, producers were not well organized and subject to the whims of these few but influential handlers. In an attempt to elevate their bargaining position, producers banded together to form dairy cooperatives. The main objective of these cooperatives was to gather enough membership to bargain effectively for a desirable milk price.

The success of early dairy cooperatives was limited. Effective price negotiations were impaired by the willingness of non-member dairy producers to sell their milk for less than the price negotiated by the cooperatives. These events persisted across the U.S. While other states were able to seek assistance from the federal government, the power imbalance in California's milk markets was deemed to be a "local" problem that did not need federal assistance. In 1935, the California Legislature addressed the inequities in milk markets by passing legislation that was intended to correct some of the existing market failures and disorderly practices.

Much has changed in the way that the dairy industry operates over the past 72 years. It follows from this notion that a question could be raised regarding the continued need for government intervention in milk markets. That is, does the dairy industry still need government oversight to achieve orderly marketing of dairy products? While much has changed in the dairy industry since 1935, many of the characteristics of milk, marketing of milk and related economic conditions that justified the government's intervention in the 1930's have remained the same. Some of the key characteristics are:

- Milk is a perishable product and must be harvested daily,
- Health regulations are insufficient to assure an adequate supply of milk,
- Production is highest when demand for fluid milk is at a seasonal low, and
- Milk continues to be viewed as a necessary food item, particularly for children.

Additionally, the marketing of milk and dairy products faces many of the same challenges that other commodities face. Without economic regulation, a strong potential exists for volatile and chaotic production and marketing practices. Milk supplies and market demands would be out of balance for extended periods of time. The swings in milk prices between the highs and lows are likely to be much greater without the stability offered by regulation.

The Dairy Marketing and Milk Pooling Branches continue to play major roles in the California dairy industry. The two branches work together to administer a regulated dairy program structure that is fair to all parties involved while helping to provide nutritious dairy products to consumers at fair and reasonable prices.

Dairy Marketing Branch
DMB-SP-101
December 2008

# Milk Pricing in California

California minimum prices paid for milk to producers are determined through a complex system of reference prices and formulas. The intricacies of the system are often not fully understood which leads to confusion even among those whose livelihood relies on this system. The complexities of the pricing system stem from processors paying different prices for milk according to how the milk is used and payments to producers according to a schedule of quota, base and overbase prices. This paper explains how the various class prices are determined and how they are converted to the pool prices from which producer payments are made.

## *Class Prices*

To promote stability in the dairy industry, California's milk marketing program establishes minimum prices that processors must pay for fluid grade or Grade A milk received from dairy farmers based on end product use. These prices are established within defined marketing areas where milk production and marketing practices are similar. Currently, California operates its milk pricing plan with two marketing areas: Northern California and Southern California. Each marketing area has a separate but essentially identical Stabilization and Marketing Plan. Each plan provides formulas for pricing the five classes of milk. In general, the classes and the products they contain are:

| | |
|---|---|
| Class 1: | Milk used in fluid products. |
| Class 2: | Milk used in heavy cream, cottage cheese, yogurt and sterilized products. |
| Class 3: | Milk used in ice cream and other frozen products. |
| Class 4a: | Milk used in butter and dry milk products, such as nonfat dry milk. |
| Class 4b: | Milk used in cheese, other than cottage cheese, and dry whey products. |

Milk consists of three basic components: butterfat (fat), solids–not–fat (SNF) and fluid carrier. Prices are assigned to all three components in the determination of the Class 1 milk price. Only the fat and SNF components are used to set the Class 2, 3, 4a and 4b milk prices. Class 2 and 3 prices are adjusted bimonthly according to their pricing formulas, and Class 1, 4a and 4b prices are adjusted monthly according to their formulas.

## Pricing Procedures for Classes 4a and 4b

The California Class 4a and 4b pricing formulas rely on commercial market prices for butter, nonfat dry milk (NFDM), Cheddar cheese, and dry skim whey. The commodity market prices are adjusted by manufacturing cost allowances and yields specific to California to determine fat and SNF component prices. In general terms, the pricing formula is:

price = (commodity market price – manufacturing cost allowance) * product yield

*Class 4a:*

The Class 4a price is updated monthly to reflect the most current dairy commodity prices used to establish the 4a fat and 4a SNF component prices. The fat portion of this class of manufacturing milk is primarily used to make butter, and therefore, 4a fat prices are derived from and reflect changes in market prices for butter. Likewise, the SNF portion of this class of manufacturing milk is primarily used to make NFDM, and therefore, 4a SNF prices are derived from and reflect changes in NFDM commodity prices. The specific formulas for the 4a component prices are:

Class 4a fat = (butter price – f.o.b. butter price adjuster – butter manufacturing cost allowance) ∗ butter yield factor

where:

- butter price = the bulk butter price at the CME
- f.o.b. butter price adjuster = $0.0309 per pound of butter
- butter manufacturing cost allowance = $0.1560 per pound of butter
- butter yield factor = 1.2 pounds of butter per pound of fat

Class 4a SNF = (NFDM price – NFDM manufacturing cost allowance) ∗ NFDM yield factor

where:

- NFDM price = the California weighted average price for nonfat dry milk.
- NFDM manufacturing cost allowance = $0.1698 per pound of NFDM
- NFDM yield factor = 1.0 pounds of NFDM per pound of SNF

The Chicago Mercantile Exchange (CME) butter price, butter manufacturing cost allowance, f.o.b. butter price adjuster, NFDM price, and NFDM manufacturing cost allowance are on a dollar per pound basis. The yield factors reflect the relationship between the component (fat or SNF) and the product (butter or NFDM, respectively): one pound of fat makes approximately 1.2 pounds of butter and one pound of SNF makes approximately 1.0 pounds of NFDM.

The Department uses the average Grade AA butter price established at the CME as a base price. The butter price is adjusted by the f.o.b. butter price adjuster ($0.0309), which represents the difference in the CME price and the price actually received by California butter processors. The average CME monthly butter price relies on the price

data released between the twenty–sixth day of the previous month through the twenty–fifth day of the current month.

The Department uses the California NFDM price as a base price. The California NFDM price is a weighted average price for Extra Grade and Grade A NFDM sales f.o.b. California manufacturing plants. The figure used in the Class 4a pricing formula is estimated each month using data from sales occurring between the twenty–sixth day of the previous month through the twenty–fifth day of the current month.

California has established 3.5% fat and 8.7% SNF as the component standards for whole milk, abbreviated as "3.5/8.7 milk". To get the standard hundredweight (cwt.) price for Classes 4a and 4b, multiply the fat component price by 3.5 and the SNF component price by 8.7 and add the two resulting numbers. For example:

$$\text{Class 4a price per cwt.} = (3.5 * \text{4a fat price}) + (8.7 * \text{4a SNF price})$$

*Class 4b:*

Following dairy industry standards, the Department uses commodity market block Cheddar cheese, whey butter and dry skim whey prices to establish the 4b component prices. The 4b formula is updated monthly to reflect the most current prices.

The average fat and SNF contents and product yields are the principal factors that determine the price level in the 4b formula. Many cheese plants in California fortify their milk to increase the total solids content in the cheese vat. To reflect the higher solids content above the typical "3.5/8.7 milk", an average test of 3.72% fat and 8.80% SNF, abbreviated as "3.72/8.80 milk" is used. One hundred pounds of "3.72/8.80 milk" yields:

- 10.2 pounds of Cheddar cheese,
- 0.27 pounds of whey butter, and
- 5.8 pounds of dry skim whey.

The Department uses the average CME price for 40 pound blocks of Cheddar cheese to set a base price. The Cheddar cheese price is adjusted by the f.o.b. cheese price adjuster ($0.0252), which represents the difference in the CME price and the price actually received by California Cheddar cheese processors. The value of whey butter is roughly equal to the value of CME Grade AA butter less $0.10 per pound. The value of dry skim whey is roughly equal to the Western dry skim whey price series as reported by USDA in *"Dairy Market News"*. The commodity prices applicable to the Class 4b formula occur between the twenty–sixth day of the previous month through the twenty–fifth day of the current month.

The 4b price calculation consists of four steps. The first step determines the Cheddar cheese, whey butter and dry skim whey price per cwt. The second and third steps identify the 4b fat price and the 4b SNF price. The final step calculates the per cwt. price of Class 4b for "3.5/8.7 milk".

***Step 1:***

Cheese price per cwt. =
(Cheddar cheese price – f.o.b. cheese price adjuster – cheese manufacturing cost allowance) ∗ (cheese yield) +
(Butter price – $0.10 – butter manufacturing cost allowance) ∗ whey butter yield +
whey factor.

where:

- Cheddar cheese price = the 40 pound block CME Cheddar price
- f.o.b. cheese price adjuster = $0.0252 per pound of cheese
- cheese manufacturing cost allowance = $0.1988 per pound of cheese
- cheese yield factor = 10.2 lbs. of cheese per cwt. of milk
- butter price = the bulk butter price at the CME
- butter manufacturing cost allowance = $0.156 per pound of butter
- butter yield factor = 0.27 lbs. of butter per cwt. of milk
- whey factor = $0.25

***Step 2:***

Fat in Class 4b milk must be assigned a value. The current formula requires that 4b fat be valued at the same level as the 4a fat, i.e.

$$\text{Class 4b fat price} = \text{Class 4a fat price}$$

***Step 3***:

SNF in Class 4b milk also must be assigned a value which is accomplished by subtracting the value of fat from the cheese price calculated in Step 1, i.e.,

$$\text{Class 4b SNF} = \frac{\text{Cheese price per cwt.} - (3.72 * \text{Class 4b fat})}{8.80}$$

***Step 4:***

Convert component prices to standardized “3.5/8.7 milk” price per cwt.

$$\text{Class 4b milk per cwt.} = (3.5 * \text{Class 4b fat}) + (8.7 * \text{Class 4b SNF})$$

## Pricing Procedures for Classes 2 and 3

The Class 2 and Class 3 prices are determined by simply adding a set differential to the Class 4a component prices. The differentials are intended to impart credit to the producer for a value–added product and are established at levels that do not provide any economic incentive for manufacturers outside the state to ship identical products into California or for manufacturers within California to reconstitute products from finished dairy products, such as butter and NFDM.

Class 2 and Class 3 prices are established on a bi–monthly basis prior to the beginning of each "even" month. For example, the February–March pricing period for Class 2 and Class 3 milk uses the average Class 4a component prices for December and January. The general formulas for each component within class are:

Class 2 fat = Average Class 4a fat

Class 2 SNF = Average Class 4a SNF + ($0.0490 for Northern California) or ($0.0757 for Southern California)

Class 3 fat = Average Class 4a fat

Class 3 SNF = Average Class 4a SNF + ($0.0433 Statewide)

## Pricing Procedures for Class 1

Determining the price for fluid milk products involves several steps. The Class 1 fat price for the fluid milk pricing formula is set directly and uses the CME butter price with an adjustment. The SNF and carrier prices are calculated as residuals. They rely on a basic price mover called the commodity reference price (CRP) which is based off the higher of the CME price for Cheddar cheese or the CME Grade AA butter and California weighted average price for nonfat dry milk. The Class 1 fat price is subtracted from the CRP and the remaining residual value is allocated to SNF and fluid carrier. Once the component prices have been assigned to fat, SNF, and fluid carrier portions of milk, the implied value of raw milk can be calculated.

***Step 1:***

Price of Class 1 fat = (CME butter – $0.1315) x 1.2

***Step 2:***

Commodity Reference Price is the **higher of**:

(CME Cheddar) x 9.8 + (CME AA butter – $0.10) x 0.27
+ (Dry skim whey) x 5.8 - $0.85

**OR**

(CME butter x 1.2) x 3.5 + (CA NFDM x 0.99) x 8.7

***Step 3:***

$$\text{Price of Class 1 SNF} = \frac{(((\text{CRP} - \$0.203) - (\text{Class 1 fat price} \times 3.5)) \times 0.76)}{8.7}$$

***Step 4:***

$$\text{Price of Class 1 carrier} = \frac{(((\text{CRP} - \$0.203) - (\text{Class 1 fat price} \times 3.5)) \times 0.24)}{87.8}$$

| |
|---|
| For Northern California, subtract an additional $0.0031 from the per pound price of fluid carrier. |

***Step 5:***

Class 1 price per 100 pounds of milk (@3.5% fat and 8.7% SNF)

= (3.5 x Class 1 fat) + (8.7 x Class 1 SNF) + (87.8 x Class 1 carrier)

# *Pool Prices*

Payments to California milk producers are determined through a system of quota and non–quota pool prices. The Milk Pooling Branch at the Department is responsible for converting the five separate class prices to the pool prices. Pool prices for fat and SNF are calculated separately. The following hypothetical examples illustrate the procedure used.

## Fat Pool Prices

The Milk Pooling Branch receives production reports from all processing plants in the state, which detail how much milk each plant received and how it was used it. For example, say that these reports show 1,000,000 pounds of fat were produced in January with the allocating among the five classes and class prices as shown in the table.

Multiplying the fat prices in each class by the individual class uses provides an indication of the revenue generated per class. The class revenues are summed to give the revenue attributable to uses of fat. Dividing the total fat revenue by the total fat production gives an average fat price weighted by the different class uses:

**Determination of Quota and non-Quota Fat Price**

| Class | Fat Pounds | Fat Prices | Fat Revenues |
|---|---|---|---|
| 1 | 80,000 | $1.39 | $111,200 |
| 2 | 50,000 | $1.34 | $67,000 |
| 3 | 60,000 | $1.34 | $80,400 |
| 4a | 350,000 | $1.27 | $444,500 |
| 4b | 460,000 | $1.27 | $584,200 |
| Total/Average | 1,000,000 | $1.29 | $1,287,300 |

$$= \frac{\$1,287,300.00}{1,000,000} = \$1.29 \text{ per pound fat}$$

## SNF Pool Prices

The process to determine the pool prices for SNF is slightly more involved than that described for fat pool prices. This is the result of two complicating factors:

1. Currently there is a $1.70 spread between quota and non–quota milk at 3.5% and 8.7% test. The spread is maintained by setting quota and non–quota SNF prices equal initially and then the price of quota SNF is increased to $0.195 per pound greater than non–quota SNF ($1.70 divided by 8.7 equals $0.195).

2. In the Class 1 formula fluid carrier must be assigned a value but a pool price for the fluid carrier does not exist. Consequently, the revenue generated by the fluid carrier is transferred to the SNF pool.

As with the fat pool pricing procedure, the Milk Pooling Branch receives reports from manufacturing plants detailing milk receipts and usage. For example, say that these reports show 1,000,000 pounds of SNF were produced in January with the allocating among the five classes and class prices as shown in the table. Also shown in the table is 2,000,000 pounds of fluid carrier with a price of $0.02 per pound.

Additionally, the $1.70 spread between the quota and non–quota price can be instituted. This is accomplished by removing $0.195 for each pound of SNF quota from the SNF revenue pool which requires that the Milk Pooling Branch be knowledgeable of the number of pounds of SNF quota held by dairyman in the state. Assume that of the 1,000,000 pounds of SNF produced 250,000 pounds were covered by quota.

Multiplying the SNF prices in each class by the individual class uses provides an indication of the revenue generated. The class revenues are summed to give the revenue attributable to uses of SNF, less the $0.195 for each pound of SNF quota. Dividing the total SNF adjusted revenue by the total SNF production gives an average SNF price weighted by the different class uses. To summarize:

**Determination of non-Quota SNF Price**

| Class | SNF Pounds | SNF Prices | SNF Revenues |
|---|---|---|---|
| 1 | 160,000 | $0.74 | $118,400 |
| 2 | 40,000 | $0.78 | $31,200 |
| 3 | 30,000 | $0.78 | $23,400 |
| 4a | 270,000 | $0.71 | $191,700 |
| 4b | 500,000 | $0.78 | $390,000 |
| Fluid | 2,000,000 | $0.02 | $40,000 |
| Quota | 250,000 | -$0.195 | -$48,750 |
| Total/Average | 1,000,000 | $0.75 | $754,700 |

$$= \frac{\$745,950}{1,000,000} = \$0.75 \text{ per pound non-quota SNF}$$

For this exercise, the quota SNF price would be $0.75 + $0.195 = $0.94 per pound quota SNF.

To convert per pound prices to prices per cwt., multiply the fat price by 3.5 and the SNF price by 8.7 and sum the revenues. In this example the quota and non–quota prices are:

| | | |
|---|---|---|
| Quota price | = | [(3.5*$0.00) + (8.7*$0.00)] |
| | = | [$4.51 + $8.19] |
| | = | $12.70 |
| Non-Quota price | = | [(3.5*$0.00) + (8.7*$0.00)] |
| | = | [$4.51 + $6.49] |
| | = | $11.00 |

The actual computations of the pool prices may be modified further by regional quota adjusters (RQAs), plant to plant transportation credits, ranch to plant transportation allowances, and other adjustments that, for the purposes of brevity, are not addressed here.

The topics covered in this briefing paper should help to understand the calculations of and the differences between class prices and pool prices for milk in California.

# History of the California Milk Pooling Program

Background and Justification

The milk marketing laws passed in the 1930s, especially the Young Act of 1935, helped to stabilize the economy of the California dairy industry. These laws established a means of regulating the minimum price paid for market grade milk (Grade A milk) by processors to producers. Basically, producers received at least the minimum price announced by the California Department of Food and Agriculture (Department) according to how their milk was used. Class 1 utilization, which was used for beverage (fluid) products, commanded the highest price. Progressively lower prices applied to milk devoted to the manufacturing classes of milk. (For more details on milk pricing, classes of milk, and product categorization, refer to “Milk Pricing in California”, DMB–SP–101.)

However, establishing minimum prices did not address the concerns of equitable prices among producers for compositionally similar milk. Plants processed an array of products, and consequently, class utilization among plants varied. Some plants processed 100 percent of the milk received as Class 1 products, but other plants processed little or no milk as Class 1 products. These groups of plants represented the extremes, and it was more typical to find plants with moderate Class 1 utilizations. Nonetheless, a producer shipping to a plant with all Class 1 utilization fared well financially while a neighboring producer selling milk of like quality to a plant with low Class 1 utilization typically received a considerably lower price.

In the late 1950s and early 1960s, disparate prices among producers in the same region were a source of frustration and led to disorderly marketing practices. Clearly, a producer's financial welfare was impacted by his or her ability to secure a contract with a handler with high Class 1 utilization. This placed producers in a weak position to bargain with handlers, and many would agree to excessive haul charges or make other (sometimes illegal) concessions to obtain or retain the coveted sales to Class 1 handlers. The lack of long–term commitments between producer and handler added to the instability in the milk market. Most contracts were subject to cancellation by either party upon thirty-days' notice.

It was difficult for producers to obtain new contracts, especially with plants that maintained high Class 1 utilization year round. Not surprisingly, the loss of a contract to an individual producer was a severe economic blow. Producers often accepted contracts with handlers that gave the handler the permission to divert milk shipments to manufacturing facilities.

Prior to pooling provisions, contracts were required for all milk sale transactions between producers and handlers. Some of the contracts were referred to as “one pound” contracts because any milk received in excess of one pound was designated as surplus milk and was not covered under the terms of the contract. As such, handlers engaged in these types of contracts were authorized to divert a producer’s milk to another plant, and the hauling costs were charged to the producer.

Besides receiving a significantly lower milk price, producers were also expected to pay for the additional cost of hauling their milk to the designated plant. An alternative was to locate another fluid milk plant that was accepting milk but this did not eliminate the high cost of shipping the milk from the dairy to a distant plant. The uncertainty of obtaining or continuing favorable contracts restricted many producers' future planning horizon and financing capability.

During the early and mid-1960s, several events combined to place even more pressure on producers. Some dairy processors began to alter the traditional framework of the milk production sector by acquiring herds and supplying their own processing facilities with milk, thereby reducing the number and volume of Class 1 contracts available to existing producers. Furthermore, a federal court ruled that the federal government could not be required to pay minimum resale prices on milk purchased by military enclaves. This ruling gave handlers the freedom to bid on government contracts at prices that were often less than the Class 1 price. Producers bore the economic brunt of this competitive bidding as some producers received less than the manufacturing milk price for milk sold as Class 1 to the military.

Producers realized the necessity of developing a system that would bring relief to their problems and provide a more equitable allocation of the revenues generated from Class 1 milk sales. The market-wide pooling systems in some federal orders were viewed as a possible basis for such a system. Producers and producer organizations concluded, however, that such a system could be brought about only through legislation and introduced a number of milk pooling bills into the California Legislature. These early efforts to establish a revenue distribution program were not successful because the producer and processor communities could not agree on the basic concepts of the program.

In 1967, Assemblyman Joseph A. Gonsalves introduced AB 910. After a series of amendments, the Legislature passed the Gonsalves Milk Pooling Act (Act), and it became law on November 8, 1967. This Act required the Department to formulate a Pooling Plan and submit it in referendum to all eligible market milk producers for their approval or disapproval.

The Act was quite specific regarding certain permissive and restrictive provisions that the Plan must contain. For example, the Act required the Department to appoint market milk producers and representatives of producers to serve as members of a formulation committee. These members were to represent all geographical areas to be included in the proposed Plan. The function of the committee was to advise and assist the Department in the development of a proposed Pooling Plan, which was to be presented for public hearing within 90 days of the effective date of the Act.

After considerable research, revisions, and testing, the committee and the Department prepared a draft of the proposed Pooling Plan that went to public hearings held in several locations throughout the State in February 1968. Testimony indicated the proposed Plan needed refinement, and the hearing was continued until May 1968. An amended proposal was submitted to producers for referendum on September 10, 1968. The referendum was officially closed and tallied on November 8, 1968. Producers gave overwhelming assent to the Plan.

## Production Base and Pool Quota

During the preliminary stages of formulating a plan, basic milk production data were gathered to establish two benchmarks for each eligible producer — a production base and pool quota. A producer's history was based on his or her production and Class 1 usage during July 1966 through December 1966 or the 1967 calendar year. The producer was permitted to select the more favorable period. Producers located South and East of San Gorgonio Pass, a region principally covering the Imperial Valley, had the special option of having their pooling history computed on the basis of four times the production and usage for December 1966, and January and February 1967. Another option given to all producers in establishing their production base was to choose between their prevailing contract amounts during the selected base period and actual production. (Any production in excess of a producer’s base and pool quota would constitute overbase production.)

Production base and pool quota were established for each producer by milk fat and solids-not-fat (SNF) on an average daily basis. The production base was computed by dividing the total production during the base period by the number of days market milk was produced. Pool quota was established as 110 percent of the Class 1 utilization accounted for during the base period divided by the number of days in that period the producer actually had Class 1 utilization. The amount by which the production base exceeded pool quota was designated as daily base. A pooling certificate was issued to each eligible producer which carried the producer's identifying number, the production base and pool quota amounts, and the effective date of allocation.

The Act and Plan provided that a producer who purchased or otherwise acquired all or a portion of another producer's business prior to the operative date of the Pooling Plan would gain that same proportion of the producer's production base and pool quota. There were many such transfers between the beginning of the first base period and the effective date of the Plan.

## Accounting Procedure

Because of the complexity of the accounting procedure of the pooling system and the interrelationships of handler activities, the Department determined that a computerized data processing system was the most feasible and sensible approach to implementing the Pooling Plan. The historic production data, procedural calculations and systems procedures were developed with assistance from a consulting firm, and the Department contracted with the State Board of Equalization to perform monthly data processing services.[1] The Milk Pooling Plan became operational on July 1, 1969.

The pool area affected by the Plan initially consisted of all marketing areas of the state except Inyo-Mono, Northern Sierra, and Siskiyou. The producers of Northern Sierra and Siskiyou marketing areas later petitioned to be admitted to the pool. After a public hearing, Northern Sierra was brought into the pool area effective December l, 1970. Siskiyou was included in the pool area effective October l, 1973. Inyo-Mono was included in the pool area effective September 1, 1976 when it became part of the Southern California marketing area.

With the institution of the Pooling Plan, producers are no longer paid directly in accordance with the class utilization of the contracting handler. Instead, producers are paid on the basis of his or her allocated quota, base, and overbase at prices which reflect the poolwide utilization of all classes. The monthly quota and base quantities are computed for each producer to the extent he or she produced these quantities. The maximum monthly quantity of quota is determined by the current quota allocation. The maximum monthly quantity of base is the difference between production base and quota. Any production in excess of the total of these two figures constitutes overbase production.

Pool Prices and Pool Obligations

Each handler submits to the Pooling Branch a monthly report detailing the amounts of milk purchased from producers and other handlers and the amounts used in the various classes. The total value of each class is determined by multiplying the class utilization by its appropriate class price for each handler in the pool. Summing these respective amounts across all pool handlers gives the value of the pool.

The Department prepares and mails a statement for each handler on or before the 28th of each month showing the gross amount the handler owes each producer. The statement itemizes the handler's class utilization and the gross amount the handler is directed to pay producers for their quota, base, and overbase milk. The statement does not include authorized deductions the handler may claim. One such deduction is the hauling charge. (The hauling charge reflects the distance from the producer's ranch to the plant first receiving the milk.)

If the total value of the milk used by the handler is greater than the amount owed the producers for their milk, the handler pays what is owed the producers, and the handler pays the difference into the pool equalization fund. On the other hand, if the amount owed producers is more than the value of the milk used, the handler pays what is owed the producers and the pool equalization fund pays the difference to the handler.

Prior to 1994, the quota price was primarily determined by the Class 1, 2 and 3 prices, while the overbase price was primarily determined by the Class 4a and 4b prices. Thus then, the difference between the quota and overbase prices varied from month-to-month. Since January 1994, there has been a fixed $1.70 per hundredweight difference between the two prices. Thus now, both the quota and overbase prices are equally affected by changes in all five class prices.

## Incentives to Supply Fluid Markets

The virtues of pooling milk receipts notwithstanding, the elimination of contractual arrangements between producers and handlers removed the incentive that existed for producers to ship their milk to a fluid plant. Instead, producers were inclined to ship to local plants, which, in general, tended to be manufacturing plants. As these changes in milk movement patterns evolved, fluid milk handlers were faced with the task of attracting adequate milk supplies, a responsibility that was exacerbated during the months of low milk production.

### *Location Differentials*

When pooling was instituted in 1969, location differentials were established to encourage the movement of quota milk to Class 1 plants. Location differentials were added to or deducted from quota payments to producers and were determined by the location of the plant that first received the milk. Location differentials applied only to the hundredweight milk equivalent of quota. In following the traditional movement of milk from supply areas to deficit areas, the higher hauling cost tended to be offset by a more favorable location differential. Conversely, if milk was needed locally for Class 1 usage, a lower location differential tended to be offset by a lower haul cost.

### *Transportation Allowances and Regional Quota Adjusters*

Over time, overbase milk became a larger and larger share of the milk produced by individual producers. Consequently, location differentials based solely on quota milk were no longer able to ensure that adequate milk supplies were made available to Class 1 plants. In June 1983, location differentials were replaced by transportation allowances and regional quota adjusters (RQAs). Transportation allowances partially compensate producers for the cost of hauling milk from a producer's ranch to qualified plants in defined deficit areas. These allowances apply to all market milk moving from dairy farms to processing plants that are in deficit areas and that process more than 50 percent of their production into Class 1, Class 2, and/or Class 3 products. In addition, cooperative members receive transportation allowances on shipments to their plant if the plant is located in a deficit area and if the plant supplies 40 percent of its receipts for Class 1 usage.

The purpose of RQAs is less transparent because they do not provide any direct incentive to move milk to Class 1 plants. They were developed to address equity issues arising out of the elimination of the location differentials and are deducted from the quota payments to producers. RQAs are determined by the geographical location of the producer's dairy farm and apply to the hundredweight milk equivalent of quota produced. Presently, these rates range from a minus 5¢ per hundredweight for dairy farms located in Northern Coastal counties to a minus 27¢ per hundredweight for dairy farms located in Fresno, Kings, and Tulare counties. There are no RQAs assigned to dairy farms located in the southernmost part of the State.

## Producer–Handler (PH) Exemptions

The Act provides that some producer–handlers (PHs) may be exempt from the Pooling Plan provided they meet certain requirements. The producer-handler is required to exercise complete ownership over both the production and processing entities. Additional requirements vary for the two types of exemptions: Option 66 and Option 70. Generally, Option 70 PHs are larger than Option 66 PHs.

## PH Option 66

Producer–handlers may be exempt from the Pooling Plan under option 66, provided they meet the qualifying requirements:

- Farm production must average less than 500 gallons per day during each 12-month period, September 1 through August 31;
- Sales must average less than 500 gallons per day during each 12-month period, September 1 through August 31; and
- Ninety-five percent of the farm production and 95 percent of the sales must be disposed of to retail or wholesale outlets (other than market milk handlers).

## PH Option 70

Producer–handlers who do not meet the qualifying requirements for full exemption operate under option 70 exempt classification. This option does not impose any restrictions on retail sales or purchases from outside sources. Producer–handlers operating under this option have their original pool quota plus any quota purchased prior to March 1, 1995 deducted from their qualifying Class 1 sales. A further daily deduction of 150 pounds fat and 375 pounds solids-not-fat is made from such sales provided the producer–handler has not transferred production base and pool quota after February 9, 1977. The remainder of all production and usage is subject to pool accountability. Qualifying Class 1 product consists of processed retail and wholesale sales, including sales to sub–handlers, but excludes sales of packaged Class 1 purchased from other handlers and bulk and packaged Class 1 sales to other handlers. Any exempt quota that cannot be deducted participates in the pool only as base or overbase.

Prior to January 1, 1978 the option 70 exempt producer–handlers could deduct original quota from their Class 1 sales. Any purchased quota could not be deducted. These provisions were added by statute in 1978. In 1994, the producer–handlers were allowed to exempt the quota they had purchased after January 1, 1978. This window of opportunity was closed March 1, 1995.

Allocating New Quota

One of the declared purposes of the Act is to equalize gradually the distribution of Class 1 and 2 utilization[2] among California producers. Allocation of new quota based on Class 1 and 2 growth was a necessary provision instrumental in attaining this goal. Class 1 and 2 sales for the most recent 12–month period, September through August, is compared to that of the previous highest identical 12–month period to determine the amount of increase necessary. [3] The resulting amount is made available for allocation as new quota. New quota allocation to existing producers is made effective January 1, following the 12–month period during which the available new quota is determined.[4]

When new quota is issued, it is allocated:

- Forty percent to unequalized producers,
- Forty percent to equalized producers, and[5]
- Twenty percent to qualifying new producers.

**Unequalized Producers.** Forty percent of the new quota available is allocated to producers holding unequalized production base and pool quota. Unequalized means that the quota held by a producer is below 95 percent of the production base. The allocation is based on a formula that gives a higher percentage of new quota to those producers having low quota in relation to production base. No quota can be allocated to an unequalized producer that would be in excess of that needed to bring quota to the equalized level. Any such excess quota is reallocated to the qualifying producers still below the equalization point.

The unequalized quota are those allocated to new producer entrants after the start of the pooling program. All of the original issue of production base and pool quota was brought to equalization effective July 1, 1978 as directed by statute amendment. This one–time direct issue of quota was not conditioned on any increase in Class 1 sales.

**Equalized Producers.** Forty percent of available quota is allocated to equalized producers (those producers whose quota is 95 percent or more of production base) prorated according to the quota held by each.

**New Producers.** Twenty percent of the new quota available is allocated to qualifying new producer applicants who do not have production base and pool quota. In order to apply for this allocation, a new producer must have been in continuous production for one year, and on the date of application must be shipping market grade milk to a pool handler. Available quota is allocated to these producers on a priority basis, first priority being determined on the basis of the date the application is received. Ties are broken by the longest period in continuous commercial production, and further ties are decided on the basis of the longest period in market grade production. In addition, any quota that has been forfeited after April 30, 1981, is allocated on a continuing basis to qualifying new producers.

The amount of quota to be allocated to new producers is based on the daily average of fat and solids-not-fat produced during the most recent three month period from September through November. A maximum of 150 pounds of fat and 375 pounds of solids–not–fat can be considered. Allocation is made at either 95 percent of the

qualifying production of each component, or 60 pounds of fat and 150 pounds of solids-not-fat, whichever is less. If a producer enters at the equalized 95 percent level, he or she is given the qualifying production as production base, and only qualifies for further quota allocation as an existing equalized producer. If the producer enters at less than the 95 percent level, production base is granted at 111 percent of the quota allocated.[6]

After holding this initial allocation for a minimum of one year, a new producer qualifies as an existing producer to participate in future allocation of new quota. In the subsequent allocations, the qualifying period production will be used in determining the amount of quota received. Additional production base will be allocated equal to 111 percent of the additional quota until the producer eventually has quota equal to 95 percent of the qualifying period production. At that point, the qualifying period production will be assigned as production base.

Transferability of Production Base and Pool Quota

Subject to certain restrictions, production bases and pool quotas are transferable. These restrictions are imposed to prevent quota from becoming a commodity for speculation. A producer may sell to another producer in the pool area, or change locations within the pool area and carry the quota to the new location. All transfers must be approved by the Department before the transfer can be made effective. All transfers are made effective on the first day of the month.

In order to purchase production base and pool quota, a producer must be in active production of market grade milk and ship to a pool handler. The average price per pound of quota solids–not–fat (without cows) reflects the true value of the quota sold. Although the price is expressed in terms of quota solids–not–fat, the transaction carries with it the related production base solids–not–fat, production base fat, and quota fat. Since the establishment of the $1.70 differential in 1994, the overbase and quota fat prices have been the same.

Producer Review Board

The Act required the Department to appoint a Producer Review Board consisting of 12 producer members. The function of this Board is to hear appeals of producers seeking hardship relief due to conditions beyond their control and make recommendations to the Director to either approve, disapprove, or modify the request.

The Board, now consisting of 12 producer members and 1 public member, also gives counsel, assistance, and recommendations on administrative matters and problem areas of the pooling program. Annually, it reviews the budget for the Milk Pooling Branch. Since its formation, it has made numerous recommendations on producer appeals and administrative issues.

Producer Responsibility

Although producers have gained considerable independence through pooling, they are still charged with responsible performance. A producer must produce milk of the required quality standards or lose quota entitlement as a consequence. For each day milk is rejected for not meeting the quality standards specified in the contract, the monthly quota eligibility is reduced by one day's quota amount. Rejected milk is still eligible to be accounted for in the base pool.

A producer may not have quota and simply hold it without producing milk. Failure to ship milk through a pool handler for a period of 60 days shall result in the forfeiture of all production base and pool quota. A proportionate amount of monthly quota entitlement will be lost for any milk shipped directly to a nonpool plant.

Verification of Records and Milk Producers Security Trust Fund

Personnel within the Milk Pooling Branch perform comprehensive audits of the records of handlers to determine their compliance with the reporting and payment procedures required by the Milk Stabilization and Pooling Plans. Monetary adjustments are made to a handler's account to correct discrepancies revealed by the audit with such adjustments being reflected in the quota price calculation. The payments to producers are also monitored to ensure that payments are made in the correct amount and at the proper intervals and that no unauthorized deductions are made.

The Milk Producers Security Trust Fund (Fund) was created by state law in 1987 to protect producers from handler payment defaults. It is administered by a seven-member board of industry representatives appointed by the Department. Currently the fund contains $48 million.

Under the original legislation:

- Money was collected for the Fund’s from assessments on milk in Classes 1, 2 and 3, until
- The Fund contained a sufficient amount of money to cover 110% of one month’s milk purchases by the milk handler with the largest monthly producer payment obligation.

The Fund was modified in 2006 by AB 2343:

- Money is now collected for the Fund’s from assessments on all milk, Classes 1, 2, 3, 4a and 4b, until
- The Fund contains approximately $30 million.
- Handlers with liabilities beyond $30 million are required to submit proper financial instruments to the Department to cover these liabilities over the higher of $30 million or the amount that is in the Fund.

## Assessments

The Milk Pooling system is the market grade producers' own program, and its administration is financed entirely by producer assessments. Producers provide financing in the form of a Pool Administrative Fee which is deducted each month from their milk payment. Initially, this fee was 2¢ per hundredweight of market milk produced; the current rate is, however, 1.1¢ per hundredweight of market milk produced.

## Summary and Conclusions

The pooling program has passed beyond its developmental stage and should now be considered to be in the phase of refinement. During its existence, it has experienced problems and disappointments as expected in any new venture, but it should be recognized that progress has been made toward achieving its stated goals. Studies and analyses of pertinent issues are perpetually underway by capable individuals and organizations to seek steps toward further fulfillment of the purpose of the Gonsalves Milk Pooling Act.

## *END NOTES*

[1] Since September 1974, the State Franchise Tax Board has performed the data processing service. By 2008, the California Agricultural Statistics Service will take over data processing.

[2] Prior to 1997, new quota allocation was based on Class 1 utilization only.

[3] Prior to January 1, 1985, the amount new quota to be allocated was determined by comparing Class 1 sales for the most recent September through August period to that of the preceding period. The increase was then adjusted for the estimated Class 1 requirements of the succeeding year, less such estimate made the prior year and further adjusted to add standby requirements.

[4] Because of a lack of growth in Class 1 and 2 utilization, no new quota allocation has been made since 1992 (1997 for qualifying new producers).

[5] Prior to January 1, 1979, 80 percent of available quota was allocated to unequalized producers. Equalized producers were not allowed to participate in the allocation.

[6] Prior to January 1, 1977 the maximum allocated to new producers as production base was the average daily production during the 12–month period preceding the application, or 90 percent of the average production base of all existing producers, whichever was less. The maximum quota that was allocated was 20 percent of the allocated production base, or the lowest percentage of pool quota to production base of all existing producers, whichever was less.