



Hearing Background Resource

Dairy Industry Statistics Related to Hearing Issues and the California Milk Pricing and Pooling Programs

The intent of this document is to assist in the understanding of the issues raised at a public hearing, within the context of the economic regulation of the dairy industry. It applies specifically to the California Milk Pricing and Pooling programs and is also useful in understanding the operation of federal milk marketing orders.

THE CALL OF THE HEARING

The California Department of Food and Agriculture (Department) has scheduled two public hearings: the first to consider amendments to the Stabilization and Marketing Plan for Market Milk for the Northern California Marketing Areas, and the second to consider amendments to the Stabilization and Marketing Plan for Market Milk for the Southern California Marketing Areas (collectively, Plans). The Northern California hearing will be held on May 3, 2005, at 8:30 am at the Red Lion Hotel, 2001 Point West Way, Sacramento. The Southern California hearing will be held on May 6, 2005, at 8:30 am at the Ontario Airport Marriott, 2200 E Holt Boulevard, Ontario.

Both hearings will consider Dairy Institute's proposed changes to specific components of the current Class 1 pricing formulas. The hearings will also consider any other aspect of the Class 1 formulas that are raised by alternative proposals received in the time and format required. Additionally, because any change in the relative Class 1 prices between Northern and Southern California affects the ability of processors to move milk plant-to-plant, the hearings will consider adjustments to the Transportation Credits, but only to the extent that there are changes to the relative Class 1 prices.

DEPARTMENT EXHIBITS

This document utilizes informational resources including the Departmental Exhibits. These exhibits will be made public on April 25, 2005, and will be entered into the hearing record on May 3, 2005 and May 6, 2005. When the exhibits are referenced in this document, they will be cited in the text. For example, throughout the text of this document, it may be noted to see the "Hearing Exhibit" references for the actual resources of the information. In the Departmental Exhibits, an asterisk (*) next to the Exhibit Number (which may include back issues) indicates they are entered by reference only. In these instances, the most recent copies are on file in the Branch office at 560 J Street, Suite 150, Sacramento, California.

ECONOMIC DAIRY REGULATIONS

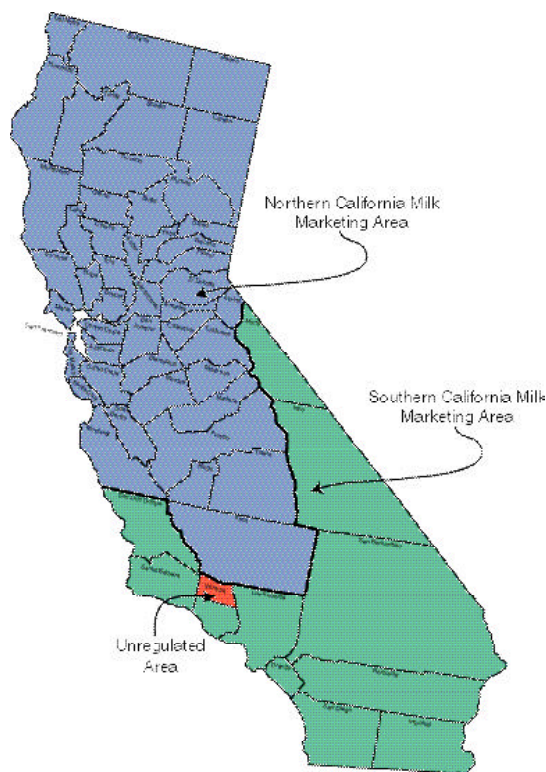
California Food and Agricultural Code Section 61801, *et seq.*, provides the authority, procedures, and standards for establishing minimum farm prices by the Department for the various classes of milk that processors (handlers) must pay for milk purchased from dairy farmers (producers). These statutes provide for the formulation and adoption of Milk Stabilization and Marketing Plans for Market Milk (Stabilization Plans).

The Gonsalves Milk Pooling Act, California Food and Agricultural Code Section 62700, *et seq.*, authorizes the Secretary to operate a statewide pooling system under specified guidelines. These statutes provide for the formulation and adoption of Milk Pooling Plans for Market Milk (Pool Plan).

These statutes identify legal requirements and public policies that the Department is charged with implementing and enforcing. The determinations resulting from any hearing are made pursuant to the authority vested in the Department by statute and in furtherance of the important State purposes embodied in the governing statutes.

About 91 percent of the market grade (Grade A) milk produced in the U.S. is subject to regulation; under federal orders (72 percent) or state marketing programs (19 percent). The remaining Grade A and all Grade B milk are not subject to minimum price regulations.

California is not part of the federal milk marketing order system; it has its own state-specific, milk marketing program. Currently there are 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 five classes of milk (as detailed at the end of this document). Both marketing areas are covered by the single Pooling Plan.



CALIFORNIA DAIRY INDUSTRY

In 2004, California was the largest milk producing state in the U.S. California dairy farmers marketed 36.4 billion pounds of milk, which represented 21.3 percent of the nation's marketings, up from 16.4 percent in 1994. California has also seen increases in cow numbers. In 2004, California had more cows than any other state in the U.S.: 1.73 million adult milk cows representing 19.1 percent of the nation's total herd, up from 13.0 percent in 1994.

INDUSTRY CONDITIONS RELATIVE TO THE STATUTORY CRITERIA

Legislative Declarations — The following are declarations made by the statutes under which the Pooling Plan and the Stabilization Plans are promulgated regarding the dairy industry effects on the public's health and welfare. The pertinent Food and Agricultural Code sections follow each declaration.

1. The production and distribution of milk is a business affected with a public interest. Thus, the police powers of this state may be used for protection of the public health and welfare (§61801 and §62700).
2. The production and maintenance of an adequate supply of milk is vital to the public health and welfare (§61802(b) and §62701).
3. Health regulations alone are insufficient to prevent economic disturbances in the production of milk. Thus in the absence of economic regulation, the potential exists for economic disruption which may constitute a menace to the public health and welfare (§61802(c) and §61802(d)).
4. By threatening industry stability, unfair, unjust, destructive and demoralizing trade practices constitute a menace to the public health and welfare. Thus, the regulatory provisions should promote intelligent production and orderly marketing, and should eliminate economic waste, destructive trade practices, and improper accounting (§61802(e) and §61701).

5. To promote the public health and welfare, it is essential to establish minimum producer prices at fair and reasonable levels (§61802(h)).
6. The regulatory provisions should result in uniformity of cost to handlers and should not restrict the free movement of fluid milk (§61805(b) and §62720).
7. The regulatory provisions should help develop and maintain satisfactory marketing conditions, and bring about and maintain a reasonable amount of stability and prosperity (§61805(d)).

The relevant statutes recognize that conditions affecting the California dairy industry are subject to change over time. As such, the Department's regulation of the California dairy industry in accordance with the governing statutes and the public interest must be modified as appropriate, as necessary, to address issues created by changing conditions. In addition, a dynamic industry, such as the California dairy industry, requires that the Department ensure that economic regulations are modified when necessary to ensure that the Pooling Plan and the Stabilization Plans continue to implement state policies and promote the public health and welfare. Since the beginning of economic regulation in 1935, much has changed:

- ◆ Dramatic increases in total milk production have been matched by equally dramatic decreases in numbers of dairy farms and dairy processing plants. From 1936 to 2004, there has been an eight-fold increase in milk production from 4.2 billion pounds to 36.4 billion pounds. Data on numbers of producers and processors is not as extensive. However, from 1940 to 2004 there was an 89 percent decline in number of dairy farmers from 19,428 to 2,107. From 1960 to 2004, the number of dairy processors declined about 80 percent from about 600 to 126. In addition to the decline in numbers, dairy processors have become more specialized. In 1960, many of the 600 processors made multiple class products. In 2004, most of the 126 processors specialized in only one or two classes. (see Hearing Exhibits).
- ◆ The historic declines in the number of dairy farms and processing plants do not capture the extent of the consolidation that has occurred in recent years. In 1985, there were 7 processing cooperatives each with a single plant; there were also 12 strictly marketing cooperatives. Today, there are only 4 processing cooperatives with as many as five plants each; there are also 6 strictly marketing cooperatives. In 1985, 18 of the cooperatives were strictly California based, while one had a few members in Northwestern Nevada. Today, the nation's three largest dairy cooperatives all have a presence in California. Two are headquartered out of state, while the nation's second largest cooperative is strictly California based.
- ◆ California has always had processing plants owned by national proprietary firms. However, in the last few years, there has been a major consolidation of fluid plants both nationally and in California. The nation's largest fluid proprietary processor has established a major presence in California through acquisition of former California firms.
- ◆ As a percent of total milk fat production, the fluid milk product share declined from 65 percent in 1952 to 12 percent in 2003 attributed to: increased milk production, decreased consumption of fluid products, and introduction of lowfat milk.
- ◆ The declining importance of milk fat has resulted in changes in producer pricing. Pricing was fat-based until 1955; fat/skim-based from 1955 to 1962; mixed fat/skim and fat/solids-not-fat-based from 1962 to 1969; and fat/solids-not-fat-based since 1969.
- ◆ The number of classes of milk has changed with changes in production and the marketing of dairy products: four classes prior to 1950; three classes from 1950 to 1968; four classes from 1968 to 1982; and five classes since 1982.

- ◆ Technology has improved the ability to ship bulk and packaged milk greater distances. Marketing areas were consolidated to reflect this technology. In the mid-1950's, there were 37 marketing areas in California; currently, there are only two.

SUPPLY, DEMAND, AND PRICES TO CONSUMERS

Milk Production and Supply. Many factors ultimately determine milk production. However, the most obvious ones are the number of milk cows and milk production per cow. More complex factors (output prices, input costs, weather, and environment) all affect cow numbers and production per cow.

Table 1 shows that California and other western states have been increasing their milk cow numbers, while in the rest of the nation, cow numbers have been declining. The net result has been a long-term decline for the nation as a whole. From 1994 to 2004, California dairy cow numbers increased at a 3.4 percent annualized rate, with a 2.2 percent increase when comparing 2004 to 2003. From 1994 to 2004, California's share of U.S. total cow numbers increased from 13.0 percent to 19.1 percent.

Table 1 - COWS ON FARM

	Calif.	Other Western ¹⁾	Other U.S.	U.S.	Calif. Share	Other Western Share
	Milk Cows in Thousands				Percent	
1994	1,235	1,079	7,215	9,529	13.0%	11.3%
1995	1,254	1,133	7,079	9,466	13.2%	12.0%
1996	1,264	1,164	6,926	9,354	13.5%	12.4%
1997	1,389	1,191	6,744	9,324	14.9%	12.8%
1998	1,401	1,209	6,532	9,142	15.3%	13.2%
1999	1,466	1,254	6,439	9,159	16.0%	13.7%
2000	1,523	1,316	6,376	9,214	16.5%	14.3%
2001	1,573	1,364	6,211	9,148	17.2%	14.9%
2002	1,648	1,445	6,046	9,139	18.0%	15.8%
2003	1,688	1,487	5,909	9,084	18.6%	16.4%
2004	1,725	1,511	5,774	9,010	19.1%	16.8%
Percent Change						
10 year average ²⁾	3.4%	3.4%	-2.2%	-0.8%		
Current ³⁾	2.2%	1.6%	-2.3%	-0.8%		

¹⁾ Alaska, Arizona, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

²⁾ 1994 to 2004

³⁾ 2004 compared to 2003

Source: NASS-USDA

While the year 2001 showed an across-the-board decrease in milk production per cow, the end of 2004 found production per cow on the increase. In 1994, California production per cow was 36 percent higher than the average of the rest of the nation, while in 2004, it was 19 percent higher. Comparing 2004 to 2003, California production per cow was up 0.7 percent, while the rest of the nation also showed increases in production per cow.

Table 2 - MILK PER COW

	Calif.	Other Western ^{1/}	Other U.S.	U.S.	Calif. Relative to Other U.S.	Other West Relative to Other U.S.
	Milk Per Cow In Pounds Per Year				Percent	
1994	20,439	18,616	15,015	16,126	136%	124%
1995	20,170	18,575	15,410	16,419	131%	121%
1996	20,421	18,924	15,376	16,499	133%	123%
1997	19,894	19,306	15,715	16,796	127%	123%
1998	19,705	19,760	16,219	17,222	121%	122%
1999	20,777	20,442	16,669	17,766	125%	123%
2000	21,169	20,805	16,992	18,227	129%	122%
2001	20,890	20,496	16,821	18,089	124%	122%
2002	21,277	21,079	17,291	18,603	123%	122%
2003	20,993	21,142	17,605	18,749	120%	121%
2004	21,139	21,140	17,734	18,957	119%	119%
Percent Change						
10 year average ^{2/}	0.3%	1.3%	1.7%	1.6%		
Current ^{3/}	0.7%	0.0%	1.3%	1.1%		

^{1/} Alaska, Arizona, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

^{2/} 1994 to 2004

^{3/} 2004 compared to 2003

Source: NASS-USDA

Table 3 shows that for 1994 to 2004, California and other western states had increasing milk production, while in the rest of the nation, milk production was slightly decreasing. The net result is a slight increase in milk production for the nation as a whole. From 1994 to 2004, California milk production increased at a 3.7 percent annualized rate, with a 2.9 percent increase when comparing 2004 to 2003. From 1994 to 2004, California's share of U.S. milk production increased from 16.4 percent to 21.3 percent. For 2004, California and the Western states accounted for 40 percent of the nation's milk production.

Table 3 - MILK PRODUCTION

	Calif.	Other Western ^{1/}	Other U.S.	U.S.	Calif. Share	Other Western Share
	Milk Production In Million Pounds Per Year				Percent	
1994	26,242	20,065	103,337	153,664	16.4%	13.1%
1995	26,293	21,045	103,037	155,425	16.3%	13.5%
1996	26,812	22,027	106,492	154,331	16.7%	14.3%
1997	27,628	22,993	105,981	156,602	17.6%	14.7%
1998	27,607	23,890	105,944	157,441	17.5%	15.2%
1999	30,459	25,626	106,626	162,711	18.7%	15.7%
2000	32,240	27,371	103,341	167,952	19.2%	16.3%
2001	32,855	27,961	104,476	165,291	19.9%	16.9%
2002	36,065	30,459	104,539	170,063	20.6%	17.9%
2003	36,437	31,438	103,437	170,312	20.8%	18.5%
2004	36,465	31,943	102,397	170,805	21.3%	18.7%
Percent Change						
10 year average ^{2/}	3.7%	4.7%	-0.6%	1.1%		
Current ^{3/}	2.9%	1.6%	-1.0%	0.3%		

^{1/} Alaska, Arizona, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

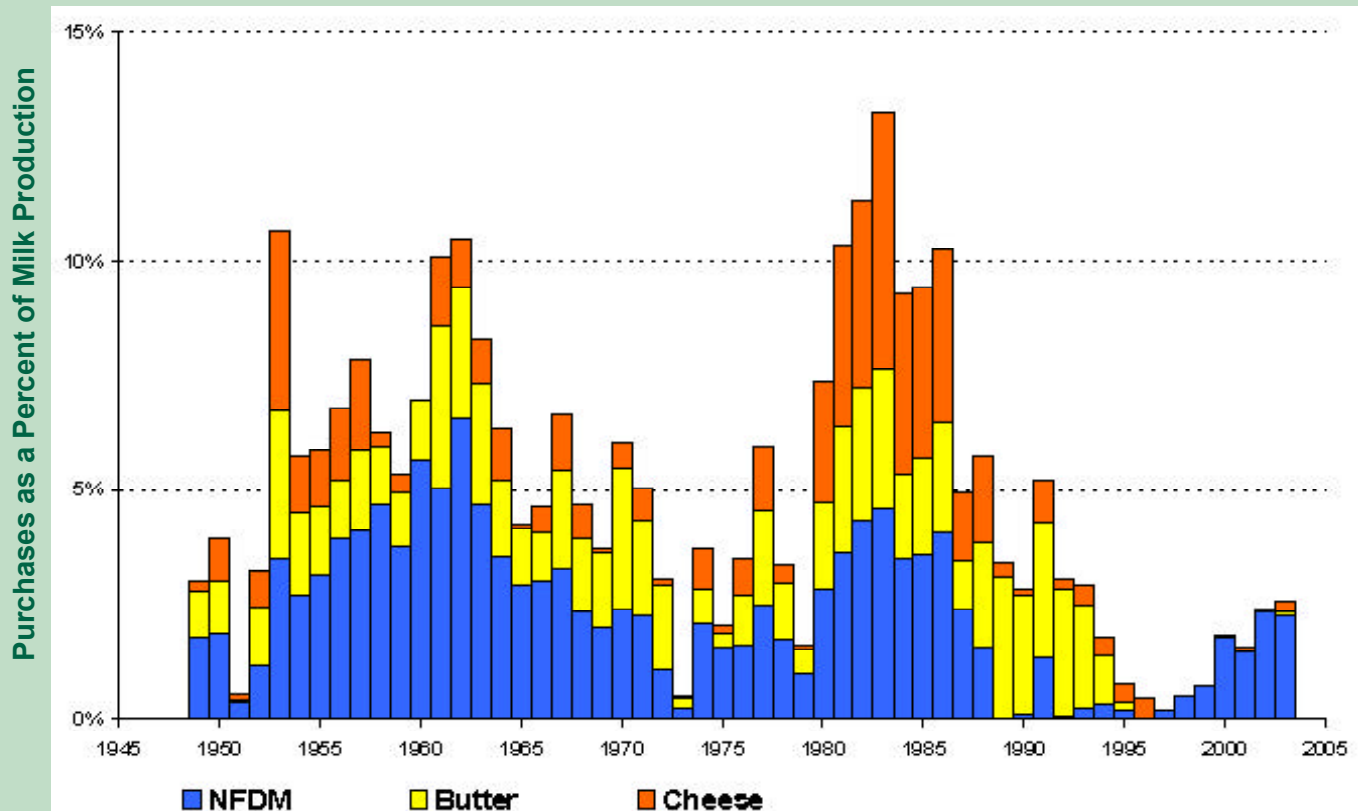
^{2/} 1994 to 2004

^{3/} 2004 compared to 2003

Source: NASS-USDA

Federal Support Purchases and Supply. Federal purchases of dairy products through the Commodity Credit Corporation (CCC) are a reflection of general supply and demand conditions. Generally, when supplies are long or when demand is short, CCC purchases are up and vice versa. Historic CCC purchases have been highly variable. (see Figure 1) Relative to total production, total U.S. CCC purchases were large for brief periods in the mid-1950's and early 1960's. CCC purchases were also large for an extended period in the 1980's. In 1983, CCC purchases reached an all-time high: 13.2 percent of total U.S. milk production (milk equivalent, total solids basis). During the 1990's, purchases were below historic averages, reaching an all-time low of 0.2 percent in 1997. From the low in 1993, CCC purchases have increased to 2.6 percent in 2003; however, this is still not a burdensome level. For all of 2004 to date, CCC purchases are actually running at about half of what they did during the same period in 2003. (see Hearing Exhibits).

Figure 1 - ANNUAL RELATIVE CCC PURCHASES
U.S. CCC Purchases on a Total Solids Basis as a Percent of Total Milk Production
by Commodity, 1949 to 2003



Source: NASS, Farm Services Agency

Demand: Many factors ultimately determine demand for California dairy products. However, the most obvious ones are total population and per capita consumption. More complex factors (income, employment rates, product price, consumer tastes) all affect population change and per capita consumption. Also, depending on the dairy product, the relevant population and per capita consumption can be on a statewide, regional, national, or international basis.

Table 4 - POOL UTILIZATION

California Total Milk Solids

	Class 1	Class 2	Class 3	Class 4a	Class 4b	Total
Market Share Based on Total Solids Utilization						
1994	23%	5%	6%	31%	33%	100%
1995	24%	5%	6%	31%	34%	100%
1996	24%	5%	6%	29%	36%	100%
1997	22%	5%	6%	31%	37%	100%
1998	23%	5%	6%	28%	38%	100%
1999	20%	4%	5%	32%	38%	100%
2000	20%	4%	5%	31%	38%	100%
2001	19%	4%	5%	29%	43%	100%
2002	18%	4%	4%	30%	44%	100%
2003	18%	4%	5%	28%	45%	100%
2004	16%	4%	4%	29%	46%	100%
Percent Change						
10 year average ^{1/}	-0.7%	2.2%	1.7%	3.3%	7.7%	4.8%
Current ^{2/}	-11.0%	-0.8%	-4.0%	4.7%	2.4%	0.6%

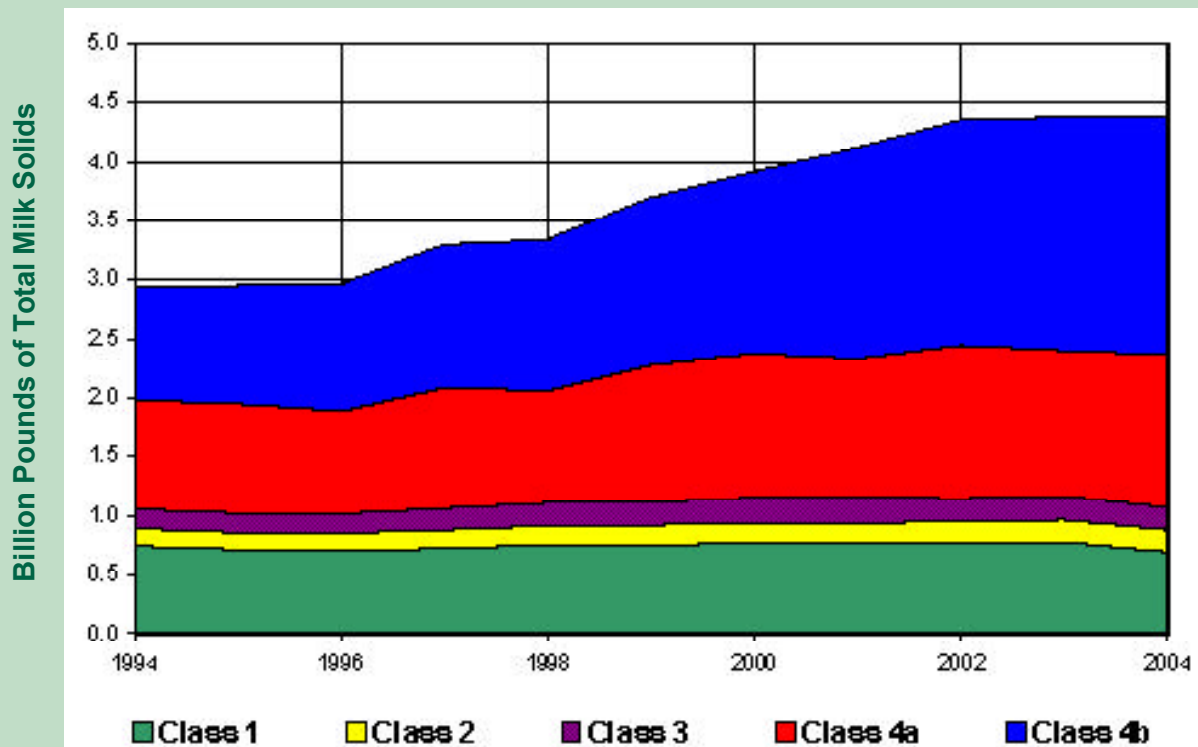
^{1/} 1994 to 2004^{2/} 2004 to 2003

Source: CDFA

Table 4 shows the relative change in pooled milk utilization. Figure 2 shows the absolute change in utilization. Classes 1, 2 and 3 have grown more slowly than total pooled milk production; Class 1 continues to show steady decreases. Class 4b has shown steady increases, while increases for Class 4a have been more erratic.

Figure 2 - HOW MILK IS UTILIZED

California, 1994 to 2004



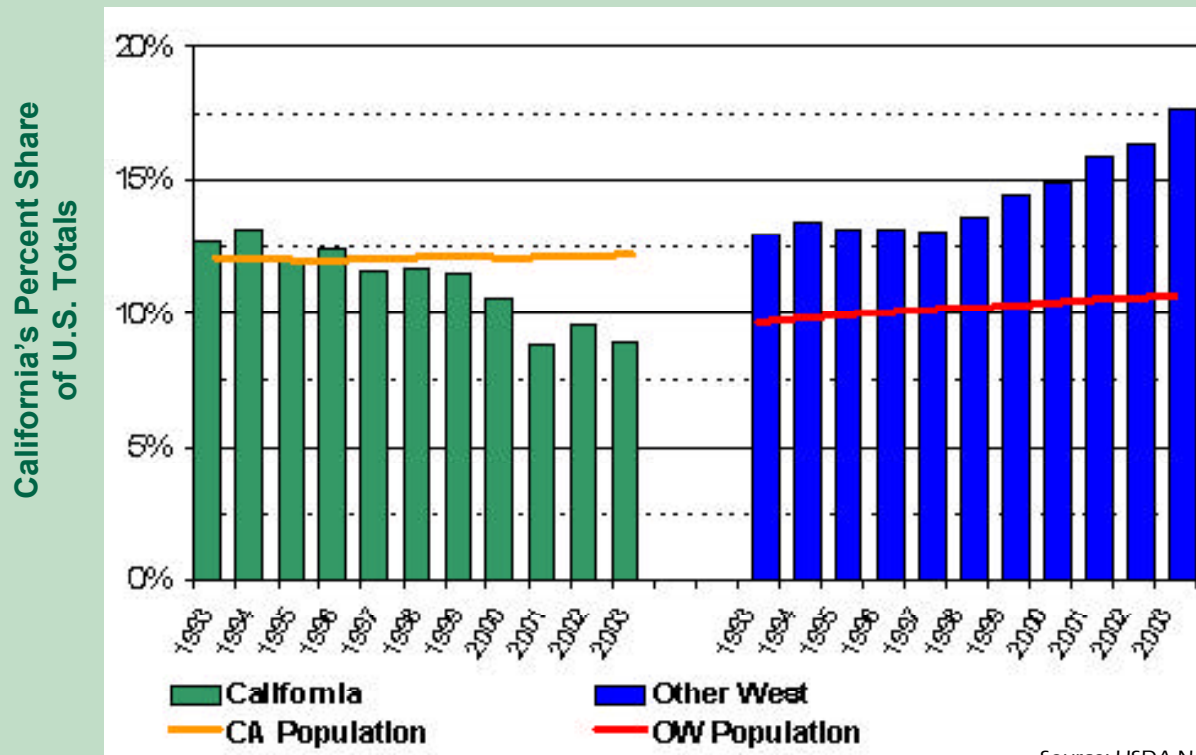
Source: CDFA

Unlike fluid milk products, manufactured dairy products have shown strong growth in commercial demand as evidenced by the rapid growth California manufacturers have experienced in production of Class 4a and 4b dairy products, robust and volatile prices on the national market for manufactured products, and (prior to 2000) the low levels of CCC purchases from California.

Commercial disappearance is equal to beginning dairy inventory plus commercial production and imports, less both sales to the CCC and ending inventory of all dairy products (fluid and manufactured). On a national basis, commercial disappearance has increased every year for the last ten years. USDA projects that commercial disappearance will increase in both 2004 and 2005. However, the level of the increases for 2004 and 2005 will be below the ten-year average for 1993-2003. (see Hearing Exhibits)

Historic data indicates that before 1989, California's share of the nation's dry curd cottage cheese production greatly exceeded California's share of the nation's population. However, since 1997, California's national share of production has been less than its population share. Currently, the western states' share of the nation's dry curd cottage cheese production exceeds their national population share and shows continued growth. (see Figure 4).

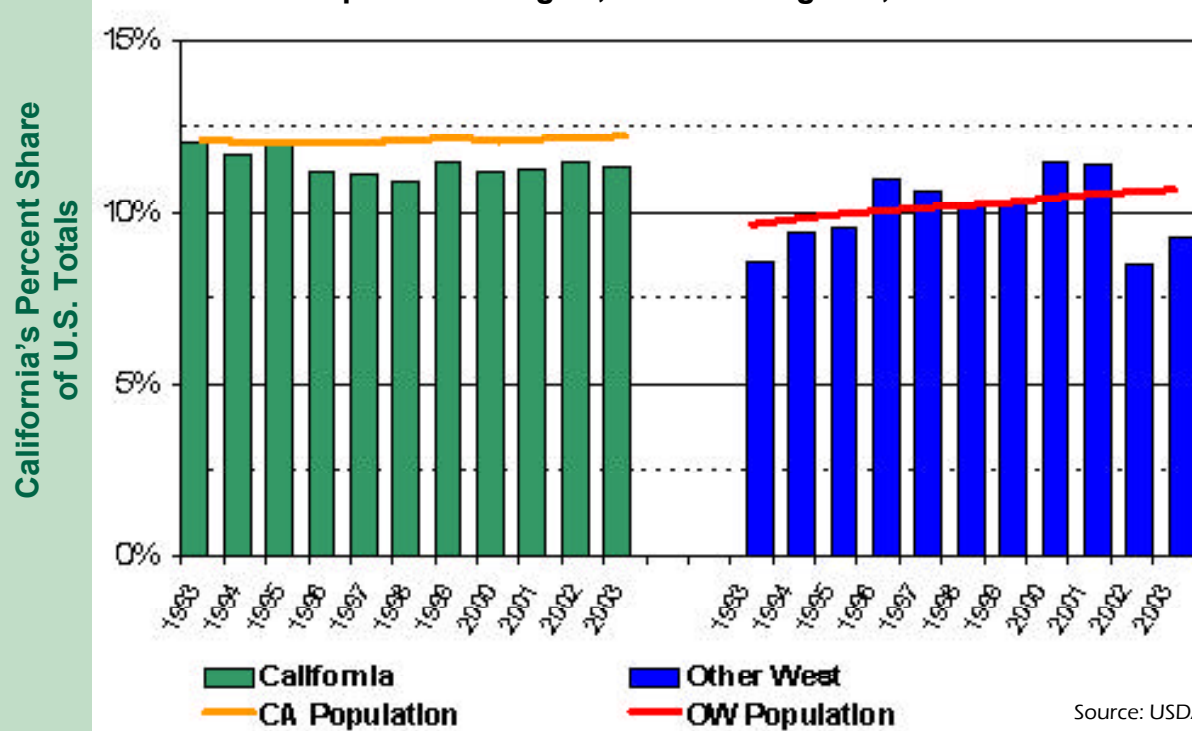
Figure 4 - DRY CURD ANNUAL PRODUCTION SHARE
Curd for Cottage Cheese, Selected Regions
1993 to 2003



Source: USDA-NASS

Historic data indicates that since 1970, California's share of the nation's ice cream production matched California's population share. However, since 1996, California's share of the nation's ice cream production has fallen short of their population share, while the other western states share of the nation's ice cream production has been both above and below their population share. The years 2002 and 2003 found both California and the other western states share of the nation's ice cream production falling below their population share. For 2003, California and the western states accounted for 22% of the nation's ice cream production.

Figure 5 - ALL FROZEN ANNUAL PRODUCTION SHARE
Except Frozen Yogurt, Selected Regions, 1993 to 2003



California became self sufficient in total cheese production in the early 1990's and continues to increase its share of U.S. production. In 2003, California and the other western states accounted for 40% of the U.S. cheese production. Both California and the other western states have steadily increased their shares of the nation's cheese production. However, the other western states have shown a larger percentage of growth in some years and even surpassed California for one year – 1996. (see Figure 6).

Figure 6 - ALL CHEESE ANNUAL PRODUCTION SHARE
Selected Regions, 1993 to 2003

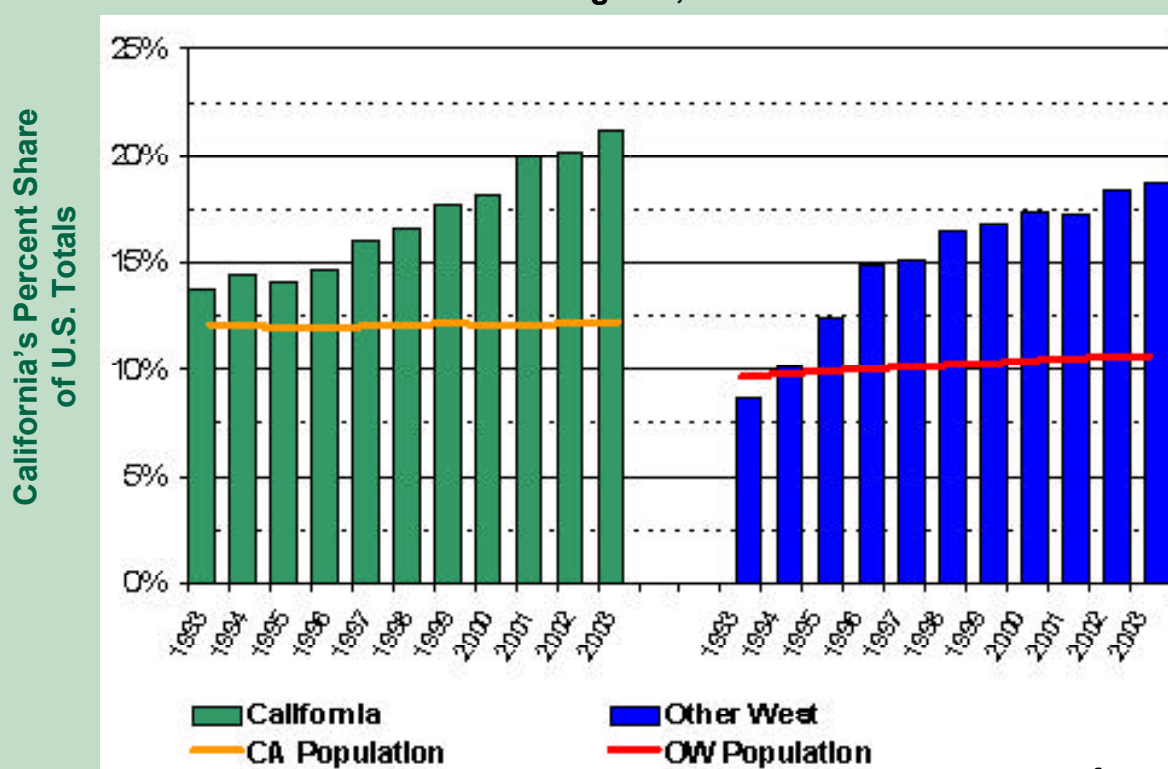
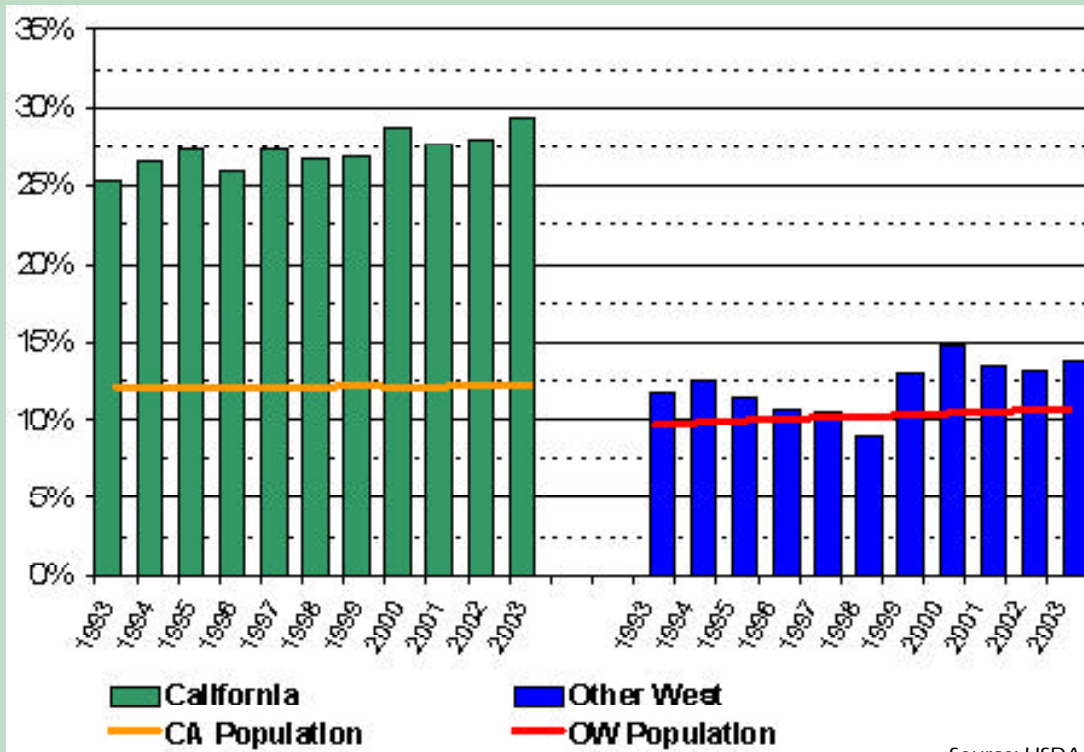


Figure 7 - BUTTER ANNUAL PRODUCTION SHARE
Selected Regions, 1993 to 2003

California's Percent Share
of U.S. Totals

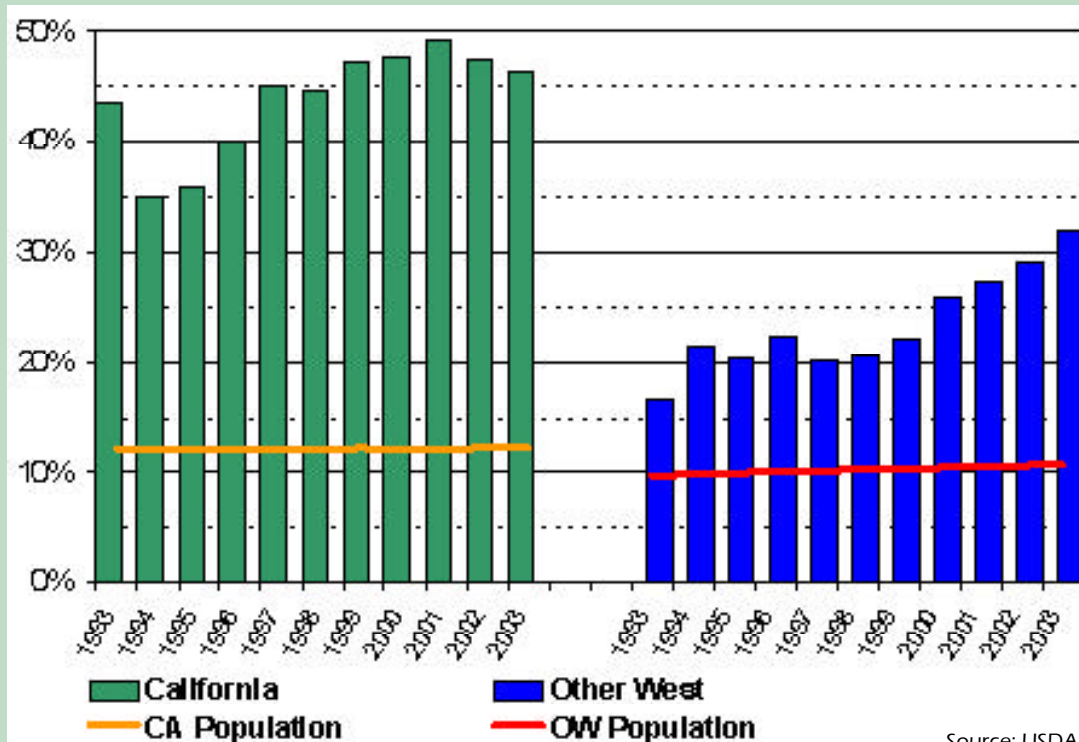


Source: USDA-NASS

Historic data indicates that since 1970, California's share of the nation's butter and NFDM production has exceeded California's share of the nation's population. The other western states share of the nation's butter production is similar to their population share while their NFDM share is well above their population share. (see Figures 7 and 8). In 2003, California and the other western states accounted for 43% of the nation's butter production and 78% of the national's NFDM production.

Figure 8 - NFDM ANNUAL PRODUCTION SHARE
Selected Regions, 1993 to 2003

California's Percent Share
of U.S. Totals



Source: USDA-NASS

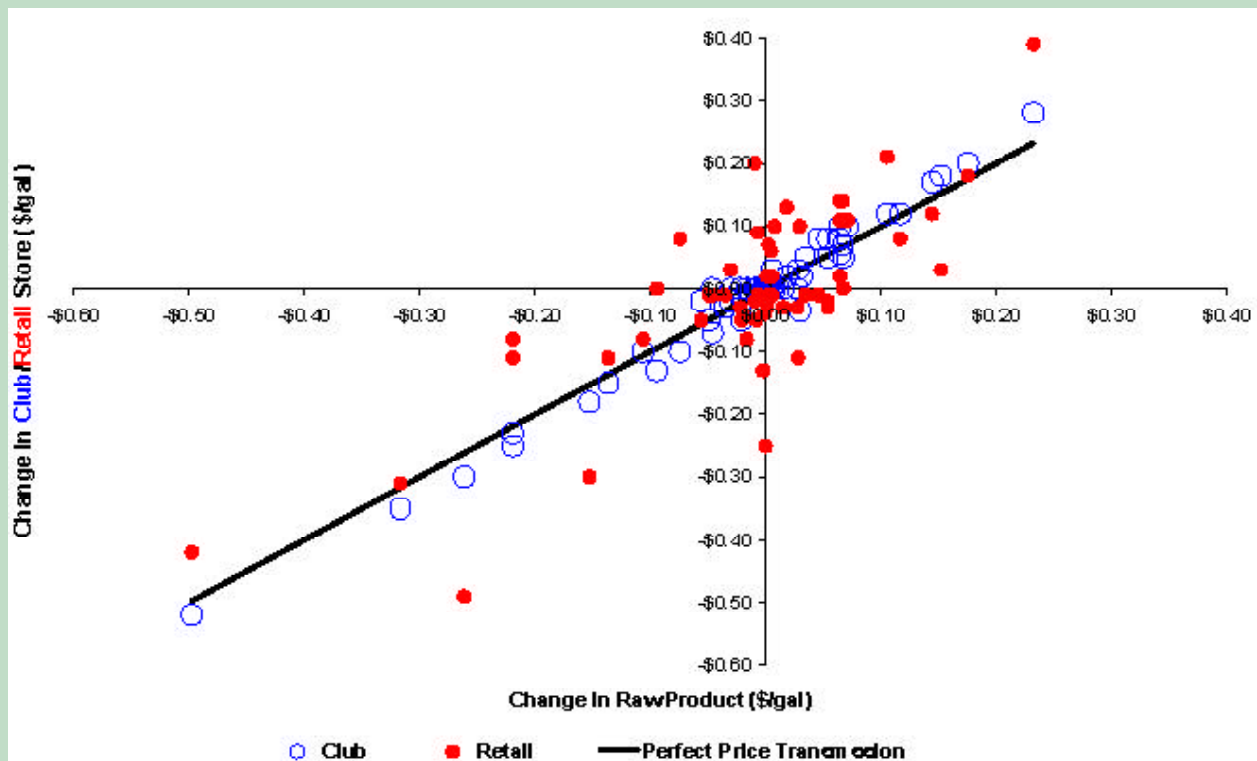
Prices to Consumers: From 1938 to 1978, the Department regulated retail milk prices. However, the Department no longer has the statutory authority for such regulation. The Department does maintain and publish data on retail milk prices from A.C. Nielsen data (see Hearing Exhibits). There is a relationship between changes in the farm and changes in the retail price of milk. Historically, the relationship was much stronger when farm prices were increasing. When the farm price increased, the retail price increased accordingly. However, when farm prices decreased, the price change at retail did not tend to decrease at a corresponding rate. This historic view is supported by the analysis in Attachment D of the “Economic Basis for Findings and Conclusions” that resulted from the March 31, 1993, Class 1 hearing (see Hearing Exhibits).

However, recent data suggests that this trend may no longer be true: “California Milk Marketing Margins” by Hoy F. Carmen, Department of Agriculture and Resource Economic, University of California, Davis. Professor Carmen found “. . . that there is a strong direct relationship between retail and farm level milk prices – retailers increase and decrease their prices equally in response to f.o.b. price increases and f.o.b. price decreases.” This conclusion is partially born out by the relationship between the change in farm and the change in retail prices for San Francisco as shown in Figure 9. The change in raw product cost explains 98 percent of the changes in prices at club stores, and 61 percent of the changes in prices at traditional retail stores (the 61 percent increases to 94 percent with lagged data).

Figure 9 - CLUB AND RETAIL STORE PRICE CHANGES

San Francisco, California

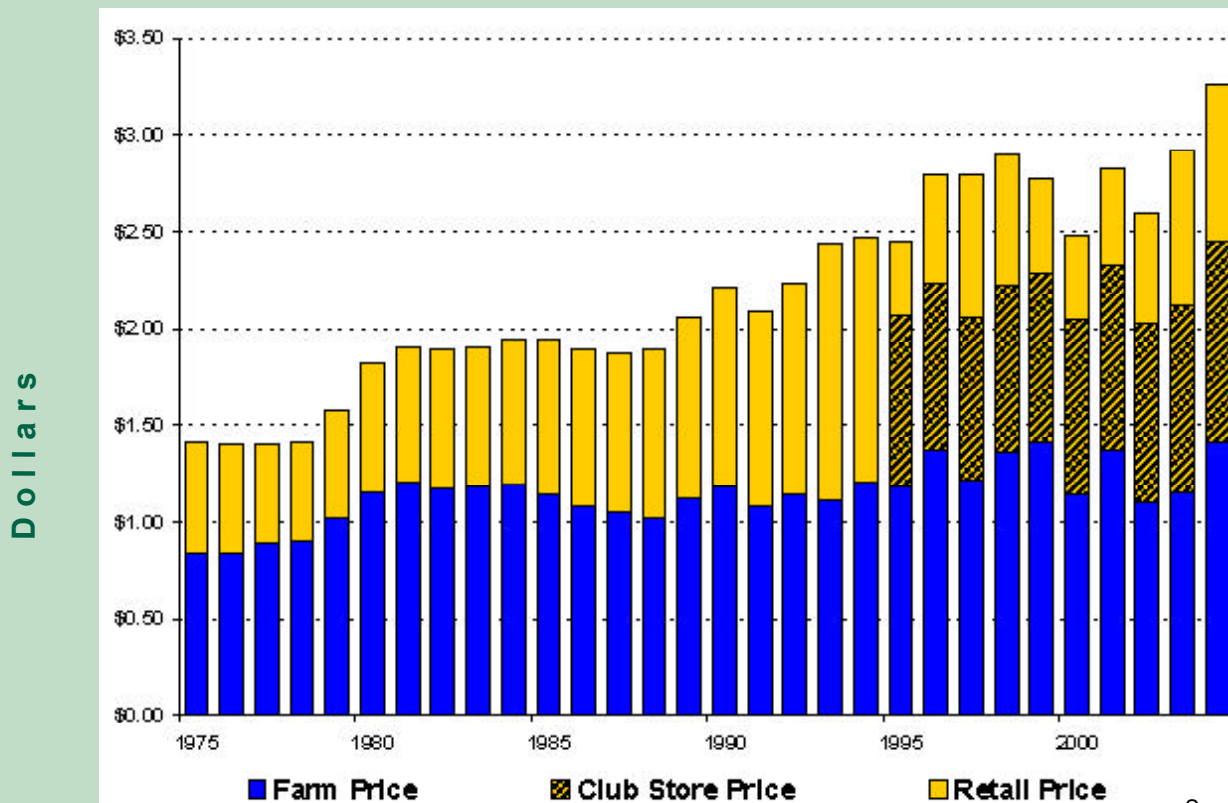
A.C. Nielsen Retail Prices, CDFA Club Prices - December 1999 to November 2004



Source: CDFA

Since 1993, the farm price has made up about 40 to 50 percent of the price at traditional retail stores. The lowest price to consumers continues to be milk sold at “club membership” stores, with a 40¢ to 80¢ per gallon savings over the retail store price (see Figure 10).

Figure 10 - AVERAGE ANNUAL WHOLE MILK PRICES
San Francisco - Farm, Club Store, and Retail Stores
1975 to 2004



Source: CDFA

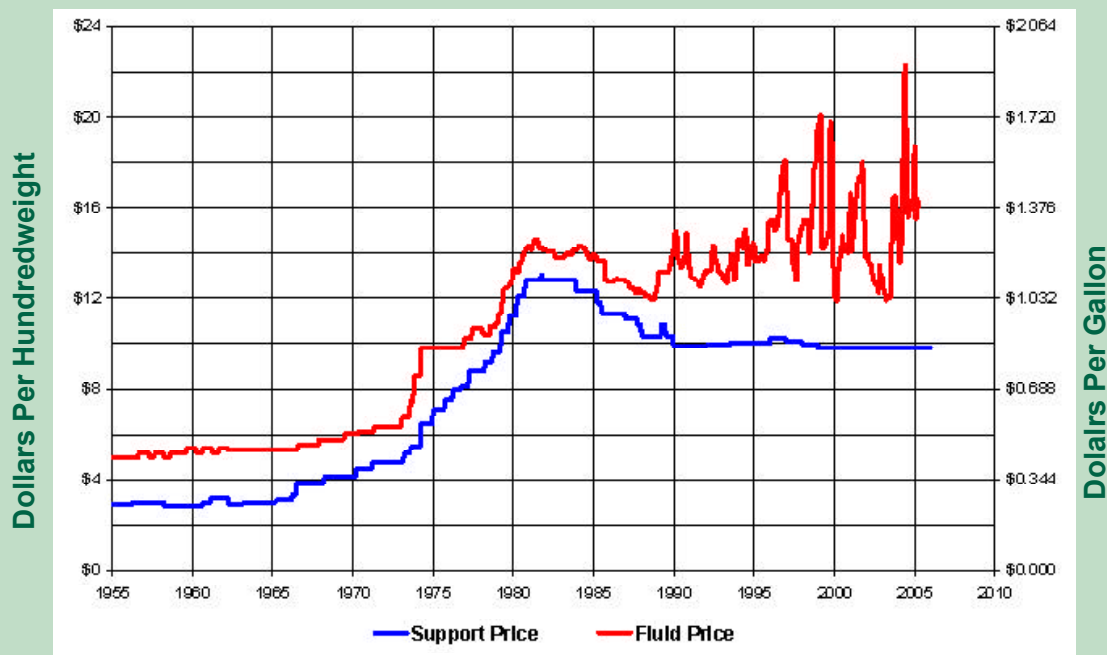
FARM AND COMMODITY PRICE RELATIONSHIPS

Between 1978 and 1987, national dairy farm prices were extremely stable. The federal support price program cleared the market when production exceeded demand by building federal inventories of butter, NFDM, and Cheddar cheese.

During this period, because of the heavy influence in the marketplace of the relatively high federal dairy support price levels, commodity prices were stable from month to month. California farm prices were tied directly to commodity prices and federal order farm prices were tied indirectly to commodity prices.

Since 1987, the decrease in the federal target support price (and the accompanying decrease in support purchase prices for butter, and Cheddar cheese) eliminated increases in federal inventories of butter, and Cheddar cheese. Existing inventories were eliminated by domestic and foreign food aid efforts. The low federal inventories of butter, and Cheddar cheese were no longer adequate to stabilize the market by helping to balance seasonal supply and demand. Consequently, whenever production of butter, or Cheddar cheese has been inadequate to satisfy commercial demand, dairy commodity prices have been quite volatile. Thus, market-driven forces have led to volatility, both in California farm prices and in federal order farm prices. (see Figure 11)

Figure 11 - MILK PRICES: Federal Support and California Fluid
The Support Price is at 3.5% Fat, Fluid Price is at 3.5% Fat, 8.7 SNF, for Los Angeles
Monthly, January 1955 to April 2005



Sources: CDFA, USDA, Farm Services Agency

CURRENT PRICE RELATIONSHIPS AMONG CALIFORNIA FARM PRICES, NATIONAL COMMODITY PRICES, AND FEDERAL ORDER FARM PRICES

For all of 2004, California fluid milk prices are compared to prices in adjacent states (see Table 5). For only one of the twelve months in 2004, the Northern California Class 1 price was higher than the Class I price in Oregon (see Figure 12). For nine of the twelve months of 2004, the Southern California Class 1 price exceeded the Class I price in Southern Nevada (see Figure 13). For all twelve months of 2004, the Central Arizona Class 1 price exceeded the Class 1 price in Southern California.

Table 5 - 2004 ANNUAL AVERAGE FLUID MILK PRICES
California Class 1 Prices Compared to Class I Prices in Contiguous States

2004 Average Price	Area	Differential above federal Class I Mover	Average Equivalent Differential
\$17.33	Arizona, Central - Phoenix, Tucson	\$2.35	
\$16.88	Oregon, Western - Medford, Portland	\$1.90	
\$16.70	Southern California - Los Angeles		\$1.72
\$16.56	Average California ^{1/}		\$1.57
\$16.43	Northern California - San Francisco; and Nevada, Northwestern - Reno, Winnemucca ^{2/}		\$1.44
\$16.38	Nevada, Southern - Las Vegas ^{3/}	\$1.40	

^{1/} Weighted by utilization.

^{2/} The Northwest Nevada price is set equal to the Northern California price by the Nevada State Dairy Commission.

^{3/} The Southern Nevada price is set equal to the federal Class I mover plus \$1.40 by the Nevada State Dairy Commission.

Sources: AMS-USDA, CDFA

Figure 12 - FLUID MILK PRICES
Northern California and Contiguous States, Monthly, 2004

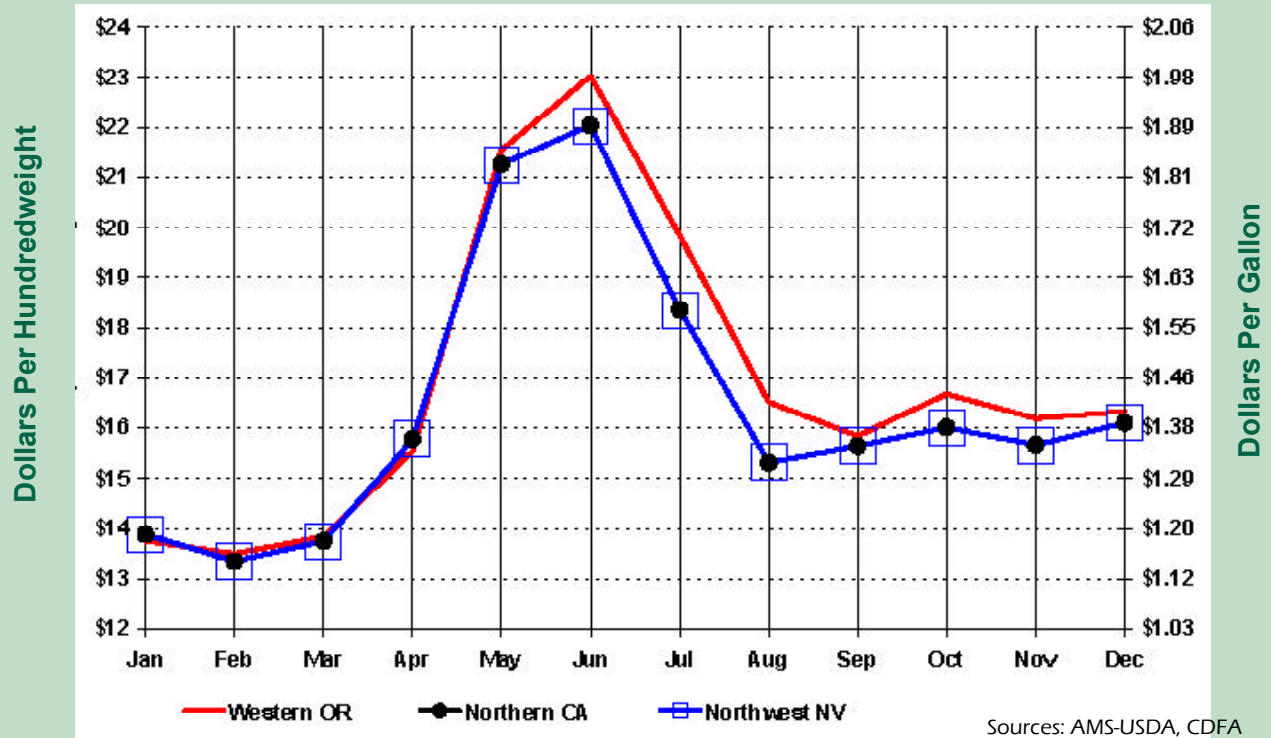
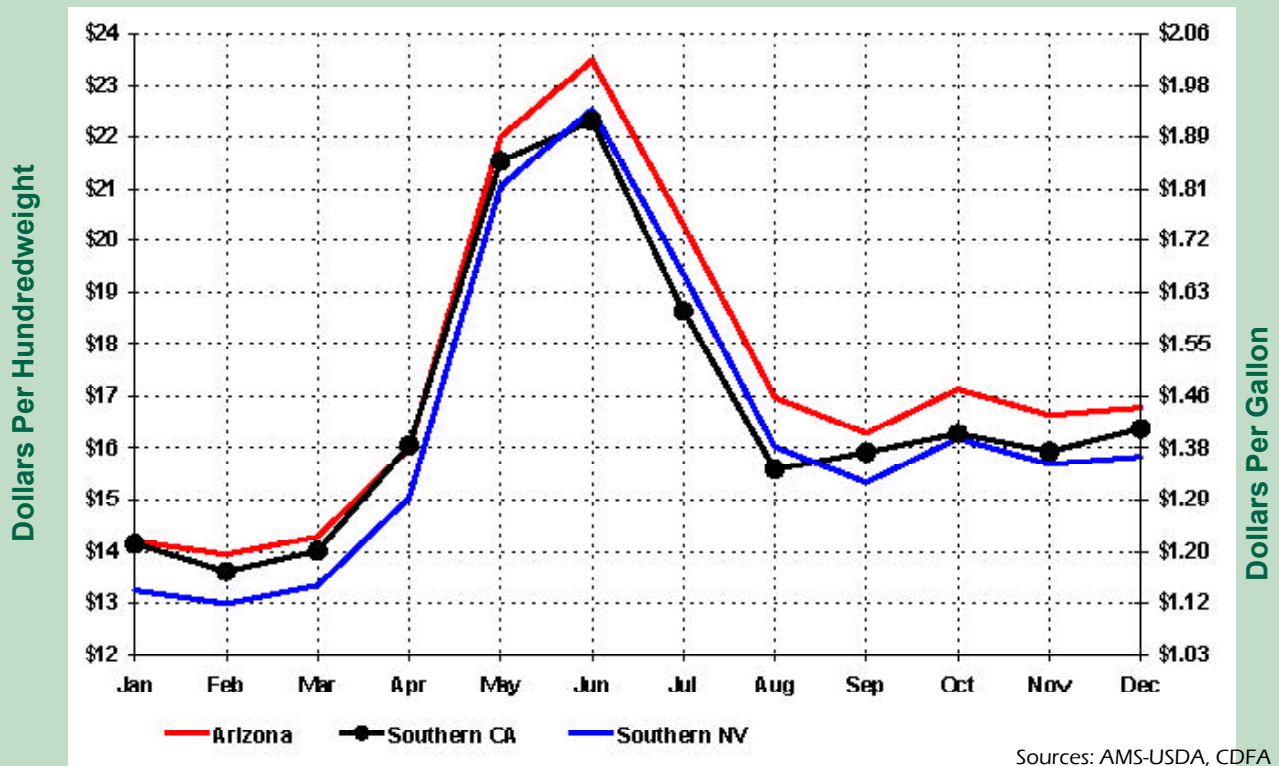


Figure 13 - FLUID MILK PRICES
Southern California and Contiguous States, Monthly, 2004



Nationally, volatile farm prices stemmed from the marketplace balancing supply and demand. In 2001, declining milk production outside of California resulted in significant price increases in dairy commodity prices. However, in 2002 milk production levels rebounded and continued throughout 2003, resulting in much lower prices. Currently, national production has slowed significantly so that 2004 is posed to have the highest prices in six years. Table 6 details how butter, block Cheddar cheese, and NFDM prices changed from July 2003 to July 2004: butter up 51%, block Cheddar cheese down 3%, NFDM up 5%, and Western Dry Whey up 60%. (See Hearing Exhibits) Because farm prices are tied directly to commodity prices, increasing commodity prices most often translate into increasing farm prices. California and federal prices for milk used to manufacture cheese products are up 28% and up 26% respectively. Average producer prices were up as well. Changes in producer farm prices should be compared to changes in the on-farm cost of producing milk. Comparing July 2003 to July 2004, California overall production costs increased slightly (2%). (see Hearing Exhibits).

Table 6 - DAIRY PRICES AND COSTS
Commodity, Processor, and Producer Prices, and Producer Costs
Comparing July 2003 to July 2004

	Unit	July 2003	July 2004	Change \$/Unit	Percent
Commodity Prices					
CME Cheese	\$/lb.	\$1.47	\$1.43	-\$0.04	-3%
CME Butter	\$/lb.	\$1.18	\$1.78	\$0.60	51%
California NFDM	\$/lb.	\$0.80	\$0.84	\$0.04	5%
Western Dry Whey (most y)	\$/lb.	\$0.1468	\$0.2356	\$0.0888	60%
Processor Prices					
San Francisco California					
Class 1	\$/gallon	\$1.01	\$1.58	\$0.57	56%
	\$/cwt.	\$11.76	\$18.36	\$6.60	56%
Class 2	\$/cwt.	\$10.29	\$14.88	\$4.59	45%
Class 3	\$/cwt.	\$10.24	\$14.83	\$4.59	45%
Class 4a	\$/cwt.	\$9.96	\$12.75	\$2.79	28%
Class 4b	\$/cwt.	\$12.59	\$12.76	\$0.17	1%
Portland Oregon					
Class I	\$/cwt.	\$11.67	\$19.85	\$8.18	70%
Class II	\$/cwt.	\$10.63	\$14.00	\$3.37	32%
Class III	\$/cwt.	\$11.78	\$14.85	\$3.07	26%
Class IV	\$/cwt.	\$9.95	\$13.31	\$3.36	34%
Milk Mailbox Prices					
California	\$/cwt.	\$11.53	\$13.91	\$2.38	21%
All Federal Order Average	\$/cwt.	\$11.72	\$16.32	\$4.60	39%
Producer Costs					
CDFA					
Cost Comparison Summary	\$/cwt.	\$12.77	\$13.01	\$0.24	2%

Sources: AMS-USDA, CDFA

DEPARTMENT PRODUCTION COST DATA

The Department collects and summarizes milk production cost data from California dairy farms. Data is collected by region and published in the Cost Comparison Summary to be used as an accurate measure of change in the cost of producing milk from one period to the next. Cost figures from January through July 2004 increased \$0.21 cents per hundredweight compared to the same period a year ago. All four areas showed increases in the cost of producing milk with the statewide cost up 1.65 percent.

The following summarizes the annual average costs and share of the state's total milk production for each of the four production cost areas for January-July 2004:

Area	Jan-July 2004 Average Average Cost Per Cwt.	Percent Change from A Year Ago	Production Share %
North Coast	\$ 14.29	+ 5.15%	3.21%
North Valley	\$ 13.27	+ 3.27%	36.57%
South Valley	\$ 12.58	+ 0.48%	45.81 %
Southern California	\$ 13.18	+ 0.84%	14.41%
Statewide	\$ 12.96	+ 1.65%	100.0%

FEDERAL MILK SUPPORT PROGRAMS

In addition to federal and State milk marketing programs, the federal government also maintains two income protection programs – the Dairy Support Price Program and the Milk Income Loss Contract Program.

Dairy Support Price Program: \$9.90 Floor

The federal government establishes a minimum target support price as a floor price for the milk dairy farmers sell to processors. This price is currently \$9.90 per hundredweight for milk testing at 3.67 percent fat. The federal government does not buy milk from dairy farmers at the target support price. Instead, through the Commodity Credit Corporation (CCC), the federal government stands ready to buy unlimited quantities of butter, NFDM, and Cheddar cheese from processors. It purchases these products at prices that, on average, should enable processors to pay dairy farmers the target price. The prices are currently \$ 1.05, \$0.80, and \$ 1.13 per pound, respectively, for butter, NFDM, and Cheddar cheese.

Milk Income Loss Contract Program: 45% below \$ 13.69.

The federal Class 1 base price is set as the "higher of" the federal Class III price (cheese) or the Class IV price (butter and NFDM). Under the Milk Income Loss Contract Program, if the federal Class 1 base price falls below \$ 13.69 per hundredweight, the federal government pays dairy farmers 45% of the difference for each hundredweight of milk produced up to a maximum production cap of 2.4 million pounds per year. This program is scheduled to expire at the end of 2005.

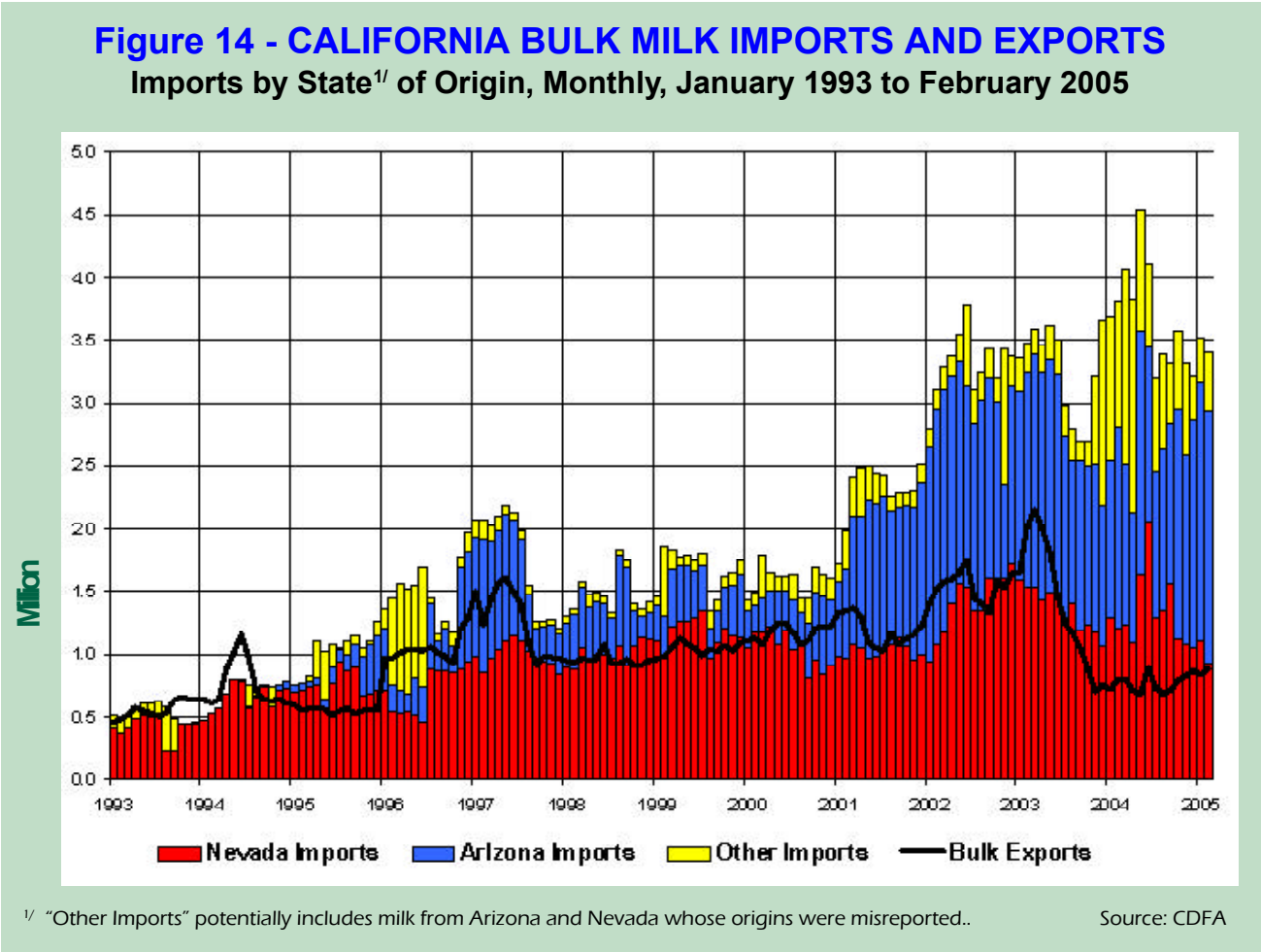
OTHER FACTORS

In addition to the above, in establishing the provisions of the Stabilization and Pooling Plan, the Department "shall take into consideration any [other] relevant economic factors" not specifically listed in the Food and Agricultural Code (§62802(h), §61805(b), §62062, §62076 and §62076(c)).

At recent hearings, independent processors and distributors in the Northern California Marketing Area have

documented their competitive disadvantage in competing with packaged milk from processors in Oregon regulated under a federal order. The California processors have contended that they are at a disadvantage because California fluid milk prices are higher than prices in Oregon.

Bulk milk shipments into and out of California are small relative to California’s total milk production. Exports have never exceeded two percent of total production, and over the last twelve months they have been at historic lows, averaging below one percent. Imports, once below one percent of total production, have averaged nearly four percent over the last twelve months. From 0.5 million pounds per day in January 1993, imports rose to 4.5 million pounds in May 2004 and for the last twelve months have averaged 3.6 million pounds. Over the same period, exports rose from 0.5 million pounds per day to a peak of 2.2 million pounds per day in March 2003 and for the last twelve months have averaged 0.8 million pounds per day. The vast majority of imports are utilized in Class 1 products. However, the relative amount has changed with time, from a high of 98 percent in October 1995, Class 1 utilization of imported milk fell to 67 percent in December 2003. As of February 2005, utilization has risen to 86 percent. Historically, over 90 percent of bulk milk imports came from Nevada; and the volume of imports from Nevada were roughly equal to the volume of exports. However, starting in 1995, significant volumes of milk began coming in from Arizona, peaking at 61 percent of all California imports in January 2002. Over the last twelve months, volumes of imports from both states have been about the same: 1.3 to 1.4 million pounds per day. (See Figure 14 – note that the term “Other” potentially includes milk from Arizona and Nevada whose origins were misreported. This may explain the large volumes of “Other” milk in early 1996 and early 2004.)



California Milk Pricing Formulas

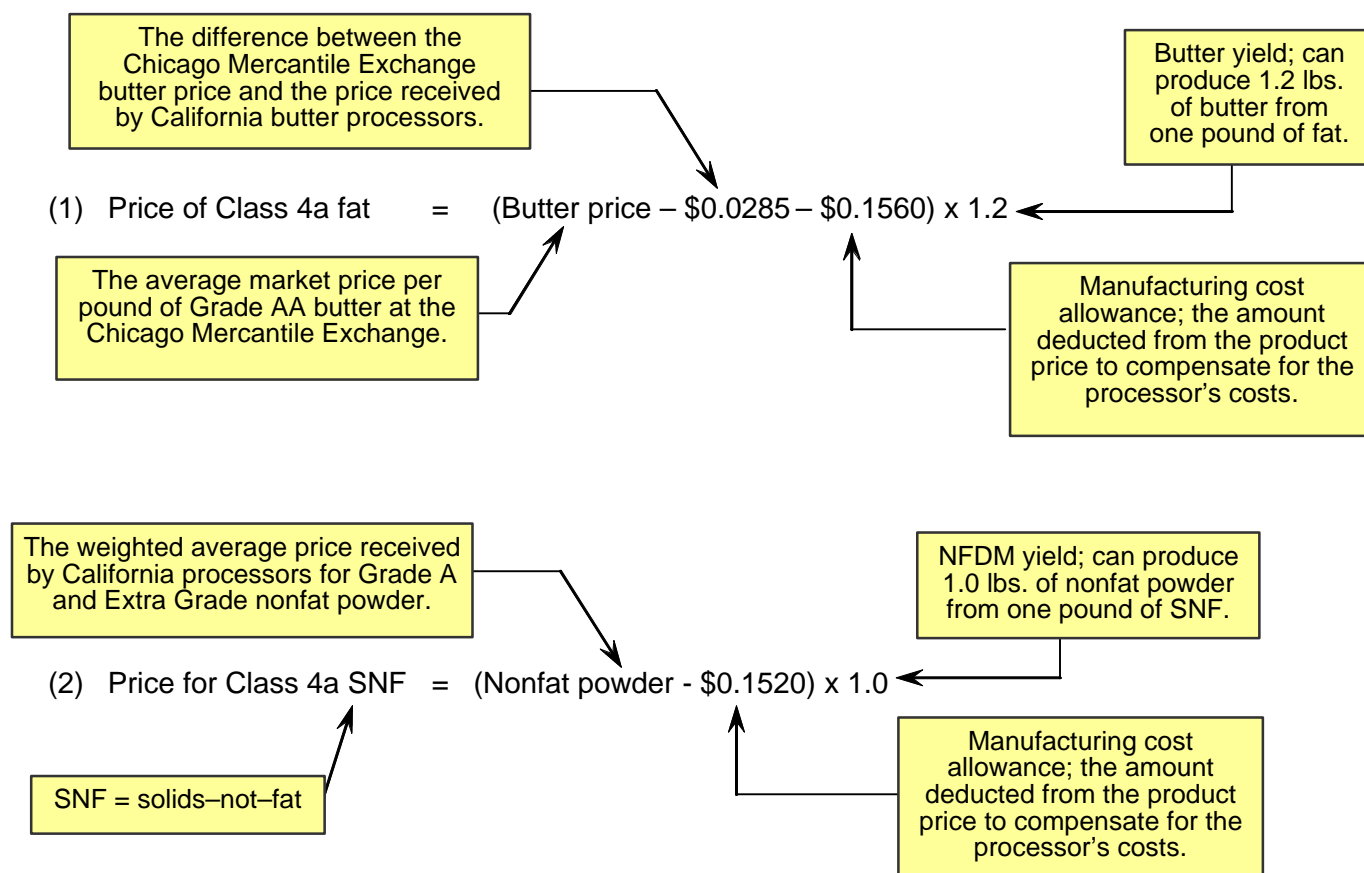
California's milk marketing program establishes minimum prices that processors must pay for Grade A milk received from dairy farmers. For the purposes of setting prices, there are five classes of milk that are established depending on the type of dairy product. In California's milk pricing system, commercial market prices for dairy product commodities are the most significant factor in determining the minimum price that processors must pay for milk.

Milk consists of three basic components: butterfat (fat), solids-not-fat (SNF), and fluid carrier (water). 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. Because prices are determined for individual milk components, a simple calculation must be performed to obtain the implied hundredweight price. Class 1, 4a, and 4b prices are adjusted monthly, and Class 2 and 3 prices are adjusted bimonthly.

The Five Classes of Milk

- Class 1: Milk used in fluid products, including whole, lowfat, extra light, and nonfat milks.
- Class 2: Milk used in heavy cream, cottage cheese, yogurt, and condensed 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.

Class 4a price formula (butter and dry milk products)



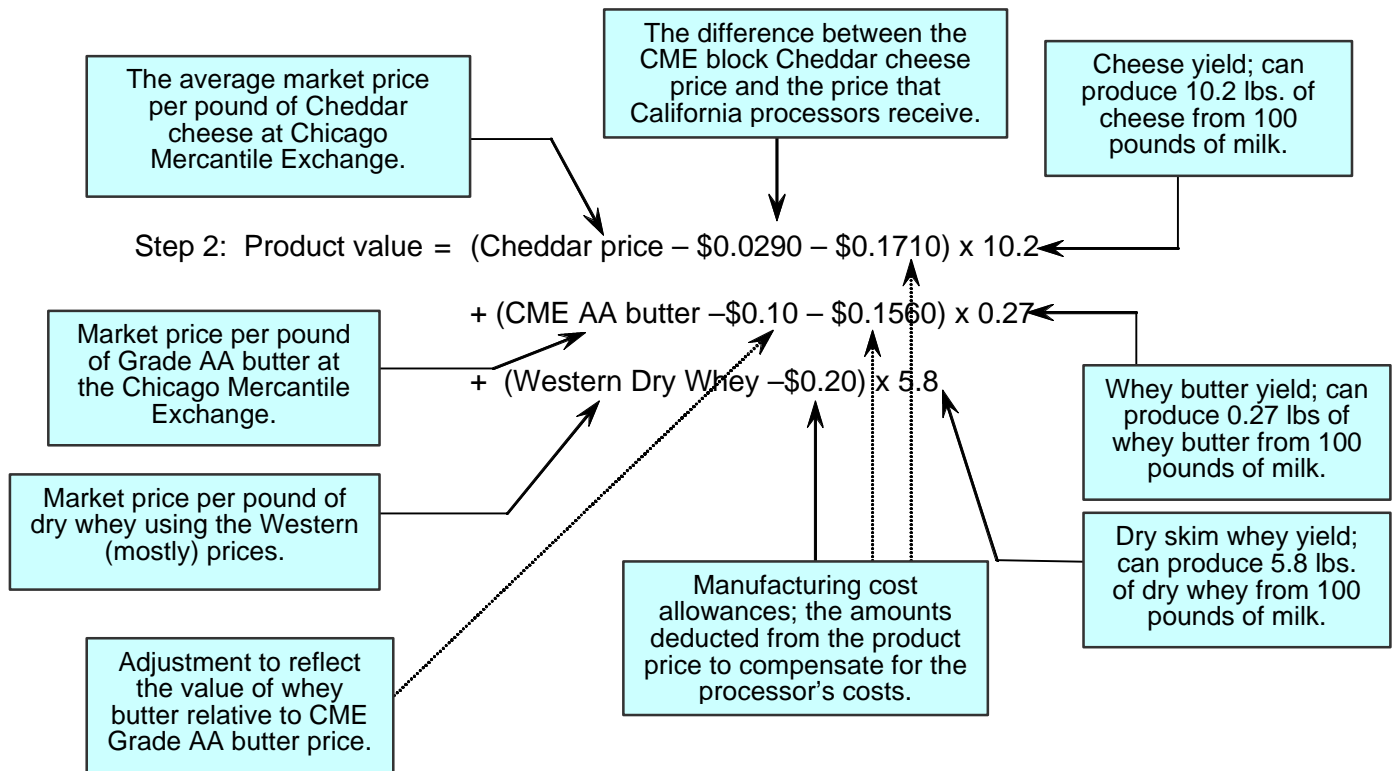
(3) Class 4a price per 100 pounds of standardized milk (@3.5% fat and 8.7% SNF)

$$= (3.5 \times \text{price of Class 4a fat}) + (8.7 \times \text{price of Class 4a SNF})$$

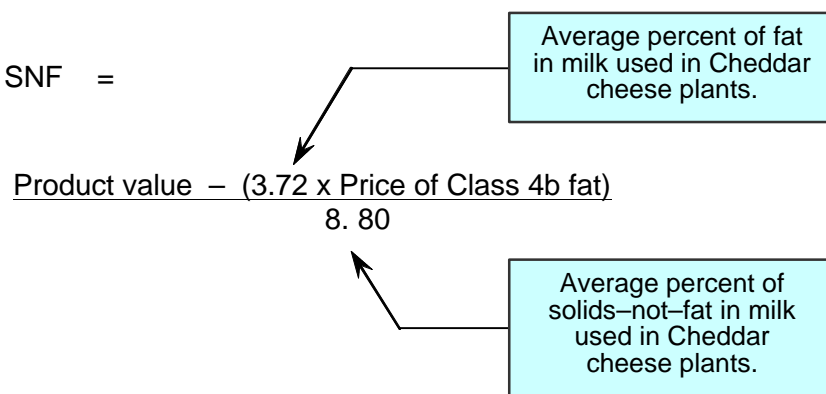
Class 4b price formula (cheese)

The Class 4b price calculation consists of four steps. The first step sets the fat component price in 4b milk to that of 4a milk. The second step determines the product value of cheese and Grade B butter per hundred pounds of milk. The third step identifies the 4b SNF price. The fourth step converts the component prices to a standardized milk price.

Step 1: Price of Class 4a fat = Price of Class 4b fat



Step 3: Price of Class 4b SNF =

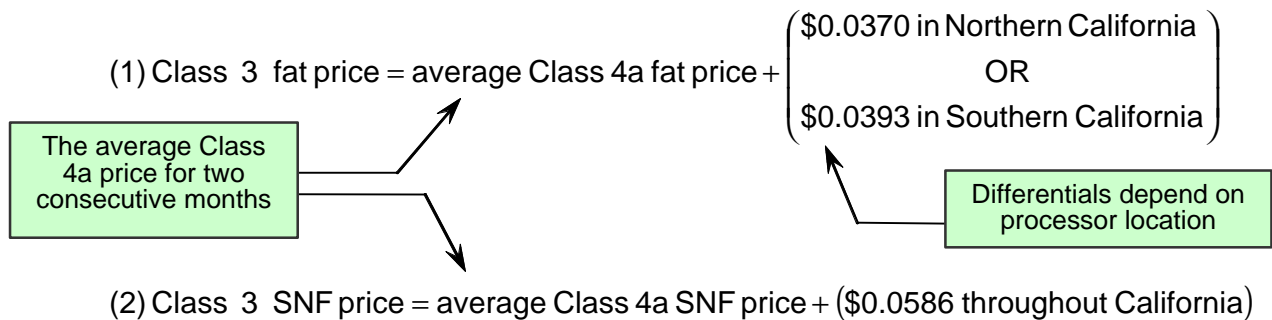


Step 4: Class 4b price per 100 pounds of standardized milk (@3.5% fat and 8.7% SNF)

$$= (3.5 \times \text{price of Class 4b fat}) + (8.7 \times \text{price of Class 4b SNF})$$

Class 3 price formula (frozen dairy products)

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 3 milk uses the average Class 4a component prices for December and January.



(3) Class 3 price per 100 pounds of standardized milk (@3.5% fat and 8.7% SNF)

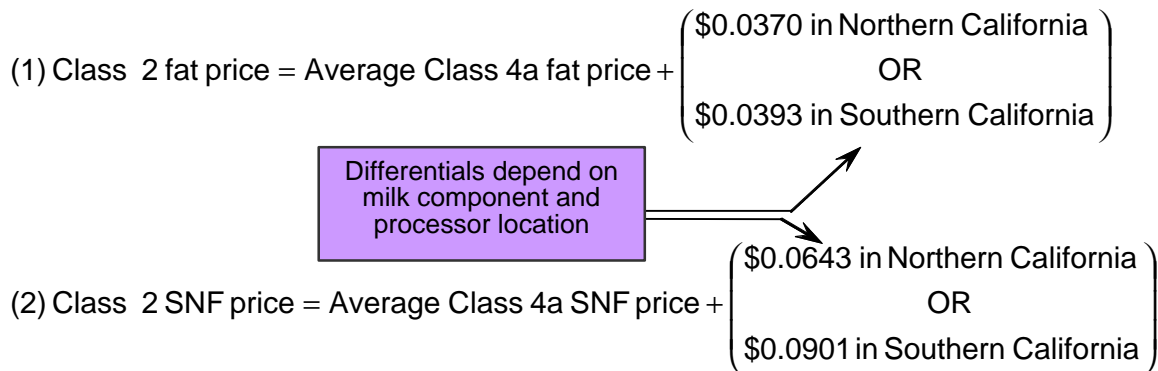
$$= (3.5 \times \text{price of Class 3 fat}) + (8.7 \times \text{price of Class 3 SNF})$$

For any month in which the Secretary implements the collection of charges for the Milk Producers Security Trust Fund, the minimum Class 3 price shall be increased by: \$0.0071 per pound of fat, and \$0.0029 per pound of SNF

Class 2 price formula

(sour cream, heavy cream, cottage cheese, and yogurt)

Like the Class 3 prices, Class 2 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 milk uses the average Class 4a component prices for December and January.



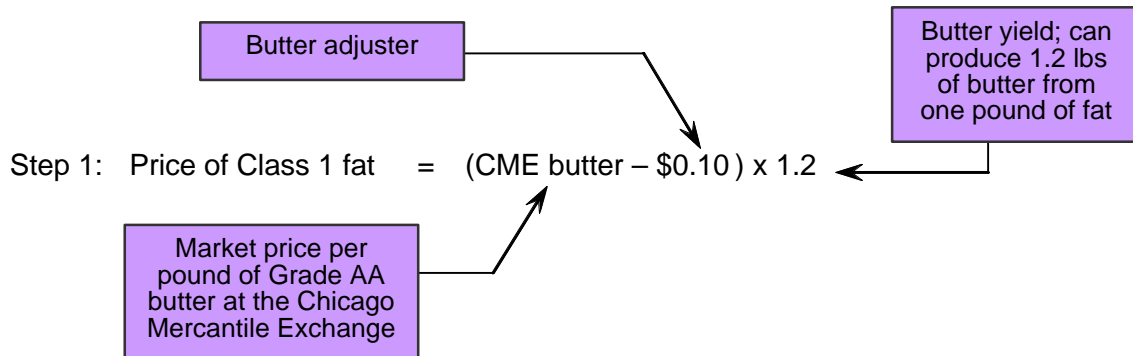
(3) Class 2 price per 100 pounds of standardized milk (@3.5% fat and 8.7% SNF)

$$= (3.5 \times \text{price of Class 2 fat}) + (8.7 \times \text{price of Class 2 SNF})$$

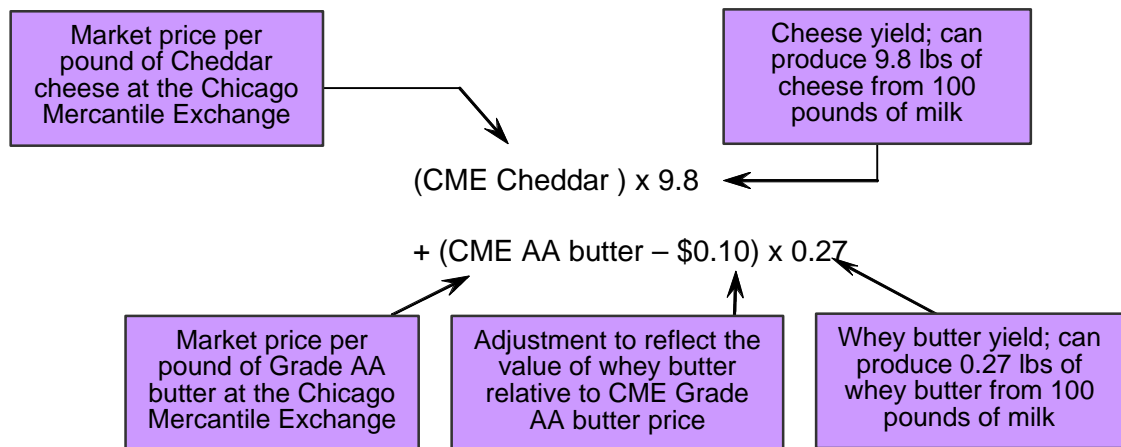
For any month in which the Secretary implements the collection of charges for the Milk Producers Security Trust Fund, the minimum Class 3 price shall be increased by: \$0.0071 per pound of fat, and \$0.0029 per pound of SNF

Class 1 price formula for fluid milk products

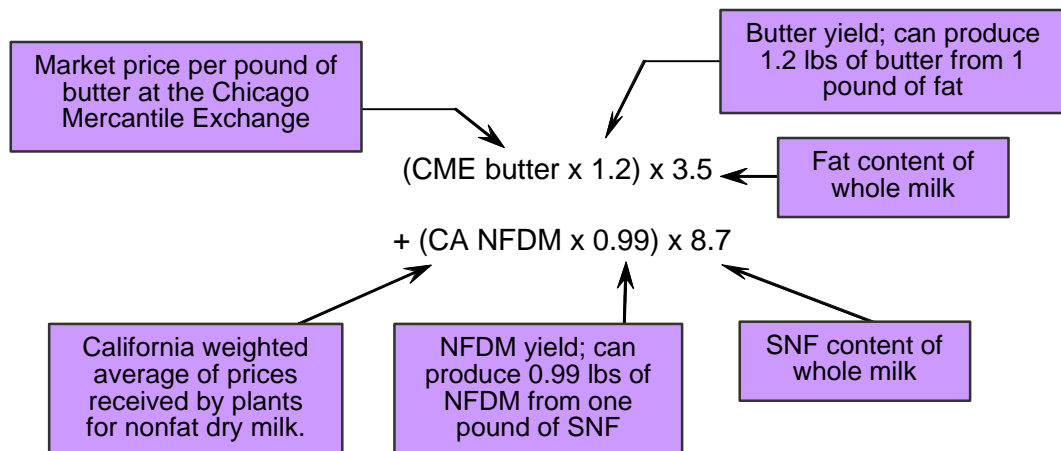
Determining the price for fluid milk products involves several steps. The Class 1 fat price for fluid milk pricing formula is set directly and uses the Chicago Mercantile Exchange (CME) butter price with an adjustment. The SNF and carrier prices are calculated as residuals. They rely on a basic price 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 value of the Class 1 fat price is subtracted from the CRP and the remaining residual value is allocated to SNF and carrier. Once the component prices have been assigned to fat, SNF, and fluid carrier portions of milk, these component prices are converted to a standardized milk price.

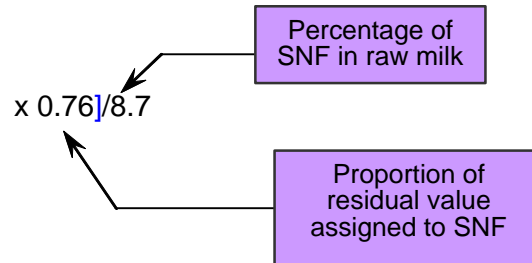
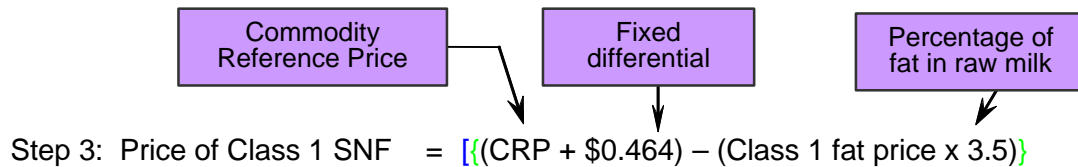


Step 2: Commodity Reference Price = the **higher of** two price calculations:

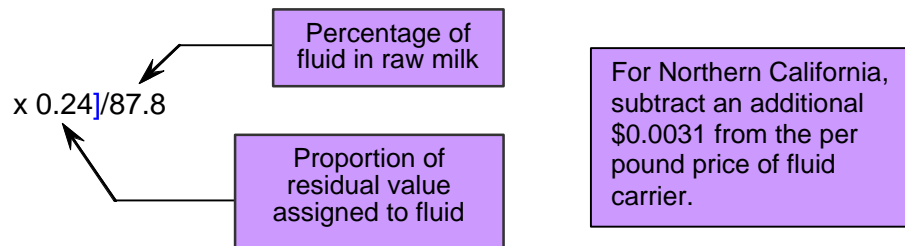


OR





Step 4: Price of Class 1 fluid = $\{[(\text{CRP} + \$0.464) - (\text{Class 1 fat price} \times 3.5)] \times 0.24\} / 87.8$



Step 5: Class 1 price per 100 pounds of milk (@3.5% fat and 8.7% SNF)

$$= (3.5 \times \text{Class 1 fat}) + (8.7 \times \text{Class 1 SNF}) + (87.8 \times \text{Class 1 carrier})$$

For any month in which the Secretary implements the collection of charges for the Milk Producers Security Trust Fund, the minimum Class 3 price shall be increased by:
 \$0.0051 per pound of fat, \$0.0023 per pound of SNF, and \$0.0001 per pound of carrier