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— DISCUSSION —
**IMPACTS OF PAST U.S./CANADIAN DAIRY PROGRAMS
ON STRUCTURE, EFFICIENCY, AND TRADING RELATIONSHIPS**

Donald R. Nicholson

The Federal milk order program is a marketing plan with the basic objective of increasing returns to dairy farmers by segregating the disposition or usages of raw Grade A milk so as to prevent the last one hundred pounds of milk from setting the price for the entire market, i.e., price discrimination.

The majority of the milk supply was manufacturing grade in the early days of orders. The Grade A supply was centred around metropolitan areas and eventually a surplus of Grade A milk developed around the population centres. Most of the milk was processed by proprietary firms and most of the cooperatives were bargaining organizations.

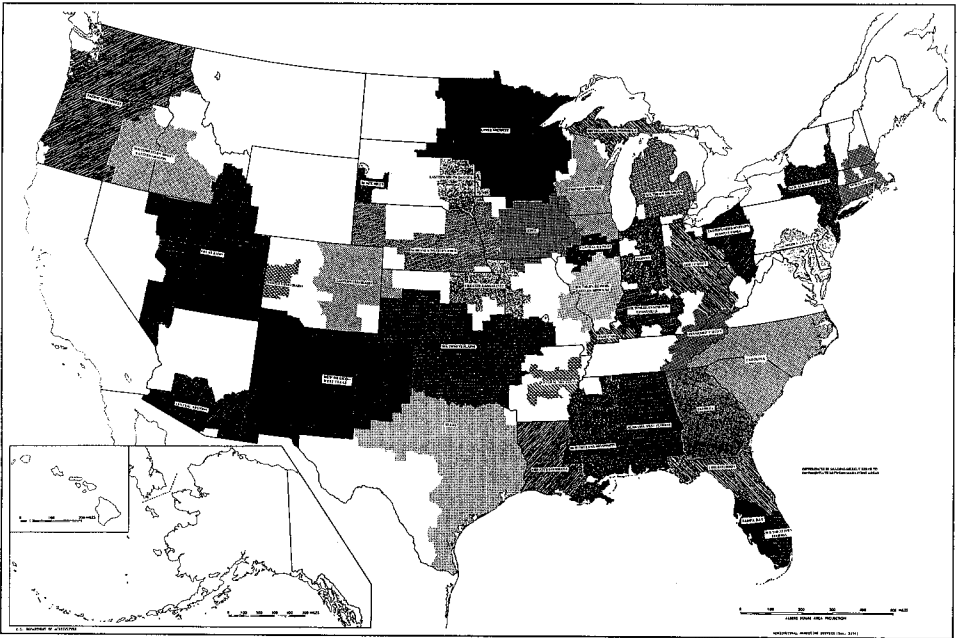
Implementation of classified pricing spread rapidly across the country. Class prices were determined by private negotiation. The utilization was proclaimed by the processor in the form of an individual handler pool, and bargaining cooperatives would question the utilization of their member's milk. The honour system on accountability soon became one of dishonour. The cooperatives insisted upon an audit of their class utilizations and processors reluctantly agreed. Proprietary firms were not interested in cooperative personnel auditing their plant records. Public accounting firms were engaged in some markets. High standards of ethical business conduct were lacking in many cases. Suffering also, was the integrity of the producer butterfat testing program.

Farmer unrest and consumer dissatisfaction were quite common. Disorderly marketing conditions were paramount. During the early 1930s efforts were made by the federal and state governments to correct the situation brought about by unprecedented economic conditions in rural America. The federal effort commenced with the Agricultural Adjustment Act of 1933, the origin of our current enabling legislation. The Agricultural Act of 1949 provides the foundation for the dairy support program.

The Federal order program regulated 73 percent (108.6 billion pounds) of the fluid grade milk marketed in the United States during 1995 and 70 percent of the total milk marketed (Figure 1). There were 88,727 producers delivering an average of 3,352 pounds of milk per day to 599 regulated handlers. Payments to producers averaged \$12.78 per

hundredweight in 1995, which amounted to a gross value of \$14.0 billion on all producer milk marketed under the program. Currently, about 58 percent of the milk marketed is under a multiple component pricing structure, and 43 percent of the milk is priced based on multiple components and somatic cell counts.

Figure 1. Marketing Areas under Federal Milk Orders as of January 1, 1994



Stability and orderly marketing, intrinsic to the Federal milk programs, have contributed to the production of 155 billion pounds of milk for \$20 billion. Consumers on the other hand, pay approximately \$67 billion for milk and milk products produced in this country. Milk production during 1995 totalled 592 pounds per capita with 1995 per capita consumption of 577 pounds. The top five producing states are California, Wisconsin, Pennsylvania, New York and Minnesota. They accounted for over 51 percent or 80 billion pounds of the total milk produced during 1995.

A regulated classified pricing program has been essential in our dairy economy for reasons other than to maximize total revenue to dairy farmers. Historically, it has been necessary to integrate manufacturing grade milk into the dairy marketing channel. Class III and III-A prices reflect the value of manufacturing grade milk in Federal milk orders. Fluid milk utilization within Federal milk orders was approximately 41 percent during 1995. Milk utilized in fluid products accounted for approximately 36 percent of the total U.S. 1995 milk supply.

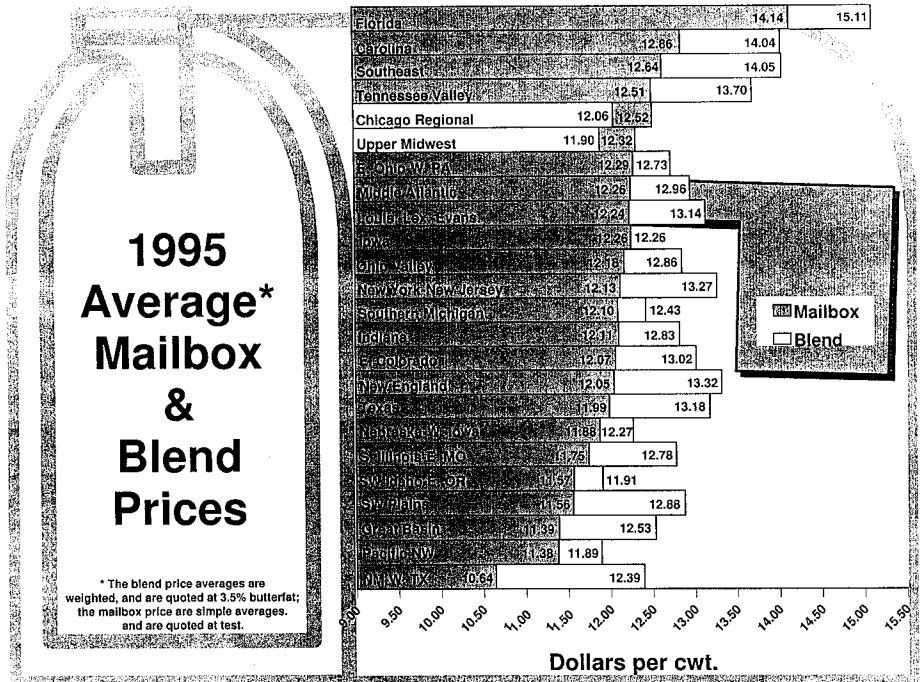
Through the milk price support program the Commodity Credit Corporation (CCC) removes dairy products from the commercial marketplace. The percent of the total milkfat and solids non fat which is removed via CCC purchases was about one percent in 1995. Approximately 1.5 billion pounds of milk was collectively removed during 1995. The support price has decreased since 1982 from \$12.80 to the current level of \$10.25. Mandatory government assessments imposed on dairy farmers began in April 1983 and continue today. Since 1983, dairy farmers have paid between \$2.5 and \$3.0 billion into the federal treasury.

The 1995 (CPI) All Milk Price Index of 93.9 reflects the fact that U.S. dairy farmers have not kept pace with the price consumers pay for all dairy products nor have they kept pace with all retail items. The spread between the prices that dairy farmers receive and the prices that consumers pay for dairy products has continued to grow. Class I price differentials between retail and farm prices vary widely from \$1.20 in the upper midwest to over \$4.00 in the southern extremes. The present Class I differentials were mandated by the U.S. Congress in the 1985 farm bill and have remained a controversial issue since then. Retail prices do not necessarily follow this pattern nor do fluid milk product sales react in direct relationship to changes in Class I prices.

A record high Class I price in the Federal milk order program occurred in February 1990. The Class I prices were indexed to indicate monthly fluctuations. Class I price changes have a minimal effect on Class I sales. The trend toward lower milkfat content in Federal order Class I sales continues. The decrease in the butterfat content of Class I milk from 1978 to 1994 has resulted in the necessity to utilize some 200 million pounds of milkfat per year in other products. The 1994 per capita milkfat consumption is at a record high of 21.2 pounds despite the decreases in the utilization of butterfat in fluid milk products.

Comparing the Federal order Class I price differentials with per capita milk production by states can give an indication of how Federal order blend (uniform) prices are related geographically. The difference between the 1995 average blend price and average Class III price in the Upper Midwest Federal order is 7 cents. In the Texas Federal Order, the difference between the average blend and average Class III is \$1.35. These are minimum prices as announced for each of the Federal orders. However, when examining mailbox prices (prices that best represent what dairy producers are actually paid) one becomes aware of a different perspective in terms of the geographical variations. In fact in the Chicago Regional and Upper Midwest the mailbox price exceeds the blend price (Figure 2).

Figure 2. 1995 Average* Mailbox and Blend Prices



* The blend price averages are weighted; the mailbox price averages are not.

The value of skim and butterfat in 100 pounds of Class III milk has shifted over the past seven years. During 1989, the value of skim and butterfat were roughly equal. With the exception of some aberrations in 1995, the first part of 1996 is back to “normal” with about 79 percent of value on skim and the balance on butterfat.

Presently 58 percent of producer milk under Federal milk order system is being valued on a Multiple Component Pricing program while the balance is still priced on the traditional skim/butterfat method. Quality differentials are now being applied to 43 percent of the Federal order producer receipts in the form of somatic cell adjustments in prices paid. Quality differentials will become a bigger factor in the industry. Future consideration might value the freshness aspect of milk. Quality payments reflecting the “freshness” factor in terms of time from farm to the plant may become important.

The present classified pricing program in Federal orders has categorized products along traditional product lines. For various reasons, some being outdated, fluid products

The present classified pricing program in Federal orders has categorized products along traditional product lines. For various reasons, some being outdated, fluid products have been assigned values greater than manufactured products. The need to integrate manufacturing grade milk into Federal order dairy programs was one reason for Class III prices which provided an outlet for moving these products into the commercial market. Based on changing elasticities of demand for these manufactured products, one might envision a price structure where selected manufactured items might be valued higher than some fluid products, a situation brought about by deregulation proponents where processing plants would purchase milk from dairy farmers and make products without recognition of any classified pricing program. Present industry participants know what kind of an economic umbrella they need to survive with the current programs. However, those who advocate privatization may or may not be equipped with the proper economic sun screen to survive the heat.

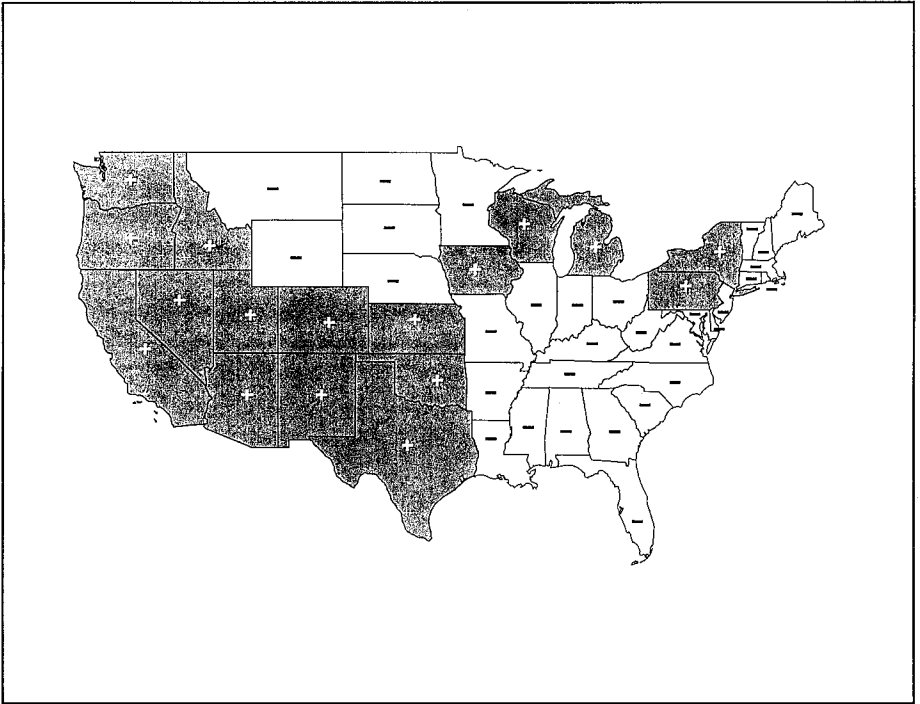
Some of the changes we can anticipate include:

1. The dairy industry is moving in the direction of one grade of milk. Today 96 percent of milk supply is Grade A.
2. Under the Federal milk order program, 43 percent of producer milk is eligible for a quality differential.
3. One class is likely in a deregulated environment.
4. 58 percent of the producer milk in the Federal order program is priced under a Multiple Component Pricing plan. That will continue to expand.
5. "Detailed/Accurate" compositional labelling will become prevalent because of the compositional differences among "like" milk products.

With the compositional labelling we have today, the labels on milk cartons may read the same even though the actual contents could be different. This situation occurs in many markets today. Consumers of tomorrow will be dissatisfied with the generic labelling on fluid milk products. They will insist on more detailed nutritional labelling than was available in the past. The "baby boomers" children and grandchildren will be more aware of food composition and will want a specific level of nutrient intake.

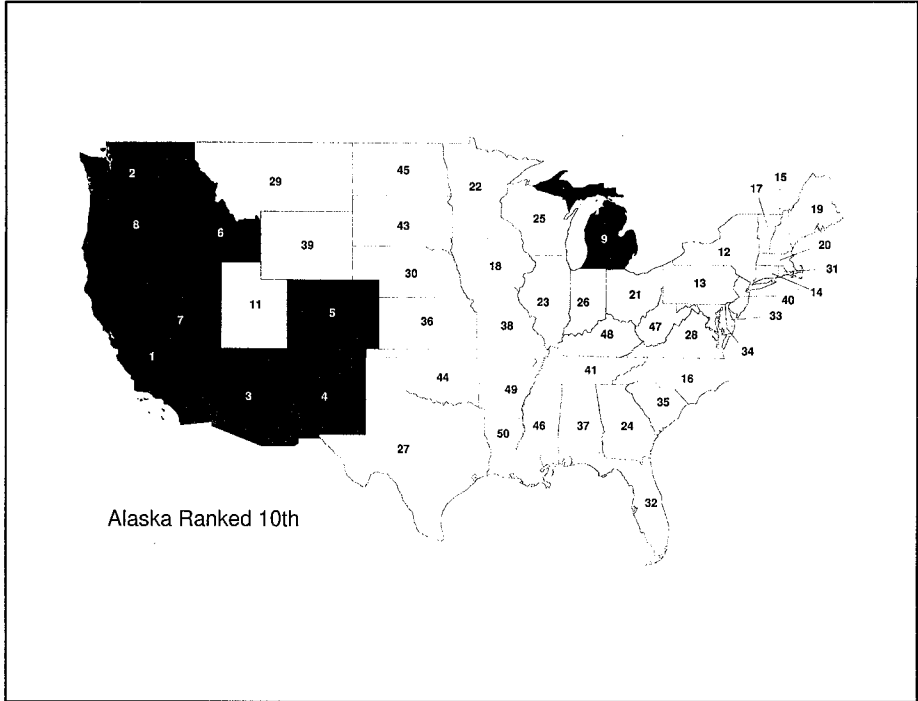
Changes in state milk production trends during the next few years are indicated in Figure 3. Production will continue to expand in the west and southwest reflecting in part the technological advantage of a late start.

Figure 3. Changes in Milk Production by Year 2000



States are ranked by milk production per cow in Figure 4. The top ten states are comparable to the states with predicted growth in milk production. This highlights the geographic regions where milk production will most likely continue to increase. In view of milk production increases occurring in areas that are not major population centres there will be a need to move milk from these regions to deficit areas. Reverse osmosis and ultra-filtration may be used to economically move the modified milk. Value based marketings will occur through contractual integration between producers and their marketing agents. This will become a major factor in the pricing of an individual producer's milk with or without deregulation.

Figure 4. 1995 Milk Production Per Cow Rankings by State with the Top Ten States Highlighted



Many view dairy exports to Mexico as a boom for the U.S. dairy industry. The last three years have shown that this environment is highly sensitive to political moves and exchange rate adjustments. Today few would raise trade with Mexico in the same light.

