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MILK MARKETING ORDERS

Options for Change

GAO/RCED-88-9

GAO
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General Accounting Office
Washington, D.C. 20548

**Comptroller General
of the United States**

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To the President of the Senate and the
Speaker of the House of Representatives

This report discusses the federal milk marketing order program and its impact on dairy surpluses, as well as regional issues. This report also provides, for congressional consideration, our analysis of several policy options for changing the milk marketing order program.

We conducted the review because of continuing congressional and industry concern with dairy surpluses and resulting government costs, and because of concerns expressed that the federal milk marketing orders were contributing to the problem.

We are sending copies of this report to the Director, Office of Management and Budget, and to the Secretary of Agriculture.

This work was performed under the direction of Brian P. Crowley, Senior Associate Director. Other major contributors are listed in appendix VIII.

Charles A. Bowsher
Comptroller General
of the United States

Executive Summary

Purpose

Because of continuing congressional interest in dairy programs and in solving the dairy surplus problem, GAO has reviewed several aspects of federal milk pricing policies in recent years. This report focuses on how (1) the milk marketing order program affects the U.S. dairy surplus problem, (2) the program might be changed to reduce incentives for milk production, and (3) such changes would affect the surplus and the program's ability to meet dairy policy goals related to market orderliness, national production, local supply, consumer prices, and producer returns.

Background

A major objective of federal dairy policies has been assuring an adequate supply of milk. Two interrelated programs to accomplish this objective are milk marketing orders and price supports. Milk is the only commodity with both order pricing and price support programs.

Marketing orders regulate milk marketing in areas of the United States where producers have voluntarily adopted them. Orders, supervised by the U. S. Department of Agriculture (USDA), set forth marketing practices, terms and conditions of sale, minimum prices that must be paid by handlers, and distribution of returns among producers. Orders apply only to grade A milk (milk produced to specified sanitary standards and eligible for fluid consumption) regardless of end use. Most milk produced in the United States is used for manufactured dairy products, even though a majority of milk produced is grade A.

In the 1960s, a uniform pricing system was started under milk marketing orders, based on competitive prices paid for milk by selected manufacturing plants in Minnesota and Wisconsin. These prices are the basis for all prices paid to farmers delivering milk to plants regulated by federal orders east of the Rocky Mountains. Milk marketing west of the Rocky Mountains appears to be influenced by prices in California. California has state pricing policies for which the federal support price serves as a floor. (See ch. 1.)

Results in Brief

The milk marketing order system should be changed because its provisions have contributed to excess production and treat some producers unfavorably compared with others.

GAO believes that the premises for milk pricing under federal orders are outdated. A need no longer exists to encourage and maintain a locally produced supply of milk. Milk is produced in all regions of the country.

and technologies are available to transfer it, either as fluid or in a form to be later reconstituted as fluid, should local shortages develop.

Two strategies are available for changing the milk marketing order system—adopting production controls or lessening government influence on milk prices. GAO prefers the latter and offers ideas for doing so, while preserving policy goals.

GAO's Analysis

Outdated Pricing Policies

Fluid milk prices under federal orders have two components in addition to the Minnesota-Wisconsin price for milk used for manufacturing. One, a grade A differential, is a $1.04 per hundredweight (cwt) incentive to encourage farmers to upgrade their facilities to meet higher grade A sanitary standards. The other component, a distance differential, increases the guaranteed price for milk used for fluid consumption and is generally based on the distance a plant is from the Eau Claire, Wisconsin, basing point.

The milk marketing order pricing policies are not based on current dairy market conditions for the following reasons:

- The grade A differential is far higher than the added cost of producing grade A instead of grade B milk. The added cost may be no more than 15 cents per cwt, whereas the differential is $1.04. Further, about 88 percent of all milk produced in the United States is grade A.
- Distance differentials are no longer appropriate. They produce a regional price structure that bears no consistent relationship to regional variations in the cost of production or of obtaining supplies from alternative sources.
- Marketing order provisions (down allocations and compensatory payments), designed to economically discourage the shipment of surplus milk from one market area to another unless there is a deficit, effectively prohibit the use of reconstituted milk, a more efficient means for moving milk between distant locations.

Effect on National Production

National milk production increased 15 percent between 1977-79 and 1984-86. The economic incentives provided by the milk marketing orders, through the grade A and distance differentials, contributed to

this increase in production. At any given support price, federal orders add a price differential that encourages additional milk production. In the past, any such additional production led to larger surpluses. However, as a result of the supply-demand adjuster provisions in the Food Security Act of 1985, any increases in production that could result in annual federal purchases in excess of 5 billion pounds now trigger a downward support price adjustment.

Effects on Regional Production Patterns

Distance differentials provide production incentives in all regions of the country, except the Upper Midwest. These differentials were increased by the Food Security Act of 1985. The greater these differentials, the greater the production incentives, and therefore the more likely that surpluses will rise high enough to cause the support price to fall. A combination of higher differentials and lower support prices can have a particularly adverse impact upon traditional milk-producing regions of the Upper Midwest, which receive little or no benefit from the differentials, but which would be hurt by declines in the support price.

For example, the Upper Midwest, which also has a higher cost of production than some regions, potentially could experience reduced profitability. The same could be true for the Corn Belt, the Northeast, and the Southeast, which, while they benefit from the distance differentials, have a higher cost of production. Regions with a lower production cost and high distance differentials, such as the Southwest, Southern Plains, and Northwest, may become the major milk-producing regions. (See ch. 2.)

Strategies for Change

Two basic strategies for changing federal milk marketing orders could be pursued. If production controls are chosen as a strategy for change, a marketing quota system is an option that has been suggested by some industry sources. Such a system would limit the quantity of milk that could be marketed at a given price by each producer and in total. Such a quota system could reduce national production but has numerous drawbacks. GAO does not prefer this strategy.

GAO's preferred strategy is to take steps to lessen government influence on milk prices to permit market forces to play a greater role. Options to be considered include establishing more basing points; eliminating the grade A differential, distance differentials, down allocations and/or compensatory payments; eliminating orders entirely; or eliminating only order pricing provisions while retaining supervision provisions.

These options would reduce the influence of marketing orders on regional production patterns. National production would also fall, but such decline may be offset if the supply-demand adjuster causes the support price to rise. A possible first step would be to establish more basing points to reduce the influence of orders on regional production patterns. After allowing time for the industry to adjust, consideration could be given to removing down allocation and compensatory payment provisions to make reconstituted milk more competitive. After another adjustment period, it might be possible to eliminate the grade A and distance differentials. At this point, pricing provisions would have been eliminated but USDA supervision would remain. The next step might be to eliminate orders entirely. (See chs. 3 and 4.)

Matters for Consideration by the Congress

The Congress should consider setting a goal of decreasing the federal role in milk pricing; working with USDA to develop and adopt legislation necessary to accomplish that goal; and directing the Secretary of Agriculture to (1) monitor industry conditions that result from changes to pricing policies and (2) act, if necessary, to help the industry adjust. (See ch. 4.)

Agency Comments

USDA said it shared GAO's interest in resolving the dairy surplus problem and lessening government influence on milk prices while preserving dairy policy goals. However, USDA commented that the price support program played a larger role in creating surpluses than marketing orders. GAO agrees. However, as a result of legislative actions since 1980, marketing orders are playing an increasing role in influencing milk prices and attracting resources into milk production. USDA commented further that widespread support for changing milk marketing orders does not exist in the dairy industry. GAO agrees that a consensus for change does not exist; however, support does exist in some regions. USDA stated that several options would require legislative change. GAO agrees.

USDA also took issue with some of GAO's analysis and suggested changes to the report. GAO addresses these issues and made changes in the report where appropriate. (See ch. 4 and app. VII.)

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Abbreviations

AMS	Agricultural Marketing Service
ASCS	Agricultural Stabilization and Conservation Service
CCC	Commodity Credit Corporation
CED	Community and Economic Development Division
cwt	hundredweight
ERS	Economic Research Service
GAO	General Accounting Office
M-W	Minnesota-Wisconsin
RCED	Resources, Community, and Economic Development Division
TEFAP	Temporary Emergency Food Assistance Program
USDA	U.S. Department of Agriculture

Introduction

Since the federal government became involved in the dairy industry over 50 years ago, a major objective of its dairy policies has been to assure an adequate supply of milk. It has initiated two interrelated programs that have significantly affected the industry's ability to generate the necessary supply: the price support and the milk marketing order programs. These programs have been so successful that the dairy industry has consistently produced considerably more milk and dairy products than consumers will buy at prevailing prices.

Federal milk marketing orders set forth acceptable marketing practices, terms and conditions of sale, and prices. Each order contains two basic sets of provisions. One fixes the minimum prices that must be paid by milk handlers. The other specifies how the returns for selling milk are to be distributed among producers. Federal market orders are voluntary—producers must choose by a two-thirds vote to have a market order apply to their area before it becomes effective. Market orders apply only to milk eligible for fluid use.

The price support program helps ensure dairy farmers a minimum average price for milk they produce. It is uniform nationwide. To support milk prices, the Commodity Credit Corporation (CCC) purchases any quantity of butter, cheese, or nonfat dry milk that is offered and meets quality specifications. Such purchases reduce excess supplies of dairy products on the commercial market. The purchase prices for butter, cheese, and nonfat dry milk are based on the support price plus a manufacturing allowance to cover the costs of processing milk into these products. Over the past 10 years, the cost of buying this dairy surplus has increased substantially. In fiscal year 1979, the lowest level of purchases in the last decade, the federal government spent just under $247 million on surplus dairy products. Purchases peaked in fiscal year 1983 at more than $2.7 billion. In fiscal year 1986, the government spent about $2.0 billion on surplus dairy products.

The combination of price supports and marketing orders is found only in the dairy industry. Marketing orders are in effect for many fruits, vegetables, and specialty crops, and price supports are in effect for a number of commodities such as wheat, feed grains, cotton, and honey. However, unlike milk marketing orders, fruit and vegetable orders do not include a structure for pricing. Instead, they affect prices through controls over grade, size, and/or quantities flowing to market, depending on the order. Both the price support and marketing order programs for milk rely on pricing mechanisms to generate adequate milk supplies.

For a number of years, the Congress has struggled to control the growing milk surplus and reduce government expenditures—a struggle influenced by the sensitive political and economic nature of the issue. Legislators, dairy farmers, processors, and consumers have differing views on how best to deal with overproduction and resolve the imbalance between supply and demand. Although the Congress has passed several laws freezing or lowering the support price, charging dairy farmers assessments on milk they sell, and creating programs to divert or cease milk production, the problem of excess milk remains. As a result, the debate over how best to deal with the milk surplus continues, with all segments of the dairy industry proposing solutions.

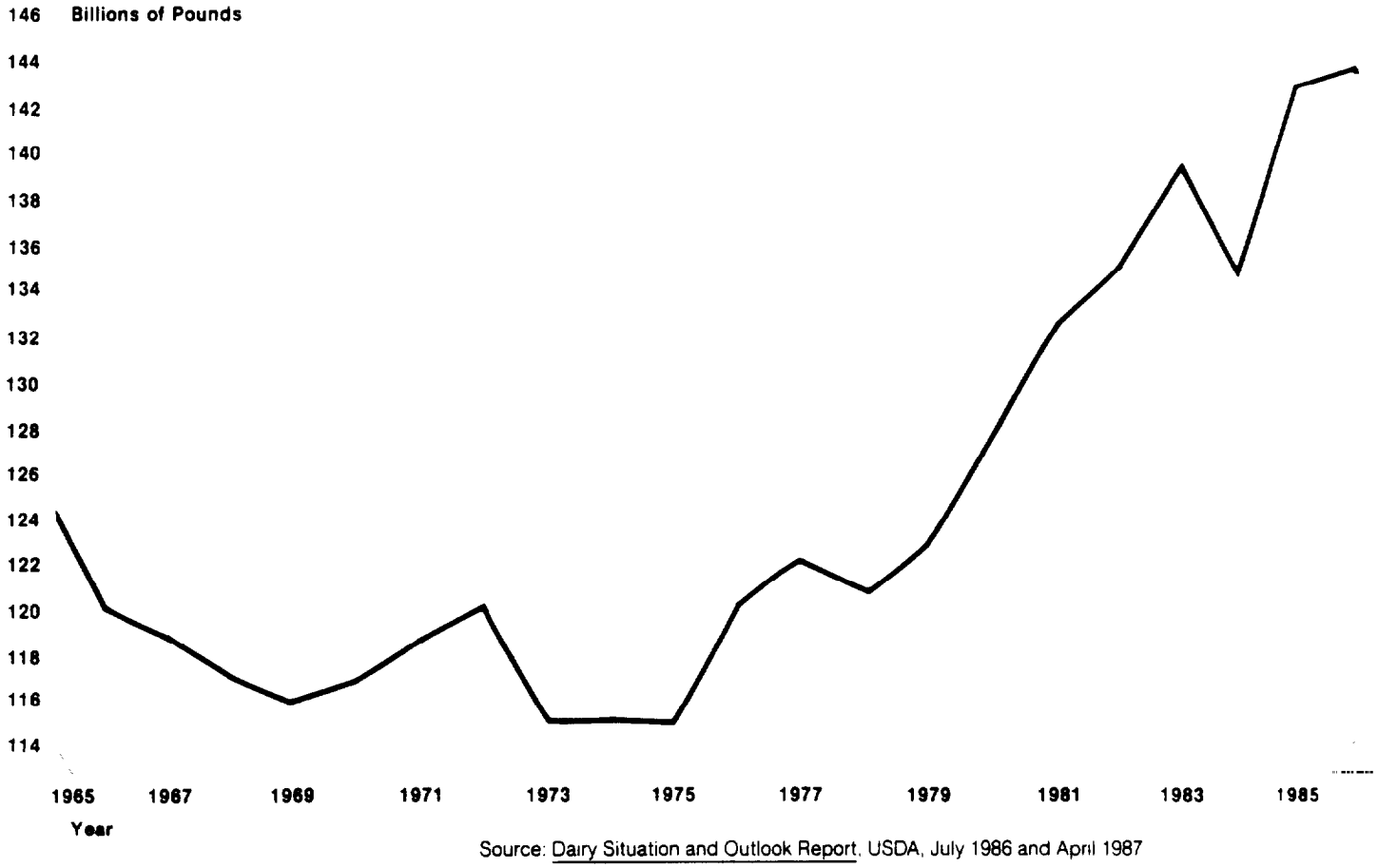
Production and Consumption Trends in the Dairy Industry

Americans buy milk in fairly constant quantities throughout the year, but milk production is more seasonal than consumption. Most milk is produced in spring and early summer and the least in late fall. In addition, because fluid milk is highly perishable and subject to bacterial contamination, it must be produced and handled under sanitary conditions and marketed quickly. Milk not consumed in fluid form must be processed into manufactured products to prevent loss. Thus, assuring an adequate but not excessive supply of milk is a complicated task.

Between 1965 and 1975, milk production showed a downward trend. Production began to increase sharply beginning in 1976. Annual output increased by about 29 billion pounds between 1975 and 1986, from about 115 billion pounds to about 144 billion pounds. (See fig. 1.1.)

Most milk produced in the United States is sold for off-farm, or commercial use. Dairy farmers sell two grades of milk. Grade A may be used for fluid consumption or in manufactured products. Grade B can be used only for manufactured products. Farmers producing grade A milk must adhere to higher sanitation requirements than for grade B milk. The bulk of all milk sold goes into manufactured dairy products, and the remainder is used for fluid consumption and other purposes.

Figure 1.1: U.S. Milk Production, 1965-86

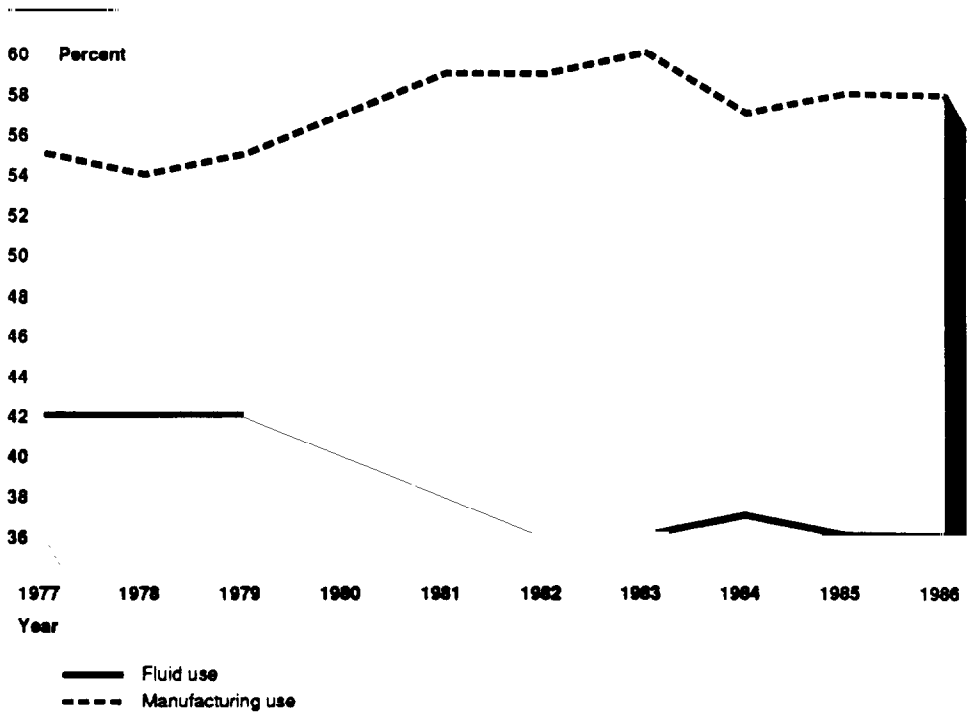


Source: Dairy Situation and Outlook Report, USDA, July 1986 and April 1987

Between 1977 and 1986, while milk production was increasing, the percentage of milk consumed in fluid form compared with the total amount of milk produced decreased from 42 percent to 36 percent. Conversely, the percentage of milk used for manufactured products increased from 55 percent to 58 percent.[1] (See fig. 1.2.)

[1]Balance of use defined by USDA source as "minor miscellaneous uses and any inaccuracies in independently determined use items."

Figure 1.2: Milk Uses, 1977-86, in Milk Equivalents



Source: Dairy Outlook and Situation Yearbook, USDA, July 1985, and Dairy Situation and Outlook Report, USDA, July 1987.

Because production has outpaced commercial use, the industry has surplus milk, which the federal government acquires under its price support program in the form of butter, cheese, and nonfat dry milk. Before 1980, surpluses and federal government costs were relatively small: in fiscal year 1979, the federal government bought about 1.1 percent of the milk that dairy producers marketed, at a cost of $246.7 million. By 1983, federal purchases had increased to 11.7 percent of milk marketed, at a cost of $2.7 billion. Purchases decreased somewhat to about 8 percent and about $2 billion in 1984, 1985, and 1986, but they were still significantly higher than in the late 1970s. Table 1.1 shows government purchases of butter, cheese, and nonfat dry milk, and the associated costs for 1977-86.

Table 1.1: U.S. Government Purchases Under the Dairy Price Support Program, 1977-86

Dollars in millions

Year	Total CCC purchases[a]	Percent of production	Cost
1977	6 8	5 6	$720 8
1978	3.5	2 9	445 0
1979	1.4	1 1	246 7
1980	8.3	6 4	1,262 4
1981	12 6	9.5	1,990 7
1982	13.7	10.1	2,282.4
1983	16.3	11 7	2,716 0
1984	10.3	7 6	1,983 2
1985	11.4	8.0	1,819 8
1986	12.3	8.6	2,036 0

[a]CCC purchases of butter, cheese, and nonfat dry milk in milk equivalents, expressed in billions of pounds. Milk equivalent refers to the amount of milk required to produce the quantity of cheese, butter and nonfat dry milk purchased by the CCC.

Source: ASCS Commodity Fact Sheet, USDA, March 1987

The Federal Role in Pricing Milk

The U.S. Department of Agriculture (USDA) administers the milk marketing and price support programs, each of which is partly aimed at assuring an adequate supply of milk. Reacting to disruptive events in the nation's milk marketing during the 1930s (see app. I for a history of dairy programs), the federal government created milk marketing orders. In the 1940s, the government created the price support program to increase milk production. The interrelation of these two programs makes dairy price regulation unique among federal agricultural programs.

Price Supports Put a Floor on the Price of Milk Used for Manufacturing Purposes

Price supports, created by the Agricultural Act of 1949 (7 U.S.C. 1421-1449), are administered by USDA's Agricultural Stabilization and Conservation Service (ASCS) through the CCC, a wholly owned government corporation created in 1933. CCC supports the price for milk sold for manufacturing uses by establishing a federal government offer to purchase quantities of butter, cheese, and nonfat dry milk that are offered and meet specifications.

The government's purchase prices, which include allowances to cover processing costs, imply a specified support price for milk sold for manufacturing uses. If market conditions warrant, the market prices for manufactured products can rise above the government's purchase prices. In

practice, however, the government's purchase prices have generally, although not always, been set high enough so that the market price for milk sold for manufacturing uses has been close to the support price.

The method for setting the milk price support level was based on the concept of parity, a standard used to measure the degree to which farm prices reflect farm purchasing power. Prices are said to be at parity when the relationship between what farmers earn and what they can buy is the relationship that prevailed between 1910 and 1914. The 1949 act required the Secretary of Agriculture to establish the milk support price at between 75 and 90 percent of the parity price; however, since October 1980 the support price has been legislated as a specific dollar amount per hundredweight (cwt) of milk.

Milk Marketing Orders Set Minimum Prices for Milk Consumed in Fluid Form

Marketing order provisions created under the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601-624), are intended to promote orderly market conditions in fluid milk markets, assure consumers (both locally and nationally) of an adequate supply of good quality milk, stabilize milk prices, and improve farmers' income. To fulfill these objectives, milk marketing orders establish minimum milk prices in specified marketing areas that milk processors (handlers) must pay farmers. Cooperatives are allowed to charge processors a price higher than the price of milk used for fluid consumption (class I price), which in the industry is referred to as over-order premiums.

Federal orders also set forth acceptable marketing practices, and terms and conditions of sale. USDA's Agricultural Marketing Service (AMS) administers the program in the 44 areas (see fig. 3.1) that are currently subject to orders. Marketing orders are legal instruments, and once issued by the Secretary of Agriculture, are binding on all handlers operating in the regulated area. Marketing orders apply only to grade A milk.

The prices set by the milk marketing orders depend on how the grade A milk is used. Under this pricing system, each order sets a specified minimum price for milk in as many as three different classes. Class I milk is used for fluid consumption. It is the highest price class. Class I prices generally apply to milk sold as whole milk, skim and low-fat milk, milk drinks, and buttermilk. Class II milk is used to manufacture soft products, such as ice cream and cottage cheese. Class III milk is used in manufacturing hard products, such as butter, cheese, and nonfat dry milk. Some orders have only two classes of milk, putting all milk except fluid milk into class II.

Federal Milk Orders Establish a National Pricing System

A national pricing system for milk used in fluid products was not established until the 1960s. Before World War II, markets had been geographically separated and located around major cities. Each market had developed its own pricing scheme, without regard to the pricing policies of neighboring markets. Local markets were free to establish prices on the basis of general economic conditions and the local supply and demand for fluid milk.

In the 1960s, as technological change reduced the cost of transporting milk, local pricing policies were replaced by a uniform pricing system for federal milk marketing orders. This system was based on prices paid to farmers for grade B milk in Minnesota and Wisconsin. These states were selected because they produce a substantial share of grade B production, and they have been the major source of reserve supplies of grade A milk. To arrive at the price, known as the Minnesota-Wisconsin (M-W) price, USDA obtained price information on manufacturing grade milk purchased by milk processing plants it surveyed in Minnesota and Wisconsin. The competitive price paid for milk by these plants became the basis for all prices paid to farmers delivering milk to plants regulated by federal milk orders.

To set the actual minimum prices in an order area, USDA first sets the price for class III milk. Orders usually require that handlers buying class III milk pay the same price that manufacturing plants pay for grade B milk in Minnesota and Wisconsin. The class II price is set at a few cents above the class III price. USDA updates these prices monthly.

Class I prices, however, are different in each order. To set the class I price in each order, USDA first adds a fixed amount, $1.04 as of February 1988, to the class III price. For purposes of this report, the difference between the class I and class III prices at Eau Claire, Wisconsin, is called the "grade A differential". This name was adopted for simplicity even though what is being measured is the difference in price based on use, not grade, in Eau Claire. We adopt this term because the term class I differential is frequently used to measure the combined effect of the higher minimum price required for grade A milk and an additional differential for class I milk at other locations based on distance from Eau Claire. The grade A differential gives farmers economic incentives to upgrade their operations to meet the higher sanitary standards required for fluid milk.

Until 1985, for markets east of the Rockies, USDA added to each order's minimum class I price a distance differential equal to 15 cents per cwt for

each 100 miles the plant was distant from Eau Claire, Wisconsin. Distance differentials were intended to represent the cost of transporting milk from surplus milk-producing areas to deficit areas to avert shortages that might develop otherwise. They were established to make it profitable for Upper Midwest producers to ship milk elsewhere when necessary. The Food Security Act of 1985 increased the minimum class I prices in some orders so that there is no longer a proportional relationship between an order's minimum class I price and its distance from Eau Claire. In general, however, the more distant orders have higher minimum class I prices.

Individual dairy producers or cooperatives within an order actually receive a "blend price". The proportion of milk that is used in class I, II, and III products is determined for the market order area and a weighted average price for all milk marketed in that area is calculated. Each independent producer or cooperative then receives this blend price regardless of how the milk supplied is used.

Classified Pricing Links All Milk Prices to the Support Price for Milk Used for Manufacturing Purposes

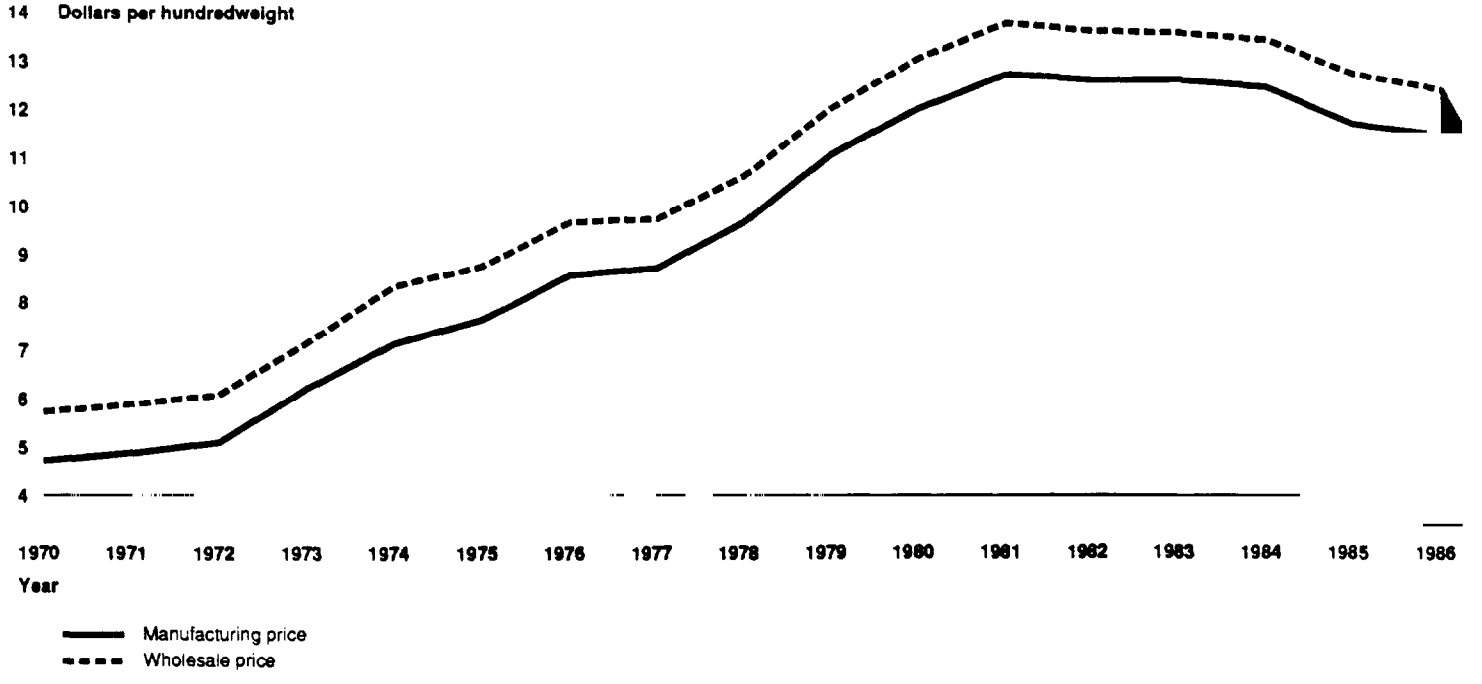
Because of the relationship between these three class prices to the M-W price, whenever market prices for milk used in manufacturing are at or below the support price level, any change in the support price results in a change in the market order minimum prices in all classes, including milk used for fluid consumption. As a result, the average price paid by processors for all milk, as reflected in the all-milk wholesale price, closely tracks the price received for manufacturing grade milk. (See fig. 1.3.) Therefore, through the classified pricing aspect of the federal order program, higher support prices are translated into higher prices for all milk, in either fluid or manufacturing uses.

Uniqueness of Western Milk Pricing

Milk pricing west of the Rocky Mountains is different from milk pricing east of the Rocky Mountains. California, the major milk-producing state west of the Rocky Mountains, is not covered by federal milk marketing orders. It has employed its own milk pricing regulations since the mid-1930s. It uses much the same classified pricing system as in federal orders with two major differences:

- Producer pricing gives heavy emphasis to milk production costs to periodically adjust the overall price level. An economic formula, as opposed to the M-W price, is used to change prices on a monthly basis for milk used for fluid purposes; and

Figure 1.3: Average Manufacturing Grade Milk and All Milk Wholesale Prices, 1970-86



Source Dairy Situation and Outlook Report, USDA, July 1986 and December 1986

- A base plan is used to allocate receipts from fluid use (class I) sales. Only those producers who have an allocated production base have access to the preferred class I market.

For other western milk-producing states, the M-W price is used as the base for setting the manufacturing use (class III) minimum price as well as for changing the minimum fluid price (class I). However, the distance differential does not solely depend on the distance from Eau Claire. The California price also becomes, in effect, a base that influences the distance differential, and it lowers it. The western class I differentials (the combination of the grade A differential and the distance differential) are lower because they appear to be influenced by the California pricing formula, which is partly based on lower production costs. For example, while the Black Hills order class I differential is $2.05, the Puget Sound-Inland order (located west of the Black Hills order) class I differential is $1.85. Likewise, while the Texas order class I differential is $3.28, the Central Arizona order (located west of the Texas order) class I differential is $2.52. The California price appears to have influenced prices in

the Puget Sound-Inland and Central Arizona orders, while Eau Claire is the base for the Black Hills and Texas orders.

If the Puget Sound-Inland milk prices were based on a distance differential of 15 cents per 100 miles from Eau Claire, the distance differential alone would be about $2.35, compared with the class I differential of $1.85, which includes both the grade A and distance differentials. Using the same base, the Central Arizona distance differential would also be about $2.55, compared with a class I differential of $2.52, which also includes both components.

How Orders Are Created and Administered

Orders are established or changed through standard administrative procedures. Interested parties—usually dairy farmers or their cooperatives—petition the Secretary of Agriculture for an order or a change to an order. AMS then determines whether the proposed order or change meets certain requirements—whether, for instance, it has potential for improving marketing conditions and has enlisted substantial producer support. If the proposed order or change meets requirements, AMS schedules administrative hearings to receive evidence on the need for the order, proposals for order provisions, and information on the potential effects of the order or change. All parties affected by the regulation—producers, cooperatives, handlers, the government, and consumers—can present evidence at the hearing. On the basis of the hearing record, AMS drafts a recommended decision and then a final decision on the order. To become effective, the order must be approved by producers selling to handlers in the order area.

Administration of the marketing orders rests with AMS. Each order is under the supervision of a market administrator appointed by the Secretary of Agriculture. Market administrators make rules and regulations to carry out the terms and provisions of the orders. They prepare monthly computations and announcements of prices, verify reports and payments through inspections of the handlers' records, furnish handlers monthly statements of their accounts, prepare and distribute statistics and other information on market supply and use of milk, and perform other tasks.

Amount of Milk Under Orders Is Increasing

Since the federal order system was initiated, more and more milk has been subject to classified pricing under milk marketing orders. In 1947, 29 federal milk orders were in effect, covering 21 percent of the nation's milk supply. The number of individual orders reached a maximum of 83

in 1962. By the end of 1986, as marketing areas expanded, the number had declined to 44 through consolidations. At the end of 1986, however, about 70 percent of all milk marketed in the United States was covered by federal orders.

Related GAO Reports

In 1980 we issued a report that discussed the consequences of possible new programs for controlling or minimizing government purchases of surplus dairy products.[2] In addition to discussing the need for alternative milk-pricing standards and a mandatory dairy promotion program, the report addressed other dairy policy alternatives such as production controls, target prices and deficiency payments, a national milk marketing order program, and deregulation of the industry.

In a September 1985 report,[3] we discussed federal dairy programs and policies, the surplus problem, and various alternatives to deal with this problem. Part of the report analyzed options for revising or replacing the price support program and described the extent to which various policy options met specific goals. One of the options advanced was deregulation of the dairy industry and the elimination of marketing orders and price supports. We pointed out that this option would meet most of the policy goals and would eliminate program costs. However, such a plan would create short-term instability in the dairy industry and would have an adverse financial impact on some dairy farmers and processors. In this report, we suggested that the Congress consider either the supply-demand adjuster or the moving-average price option as the pricing mechanism for establishing the support price.

The Congress enacted a price support supply-demand adjuster and authorized the establishment of a National Commission on Dairy Policy to study federal dairy policies. This Commission's work is scheduled to be completed in March 1988. Since our overview report, industry and congressional sources have expressed interest in federal marketing orders and their impact on production both from a national and regional perspective.

[2]Alternatives to Reduce Dairy Surpluses (GAO/CED-80-88, July 21, 1980).

[3]Overview of the Dairy Surplus Issue—Policy Options for Congressional Consideration (GAO/RCED-85-132, Sept. 18, 1985).

In July 1985, we issued a report that covered nine marketing orders involving vegetables, fruits, and specialty crops. [4] The study, which did not include milk marketing orders, noted that fruit, vegetable, and specialty crops, unlike milk, feed grains, and tobacco, have no price- or income-support programs and involve no federal subsidy payments. The report made several suggestions for improving program administration, including one that USDA develop criteria for measuring the performance of marketing orders and use decision papers to clarify benefits and shortcomings of orders or to justify changes in them.

Objectives, Scope, and Methodology

This report discusses the federal milk marketing order program and evaluates its role in meeting federal dairy policy goals. Specifically, our review sought answers to the following questions:

- What are the nation's dairy policy goals?
- How does the milk marketing order program affect the nation's milk surplus problem?
- How might the marketing order program be changed to reduce incentives for excessive milk production?
- What effect do marketing orders have on the regional distribution of milk production and producer returns?
- How would program changes affect milk surpluses and the program's ability to meet dairy policy goals?

To answer these questions, we researched the literature on milk marketing to determine what experts in the field believed were the major issues concerning the program. We also reviewed numerous studies on milk marketing orders conducted by government, industry, academic, consumer, and special interest groups.

To further our knowledge of the program and the industry, we also interviewed and obtained documentation from more than 40 individuals, chosen because they either were associated with the dairy industry or were considered experts on the dairy industry and the milk marketing order program. These individuals represented major dairy cooperatives, colleges and universities, dairy processing firms, trade associations, and state governments. They also included officials from such USDA agencies as AMS and the Economic Research Service (ERS). Discussions with USDA

[4]The Role of Marketing Orders in Establishing and Maintaining Orderly Marketing Conditions (GAO/RCED-85-57, July 31, 1985).

officials were held at USDA headquarters in Washington, D.C., and at the offices of nine market administrators located throughout the country.

To obtain a producer's perspective on issues involved in the marketing order program, we mailed questionnaires to 89 dairy farmers in 8 leading milk-producing states. We judgmentally selected these producers from eight milk-producing states (California, Florida, Iowa, New York, Tennessee, Texas, Washington, and Wisconsin) that would provide the necessary geographic coverage. Using AMS statistical data, we next identified these states' leading milk production counties. We then asked county agricultural extension service agents to identify dairy farmers in those counties who they believed would be knowledgeable about the program and willing to answer our questionnaire. In addition to requesting general demographic data, we asked the farmers whether they believed any changes were needed in the milk marketing order program and to identify any suggested changes. We used this information to help perform our analysis. However, the results do not necessarily represent views of producers in these states.

We also used and analyzed data from several sources to determine milk production and consumption trends, government purchases and inventories of dairy products, regional costs of production, and milk marketings under federal orders. We used this information to perform other analyses as well. Most of these data came from ERS, ASCS, and AMS' Dairy Division. For most of our analyses, we used data from 1977 through 1986. We selected this time period because it follows changes in dairy legislation and policy and because during this time there was a great surplus of dairy products.

For purposes of data analysis, we segmented the United States into eight milk production regions. (See app. II.) We judgmentally designated these regions to group states by common milk production practices and patterns. We did not use USDA's designations for dairy production regions because they do not include all states. For example, the USDA Southern Plains region contains only Texas. For our analyses, we assumed that the Texas cost-of-production data, which were all that was available, applied to our entire southern plains region, including Texas, Oklahoma, and New Mexico.

In our analysis of cost-of-production data, we considered the cost of production to be full economic costs. These costs include returns to operating capital, other non-land capital, and land, plus a factor for unpaid labor, as developed by ERS. We used these full ownership costs because

we believe they all must be considered by producers when they make a decision to go into dairying or to remain in dairying.

To evaluate options for changing the milk marketing order program, we identified the program's goals and determined the effects the various options would have on these goals. We were assisted in this analysis by Dr. Ronald D. Knutson, professor and extension economist at Texas A&M University, and formerly Administrator of the Farmer Cooperative Service and Chairman of the 1972 USDA Milk Pricing Advisory Committee. Dr. Knutson has extensive experience with dairy marketing and policy matters and had served as a consultant to us on several other reviews dealing with dairy programs.

At the conclusion of our review, we circulated a draft of our report for review to three agricultural economists (Dr. Bruce Gardner of the University of Maryland, Dr. Harold Harris, Jr. of Clemson University, and Dr. Robert Cropp of the University of Wisconsin-Platteville) who are knowledgeable about the federal milk marketing order program. Their comments were considered and incorporated where appropriate in this report.

We conducted our review between January 1986 and June 1987, in accordance with generally accepted government auditing standards.

Outdated Marketing Order Pricing Policies Contribute to Surplus Production

The pricing policies established by milk marketing orders were intended to encourage and maintain a locally produced supply of grade A fluid milk. These policies are no longer needed. Grade A fluid milk is produced in all regions of the country, and technologies are available to transfer grade A milk, either as fluid, or in a form to be later reconstituted as fluid, from one region to another that has developed an inadequate supply.

The milk marketing orders provide incentives to produce milk, in addition to the incentives provided by the price support program. Consequently, they have contributed to surplus milk production. Nationwide, milk production increased an average of 15 percent between 1977-79 and 1984-86. Production increased in all regions of the country, but the largest percentage increase occurred in the Northwest (38 percent), Southern Plains (25 percent), and Southwest (35 percent), where producers not only benefit from the lowest production costs but also from the higher minimum (guaranteed) price under the milk marketing orders than producers near the Upper Midwest basing point.

The rate of government purchases of surplus production under the price support program has also increased significantly in these same regions in recent years. Recent technological advances in dairy production threaten to further aggravate the milk surplus situation.

Marketing Order Pricing Policies Are Outdated

The dairy production and market conditions used to justify the federally guaranteed milk prices under marketing orders no longer exist for the following reasons:

- When the federally guaranteed marketing order prices were being justified, about 90 cents per cwt was added to encourage production of fluid grade milk because of the extra sanitation requirements associated with grade A certification. The grade A differential is $1.04 today, even though the additional cost of producing grade A milk may be no more than about 15 cents, and about 88 percent of all milk produced is grade A.
- When a national pricing system was established in the 1960s, producers were guaranteed higher minimum prices for milk sold for fluid purposes in markets distant from the Upper Midwest. At that time, the Upper Midwest was considered the nation's primary milk surplus region. The difference between the minimum fluid price in Eau Claire, Wisconsin, and elsewhere—known as the distance differential—was intended to represent the cost of transporting milk from the Upper Midwest to other

regions. These differentials were established to provide Upper Midwest producers with an economic incentive to transport milk to other regions if shortages developed. However, the effect of distance differentials has largely been to provide incentives for increased local production, leading to surpluses in many regions, at the expense of producers in other regions, with the additional guarantee bearing no relationship either to cost of production or to cost of obtaining an alternative source of supply. Further, the down allocation and compensatory payment provisions, as discussed on p. 29, foster local production of milk by protecting local producers from the competitive advantages of reconstituted milk from distant markets.

Grade A Differential Is Not Justified by the Additional Cost of Producing Grade A Milk

The grade A differential is an incentive payment that was set at about 90 cents per cwt to encourage farmers to upgrade their facilities to meet the higher sanitation standards for fluid milk. The 1986 report of the American Agricultural Economics Association's Task Force on Dairy Marketing Orders found that production cost differences between grade A and B are no more than 15 cents per cwt. However, the grade A differential under federal orders is now $1.04 as a result of the Food Security Act of 1985. Other sources, including economists and dairy farmers whom we contacted, generally indicated that production cost differences between grade A and B are considerably less than the grade A differential.

Since only 16 percent of the grade A milk pooled in the Upper Midwest federal order is allocated to class I, the grade A blend price received by dairy farmers pooled under that market is only 14 cents above the grade B milk price. This is far less than the grade A differential. The difference between the blend price and the grade B price is what grade A dairy farmers receive for covering the added costs of producing grade A milk. However, since a higher proportion of the total U.S. milk supply is grade A over time and the overall class I utilization rate is declining, the class I differential is higher than is needed to attract an adequate supply of grade A milk for fluid milk markets.

The grade A differential is uniform throughout all order areas. As such, it benefits producers in all regions, especially those having a lower cost of production. Further, it no longer appears justified since about 88 percent of all milk produced in the United States, by regulated and unregulated producers combined, is grade A.

Distance Differentials Favor Producers in One Region Over Another

Distance differentials were set up to make it profitable to transport milk from surplus to deficit areas. When the differentials were established, it was assumed that the Upper Midwest was the nation's primary surplus region. These differentials increase as the distance from the Upper Midwest becomes greater. Although designed to provide incentives for Upper Midwest producers to transport milk to other regions, distance differentials increased the incentive to produce milk in areas further from the Eau Claire, Wisconsin, basing point. Further, this incentive is particularly strong in the Northwest, Southwest, and Southern Plains because production costs in those regions are less than in the Upper Midwest, and minimum fluid milk prices are higher.

The distance differential pricing system with a single basing point at Eau Claire makes most sense if it can be assumed that the area around Eau Claire is the only region from which surplus grade A milk can generally flow. While this situation may have been true when the distance differentials were established, it is no longer valid. Milk is produced everywhere in the United States, in some places at less cost than the Eau Claire area, and milk can be moved from any location to another, either in fluid or reconstituted form.

Furthermore, the effect of the distance differential as an incentive for producing milk was amplified when the Food Security Act of 1985 increased the class I price for most marketing orders. These increases in the class I price ranged from nothing in nine of the marketing orders, located primarily in the Northwest and Southwest, to $1.03 per cwt in the Southeastern Florida order. (See app. III.) Although the increases brought about by the 1985 act broke the strict link between minimum class I prices and distance from Eau Claire, the class I differential (which consists of the grade A differential and the distance differential) generally increases as the distance from Eau Claire becomes greater. (See app. III.) For example, the class I differential in the Upper Midwest order is $1.20; in the Memphis, Tennessee, order, it is $2.77; and in the Southeastern Florida order, it is $4.18.

Using USDA cost-of-production data, table 2.1 presents a regional comparison of producers' receipts from milk marketed with the same producers' cost of production from 1981 to 1986. While all regions are profitable, production costs in some regions have been lower than in the Upper Midwest. In 1986, cost of production ranged from $9.43 in the Southwest and Northwest regions to $12.74 in the Southeast. The Southwest and Northwest producers consistently had the lowest cost of production over the 6-year period. During 1985 and 1986, the Southern

Plains also had lower costs than the Upper Midwest. In contrast, the Northeast, Southeast, and the Corn Belt have consistently had higher costs than the Upper Midwest during the 6 years. To the extent that they have increased the prices producers have received, milk marketing orders have contributed to producers' profitability.

Table 2.1: Comparison of Milk Receipts and Cost of Production by Region in Dollars Per Hundredweight

Region and year	Milk receipts[a]	Total cost of production[b]	Profit
Corn Belt			
1981	14.71	13.97	0 74
1982	14.45	13 68	0 77
1983	14.41	14 58	(0 17)
1984	14.29	14.28	0 01
1985	13.46	13.02	0 44
1986	13.18	12.69	0 49
Northeast			
1981	15.22	12.85	2 37
1982	14.99	12 73	2 26
1983	14.91	13 11	1 80
1984	14.75	13 36	1 39
1985	13.92	12 10	1 82
1986	13.61	12 14	1 47
Southeast[c]			
1981	15.16	13.90	1 26
1982	14.87	13 14	1 73
1983	14.88	14 12	0 76
1984	14.90	14 27	0 63
1985	14.39	12.19	2 20
1986	14.01	12 74	1 27
Southern Plains			
1981	15.84	13 57	2 27
1982	15.53	13 23	2 30
1983	15.40	12.99	2 41
1984	15.14	13 54	1 60
1985	14.64	11 91	2 73
1986	14.46	11 25	3 21

(continued)

Region and year	Milk receipts[a]	Total cost of production[b]	Profit
Southwest and Northwest[c]			
1981	$14.39	$10.89	$3.50
1982	14.09	10.70	3.39
1983	13.95	11.47	2.48
1984	13.71	11.17	2.54
1985	12.96	10.14	2.82
1986	12.53	9.43	3.10
Upper Midwest			
1981	14.85	12.49	2.36
1982	14.56	12.63	1.93
1983	14.48	12.75	1.73
1984	14.35	13.00	1.35
1985	13.41	12.05	1.36
1986	13.28	11.74	1.54

[a]Includes receipts from cull cows, calves, and replacements.

[b]Economic (full ownership) costs.

[c]USDA's Pacific region renamed Southwest and Northwest; Appalachia renamed Southeast to conform with the GAO-designated regions.

Source: Economic Indicators of the Farm Sector-Costs of Production, 1986, USDA, ERS, November 1987, unpublished ERS revised cost of production data for 1981-83.

As a result of these cost and price differences, profits earned by dairy farmers have varied widely by region. Costs were sufficiently low in the Southwest and Northwest regions so that marketing order price differentials would not have been needed to cover producers' cost of production. During these 6 years, Southwest and Northwest producers had an average profit of $2.97 per cwt and could have made a profit selling at the price support level, which ranged from $11.60 to $13.10 during the 6-year period. In contrast, during the same period, Corn Belt producers experienced an average profit of 38 cents per cwt.

In 1986 the Southern Plains had lower costs and considerably higher prices than the Upper Midwest. Therefore, profits for the Southern Plains were similar to those of the Southwest and Northwest regions, even though the Southern Plains had considerably higher costs than the Southwest and Northwest. A portion of the higher receipts in the Southern Plains can be explained by high fluid use in that region. (See app. IV.) However, the stage is being set for surplus production in this region.

Down Allocation and Compensatory Payment Provisions Protect Local Producers

Down allocations and compensatory payments effectively prohibit the use of reconstituted milk, a more efficient means for moving milk between distant locations. Down allocation provisions price milk from distant markets in a lower price class regardless of its use, thereby eliminating any financial incentive for shipping milk into a market where it is not needed. Compensatory payments place a charge on milk shipped into a market except when the milk is needed, e.g., a deficit situation in the receiving market. A typical compensatory payment is the difference between the class I and class III price or the difference between the class I price and the blend price. Orders require processors who use reconstituted milk from another order to pay into the local order pool the difference between the class III price and the class I price. The effect is to make reconstituted milk noncompetitive with class I milk—particularly when the cost of reconstituting and the preference for fresh milk are considered.

Marketing Order Pricing Policies Contribute to Surplus Production

The milk marketing order program has contributed to surplus production. Federal orders add a price differential to the M-W price. As long as the federal support price was an effective floor price for manufacturing grade milk, any increase in the support price also increased the M-W price. Conversely, any decrease in the support price would decrease the M-W price. Since all federal order class prices were tied to the M-W price, all order prices rose, and, in response to the price increases, producers increased production. Since consumers did not consume all the increased production, surpluses increased.

By enforcing classified pricing—pricing according to use—the milk marketing order program allows producers to earn higher revenues from a given production level. When producers sell a product to two groups of buyers who differ substantially in their responsiveness to price changes, producers can often enhance their receipts when the two groups are charged different prices. This type of pricing, in which price differences do not reflect production cost levels, is referred to as price discrimination. In many markets, competition among sellers is likely to preclude price discrimination. Although some dairy cooperatives might have sufficient market power to practice price discrimination by charging higher prices for grade A milk used for fluid purposes than the same milk used for manufacturing, they would not have the same likelihood of doing so without marketing orders.

Dairy farmers are likely to benefit from price discrimination because it is generally believed that the demand for fluid milk is less responsive to

price changes than the demand for manufactured milk products. Therefore, farmers, through their cooperatives, are likely to be able to earn more from a given level of production by charging buyers using the milk for fluid purposes more, and buyers using the milk for manufacturing purposes less, than if the entire grade A milk supply had to be sold at a single average price. Consequently, by facilitating price discrimination, milk marketing order pricing policies have enhanced the profitability of milk producers, which in turn results in higher production levels.

Orders contribute to overproduction because the classified pricing scheme sends false economic signals to the individual producer. Assume, for example, a market with a class I price of $13.00, a class III price of $11.00, and a fluid utilization rate of 50 percent. Consequently, the blend price, which gives the economic signal to the producer, is $12.00. However, each incremental 100 pounds of milk is worth only $11.00 in the marketplace. As a result, this false signal creates overproduction.

Traditionally, the Upper Midwest and the Northeast have been the major milk-producing areas. Since the late 1960s, there has been a significant trend toward increased production in all areas of the United States but predominantly in the Northwest, Southwest, and Southern Plains. Data are not available to determine whether this increased production is solely attributable to the pricing policies of milk marketing orders. However, there is a relatively consistent correlation between profitability and increase in rate of production.

Table 2.2 shows that the regions with the greatest rate of increase in milk production between 1977-79 and 1984-86 were the Northwest, with a 38 percent increase, and the Southwest, with a 35 percent increase. The Southern Plains was next with a 25 percent increase. As table 2.2 indicates, these regions also experienced the highest average profit between 1977 and 1986. These regions also have higher differentials because of their distance from the Upper Midwest. The Corn Belt and the Southeast had only minor increases in production. However, the Southeast, with the highest differentials, has increased production even though it has a relatively high cost of production. (See app. V for additional information on production changes by state.)

Table 2.2: Profitability, and Changes in Profit, Rate of Production, and CCC Purchases by Region, 1977-86

Region	Average profit 1977-86 per cwt	Percent change in profit[a]	Percent change in production[a]	Percent change in CCC purchases[a,b]
Corn Belt	$0 52	(56)	6	66
Northeast	2 01	(29)	15	36
Northwest	2.96	(5)	38	695
Southeast	1 27	8	2	252
Southern Plains	2.59	(16)	25	4 227
Southwest	2.96	(5)	35	262
Upper Midwest	1.77	(19)	14	154
Western Plains	[c]	[c]	7	1 407

Note We did not include 1987 data because of the influence of the dairy termination program and lack of data.

[a]Average of 1984, 1985, and 1986 compared with the average of 1977, 1978, and 1979

[b]See appendix VI for purchase amounts.

[c]Cost data not available for this region

Source Economic Indicators of the Farm Sector—Costs of Production, 1986, USDA-ERS, November 1987, unpublished ERS revised cost-of-production data for 1977-85, Dairy Situation, USDA, March 1980 Dairy Situation and Outlook Report, USDA, April 1987, and ASCS Commodity Fact Sheet, USDA March 1987.

Table 2.2 also shows the rate of change in CCC purchases from 1984 to 1986 compared with 1977 to 1979. While increases in CCC purchases of manufactured dairy products have been occurring in all regions of the United States, the rate of change in some regions has been greater than in others. (See app. VI for further information on CCC purchases by region.) The Northwest, Southern Plains, and Western Plains had the largest rate of change. As illustrated in table 2.2, the correlation pattern between profitability, influenced by the higher differentials, and rate of change in milk production also carries over to the rate of change in CCC purchases.

Normally, CCC purchases would be expected to occur in regions with high production and low fluid use patterns, such as the Upper Midwest. However, because guaranteed prices under milk marketing orders provide increased incentives to produce milk as the distance increases from the Upper Midwest, all areas have increased production, so that CCC has purchased surplus manufactured dairy products. This relationship is especially evident from the increase in the rate of change in the purchases in those regions having high milk prices and low cost of production, such as the Northwest and Southern Plains.

Technological Advances Likely to Increase Surpluses

Recent increases in dairy productivity and emerging technologies have the potential to greatly increase milk output per cow while reducing production costs. These advances will further increase dairy surpluses. According to USDA, the rate of increase in milk production in 1988 is expected to be greater than the rate of increase in consumption.

Technology has contributed to increased milk production per cow during the last few decades. In 1934, when federal dairy programs began, annual average milk production per cow was only about 4,000 pounds. In 1986 it was about 13,000 pounds. According to a 1986 Office of Technology Assessment report, milk production per cow could rise to over 26,000 pounds by the year 2000.

Biotechnologies, such as artificial insemination, embryo transfer, and bovine growth hormone, appear promising for increasing herd productivity. Artificial insemination allows dairy farmers to breed their cows to the best bulls regardless of location; previously, they had been limited to locally available bulls. A USDA researcher estimated that artificial insemination has increased milk production by about 1,500 pounds per cow, on average. Since only about half of the nation's cows are now artificially inseminated, there is a great potential for increased use of this technology.

Embryo transfer involves the transfer of an embryo from the reproductive tract of one cow to another. According to one researcher, a high-producing cow, through embryo transfer, can produce 5 to 12 calves per year and more than 100 calves during her lifetime, compared with the usual 1 calf per year and an average 3.5 calves during a cow's lifetime. Calves resulting from the embryo transfer should have a high productive capability.

Bovine growth hormone is protein naturally produced by dairy cows, but it can be produced synthetically. Mass-producing this protein and injecting it into milk cows could increase milk production by at least 15 percent, according to Cornell University researchers.

Analysis of Options to Modify Federal Milk Marketing Orders

Because federal milk marketing orders have been in operation for a long time, and changes could have significant impacts on various segments of the dairy industry, careful evaluation is required of options for changing orders. The options we analyzed have been suggested by various industry representatives, or discussed in literature reviewed for this study. Each of these options represents possible changes in federal milk marketing order policies and provisions.

In this chapter, each of these options is defined, objectives are specified, and the likely consequences are discussed. The specific options analyzed include:

- eliminate grade A differential;
- eliminate distance differentials;
- establish more basing points;
- eliminate down allocations and compensatory payments;
- establish transportation pools;
- establish a standby pool;
- establish marketwide service payments;
- establish regional orders;
- establish a national order;
- establish marketing quotas;
- eliminate orders; and
- eliminate order pricing provisions, but retain order supervision.

In our discussion of the extent to which the various milk marketing order options and provisions affect surpluses or regional production patterns, we assume continuation of the price support program. Of particular importance to our analysis is the Food Security Act of 1985, which provides for reductions in the price support level when annual net CCC purchases are expected to exceed 5 billion pounds and increases when purchases are estimated to be not more than 2.5 billion pounds. These provisions imply that if adopting one or more of the options we discuss changes producers' receipts enough to cause large changes in milk production, leading to government purchases outside the 2.5 to 5 billion pound range, then the support price will change correspondingly to restore government purchases to that level. Therefore, changes in milk marketing order provisions could, in the long run, influence regional production and government purchase levels only within the target range. However, regional increases in milk prices brought about by federal order policies can add to the surplus and force support price reductions to maintain purchases within the limits.

We considered the following consequences in evaluating these options:

- How the option affects producer receipts. Overproduction is stimulated by milk prices that substantially exceed the cost of production. The price support program influences the overall level of prices, and the federal order program enhances the effects of the price support program on a national basis and provides further incentives on a regional basis. As a result, producer receipts may be changed either regionally or nationally. One particularly significant regional distinction is the effect on prices in Minnesota and Wisconsin compared with the rest of the country.[5] These two states were chosen because (1) a substantial share of grade B production occurs there, (2) the M-W price series is established there because most of the milk produced is used for manufacturing purposes, (3) the basing point for a majority of the country is located there, and (4) as a result, producers in these two states would be affected differently than in other regions of the country.
- How the option affects the orderliness of milk marketing. Orderliness in marketing is assumed to relate primarily to issues of equitable treatment in terms of pricing milk to both producers and processors. When producers receive different prices for milk sold under the same conditions, the resulting inequities lead to competition for the markets generating the higher receipts. Likewise, when processors pay different prices for milk purchases, their competitive position in processed product markets is affected. Therefore, they seek assurance that all other processors are paying the same price for milk purchased under the same conditions.

In setting only minimum prices, the Agricultural Marketing Agreement Act of 1937, as amended, apparently did not seek to achieve complete price uniformity. A degree of competition was apparently envisioned by allowing cooperatives to charge premiums over the federal order minimum prices, by allowing cooperatives to pay their producers less than the order minimum blend price, or by allowing processors to pay their independent producers more than the order minimum blend price. Cooperative premiums have become quite common in order markets as cooperatives attempt to cover the costs of serving milk processors in markets where the demand for milk is particularly strong relative to supply, or in markets where the dominant cooperative has a large share of sales and may have been able to exercise some market power.

[5]The basing point for pricing milk in most orders is located in Eau Claire, Wisconsin. In addressing these options, we used Minnesota-Wisconsin in lieu of Eau Claire for discussion purposes, recognizing that there is some differential in pricing between Eau Claire and the outer reaches of Minnesota and Wisconsin.

- How the option affects the level of national milk production. One of the prime objectives of the Agricultural Marketing Agreement Act of 1937, as amended, was to assure an adequate supply of milk. The act also specified the need to consider factors affecting the supply and demand for milk. After reviewing the legislative history of the act and previous studies of its objectives, such as the 1962 Nourse Committee report,[6] the USDA's Milk Pricing Advisory Committee concluded in 1973 that orders were intended to generate an adequate, but not excessive, supply of milk. The options we discuss can influence production by influencing producer returns. Options that result in reduced milk production could lead to reduced government expenditures for purchased manufactured dairy products.
- How the option affects the local supply of milk. When refrigeration was poor and interstate highways did not exist, a locally produced supply of milk may have been the only practical means of generating an adequate supply of milk for bottling purposes—regardless of the cost of production. This is no longer the case. Processors no longer need a locally produced supply of milk. For markets where the cost of production is high, it may be less expensive to rely on milk supplies from other markets to fill at least a share of the markets' needs.
- How the option affects consumer prices. While the order system was designed primarily to benefit producers, consumers have a legitimate, vested interest in milk prices. From a practical economic perspective, farmers, processors, and retailers should recognize consumers' interest in their milk pricing decisions, otherwise consumers may choose substitute products.

The consequences of each of these options are summarized on pages 62 and 63.

Eliminate Grade A Differential

Under classified pricing, milk marketing orders set higher required minimum prices for milk used for fluid purposes than for grade A milk used for manufacturing purposes. The difference in Eau Claire, Wisconsin, between the minimum class I and class III prices is defined in chapter 1 as the grade A differential. Eliminating the grade A differential implies that the required minimum class I price in Eau Claire would be no higher than the minimum class III price there. In analyzing the effect of this option, we assume that the additional differential for class I milk at other locations based on distance from Eau Claire—known as the distance differential—would remain. But, since the minimum class I price

[6]Report to the Secretary of Agriculture by the Federal Milk Order Study Committee, Dr. Edwin G. Nourse, Committee Chairman, December 1962.

for all locations east of the Rocky Mountains is based on the Eau Claire price plus the appropriate distance differential, a reduction in the Eau Claire class I price will result in similar decreases in all the markets tied to that basing point.

Eliminating the grade A differential would result in a single federal order price for all grade A milk in Eau Claire, regardless of use. However, it is not certain that the federal order price will be the market price for fluid milk. Cooperatives might have sufficient market power to enforce higher prices (over-order premiums) for fluid use—even without higher required minimum prices—because the demand for fluid milk is generally believed to be less responsive to price changes than the demand for manufactured milk products. Such higher prices would be determined by the market as opposed to being federally mandated. Nonetheless, cooperatives clearly would not have the same likelihood of obtaining higher prices for fluid milk without higher required minimum prices.

Producer Receipts

By lowering the minimum required price for fluid milk at all locations, this option would be most likely to lower producer receipts in all regions, at least initially. Reductions in the minimum prices for fluid milk will be likely to lead to reductions in the actual prices paid for milk used for fluid purposes. The reductions in actual prices paid may, however, be smaller than the reductions in minimum prices if market conditions warrant over-order premiums. But, given the disparity in many orders between current minimum class I prices and production costs, it is very likely that fluid milk prices would fall. That is, without a mandated differential, it will be more difficult to practice price discrimination by charging higher prices for milk used for fluid purposes.

Because producers receive a blend price for their milk, lowering the fluid milk price will lower the national average price they receive, in both the short and long term. This reduces the receipts from milk production, reducing dairy farmers' incentive to produce as much milk as they had been producing at the previously higher average prices. As production falls, government purchases will fall. Increases in fluid milk consumption at the now lower fluid price will also reduce government purchases. However, the extent to which producer receipts can fall is limited in the long run by (1) the role of the supply-demand adjuster in maintaining a target level of government purchases and (2) possible increases in the M-W price. A combination of a higher support price, a higher M-W price, and no grade A differential might increase producer

receipts in some markets with low fluid utilization rates, such as the Upper Midwest.

Orderliness

In both the short and long term, a less orderly market for milk is likely to result from eliminating the grade A differential because, with lower minimum prices, more milk is likely to be exchanged at negotiated above-minimum prices. As a result, both the prices paid by processors and the prices received by producers may vary, particularly in areas such as the Upper Midwest in which there are many processors and more than one cooperative.

National Production

Eliminating the grade A differential would reduce national milk production in the short term. Because this change should lower the blend price producers receive, producers could be expected to reduce production. In the long term, the decline in production could be limited somewhat by (1) M-W price increases or (2) adjustments in the support price. Nonetheless, there might be expected to be a decline in long-term national production as a result of eliminating the grade A differential because the incentive for increased production resulting from price discrimination would probably be smaller.

Local Supply

In both the short and long term, eliminating the grade A differential would reduce local milk production. The greatest reduction will be in higher fluid use markets—generally in the South and Southeast. This result would be expected because in those markets the blend price producers receive is more heavily influenced by the fluid milk price than in markets with relatively low fluid use, such as the Upper Midwest. Particularly in markets with high fluid use, the lower blend price will reduce the incentive to ensure adequate local supply through local production, and thus increase the incentive to move milk from surplus areas. On the other hand, if producer receipts rise in the Upper Midwest or other markets with low fluid use because of an increase in the M-W price that might result from eliminating the grade A differential, then the production in those regions might rise.

Consumer Prices

In both the short and long term, eliminating the grade A differential would be likely to cause the consumer price for fluid milk to fall because the prices processors pay to acquire milk will be likely to fall. If the actual price for fluid milk falls by as much as the minimum allowable

price falls, processors will pay about 8 cents less per gallon. Market conditions may prevent the price from falling that much, but some decline in price seems almost certain.

Eliminate Distance Differentials

For any given support price, distance differentials increase the price of milk used for fluid purposes (class I) as distance from a basing point, such as Eau Claire, Wisconsin, increases. The resulting higher price provides a greater incentive for increased local milk production in markets distant from Eau Claire. If the differential is high enough to cover transportation costs, it can also provide an incentive for moving milk into the market.

From 1968 through 1985, when the Food Security Act of 1985 provided for increased distance differentials for most markets, the distance differential was 15 cents per cwt per 100 miles from Eau Claire. Even though hauling costs had increased in the 1970s to about 30 cents per cwt, largely because of increased energy costs, there had been no increase in the distance differential for three reasons: (1) federal order prices were viewed as being minimum prices—premiums could always be negotiated; (2) increased supplies could always be obtained by offering above-minimum prices to outside markets; and (3) it was not clear that increased supplies were needed in distant markets. In other words, prices were already high enough to encourage local production for fluid purposes.

Eliminating the distance differential would mean there would be a uniform minimum class I price across all federal order markets. To the extent justified by economic forces, higher actual market-determined prices would be expected in some higher cost markets. To the extent enabled by market dominance, cooperatives would be free to negotiate premiums over federal order prices. In other words, price differentials between markets would be established on the basis of market forces.

Producer Receipts

Eliminating distance differentials would be most likely to initially reduce producer receipts at all or most locations, other than Eau Claire, because actual prices paid for milk used for fluid purposes are likely to fall if the required minimum prices are lowered. That is, it will be more difficult to maintain the same degree of price discrimination with fluid milk prices well above the prices charged for milk used for manufacturing purposes. Producer receipts may be affected most in areas farthest from Eau Claire because eliminating distance differentials will have the

largest effect on minimum prices in those areas. However, as discussed with respect to eliminating the grade A differential, the extent to which producer receipts can fall is limited in the long term by (1) the role of the supply-demand adjuster in maintaining a target level of government purchases and (2) possible increases in the M-W prices.

Over the long term, although overall producer receipts would be expected to decline, producer receipts at Eau Claire might rise if eliminating the distance differential increases the demand for transporting Upper Midwest milk to other regions. However, any increased demand for milk could also be satisfied by surplus milk from other regions, thus tending to increase producer receipts in those regions as more milk is used for fluid purposes.

Orderliness

In both the short and long term, a less orderly market for milk is likely to result from eliminating distance differentials. With lower minimum prices, more milk is likely to be exchanged at negotiated above-minimum prices. As a result, both the prices paid by processors and the prices received by producers may vary, particularly in areas such as the Upper Midwest in which there are many processors and more than one cooperative. Those processors and producers with the greatest market power may receive the most favorable prices.

National Production

Eliminating distance differentials would be most likely to reduce national production in the short term. Because this change would almost certainly lower the blend price producers receive, producers could be expected to reduce production. In the long term, upward adjustments in the M-W and support prices could limit the decline in national production. Nonetheless, there might be a decline in long-term national production because the incentive for increased production resulting from price discrimination would probably be smaller.

Local Supply

In both the short and long term, elimination of the distance differentials would reduce the incentive to rely on local supply. The greatest reduction of milk production would occur in markets that are distant from the Eau Claire and California basing points. Inefficiencies result when distance differentials foster local production that is more expensive to produce than obtaining the milk from distant markets. Efficiency, in this context, should not be judged on the basis of cost of production and transportation alone, but should also include the cost of processing. For

example, for a market that is deficit in the fall but in balance in the spring, there may be less cost involved in transporting milk from distant markets to meet the fall deficit than in increasing the distance differential and building a manufacturing facility to process the spring surplus. Production may, in the long term, rise in the Upper Midwest and other market order areas with small distance differentials and low fluid utilization rates if producer receipts in those areas rise because of support or market price increases resulting from elimination of distance differentials.

Consumer Prices

Eliminating distance differentials would be likely to cause the consumer price for fluid milk to fall, except at Eau Claire, because the prices processors pay to acquire milk will be likely to fall. Market conditions may keep the fluid milk price from falling by as much as the eliminated distance differential, but some decline in price seems almost certain in most places. The largest reductions in minimum fluid milk prices would be in those orders most distant from Eau Claire whose distance differentials are currently highest.

Establish More Basing Points

The establishment of more basing points would retain classified pricing while creating a series of regional bases for setting the class I price that would be similar to the basing points that currently exist at Eau Claire and in California. Class I prices would then be arrayed on the basis of distance from each regional base. It is assumed in this discussion that distance differentials would remain in effect.

Each base would be in a surplus milk-producing area. For example, additional bases might be established in the Northeast, the Northwest, and the Ozarks. The prices at the new basing points would not necessarily be identical, but, in general, prices would be lower at the basing points than elsewhere. Such lower basing point prices would recognize that efficient milk producers have more uniform costs of production regardless of where located. In addition, multiple basing points would recognize that several surplus areas exist from which a deficit market could obtain its milk supply.

The concept of new basing points, their location, and the resulting price level would be highly controversial. The exact location of the new basing points, as well as the appropriate class I price level, would need to be established after careful economic evaluation. Costs of production trends in costs, and regional and local supply and demand conditions

would all need to be considered in choosing the appropriate new basing points.

Producer Receipts

In both the short and long term, producer receipts would decline in locations arrayed from where new basing points are created far from Minnesota and Wisconsin. Prices paid for fluid milk would be expected to decline because, with lower required minimum milk prices, it would be more difficult to maintain the same degree of price discrimination that currently exists. In the long term, the extent to which overall producer receipts can fall is limited by possible increases in the M-W price and the role of the supply-demand adjuster. These factors might cause receipts for Minnesota and Wisconsin producers to increase.

Orderliness

In both the short and long term, a less orderly market for milk is likely to result from establishing more basing points because with lower minimum prices more milk is likely to be exchanged at negotiated above-minimum prices. As a result, both the prices paid by processors and the prices received by producers may vary, particularly in areas such as the Upper Midwest in which there are many processors and more than one cooperative. Those processors and producers with the greatest market power may receive the most favorable prices.

National Production

In both the short and long term, the national level of milk production would be reduced by the establishment of more basing points. Lower production would result from lower class I prices at each new basing point and the locations arrayed from the new basing points, but support price adjustments could limit the long-term decline. Nevertheless, there might be a decline in long-term national production because the incentive for increased production resulting from price discrimination would probably be smaller.

Local Supply

In both the short and long term, more basing points would reduce the degree of reliance on local milk supplies because of the reduced local production incentives. Greater reliance would initially be placed on milk supplies from the closest basing point. If those supplies were exhausted, milk from more distant basing point areas would be purchased.

Consumer Prices

In both the short and long term, establishment of additional basing points would be likely to cause the consumer price for fluid milk to fall, except in markets that would continue to set fluid milk prices on the basis of distance from Eau Claire, where consumer prices would be likely to remain unchanged. The greatest decline would probably occur in markets far from current basing points, as well as in markets that lie beyond the new basing points.

Eliminate Down Allocations and Compensatory Payments

Down allocation provisions put milk from distant markets into a lower price class, regardless of its use. These provisions eliminate any financial incentive for shipping milk into a market, except in cases of shortage. Compensatory payments place a charge on milk shipped into a market except when the milk is needed, e.g., a deficit situation in the receiving market. A typical compensatory payment is the difference between the class I and class III price or the difference between the class I price and the blend price. Since the effects of down allocations and compensatory payments are basically the same, they are discussed simultaneously here.

This option would eliminate all forms of down allocations and compensatory payments that discourage milk from moving between markets. The best example of affected milk is reconstituted milk, which is a mixture of concentrated milk solids and water.

Orders require processors who use reconstituted milk from another order to pay the difference between the class III price and the class I price into the local order pool. The effect is to make reconstituted milk noncompetitive with class I milk—particularly when the cost of reconstituting and the preference for fresh milk are considered. Without such payments and with the water removed from the milk, concentrated milk solids could be shipped into distant markets at considerably less cost than the transportation of fluid milk. The cost of removing the water from the milk is considerably less than the difference between the cost of transporting fluid milk and the cost of transporting and reconstituting. If not for down allocations and compensatory payments, it would be economically feasible to use reconstituted milk any time the cost of production in the distant market was greater than the cost of milk in the low-cost surplus market, plus the cost of removing the water from it, transporting the concentrated product, and reconstituting it.

Producer Receipts

Eliminating down allocations and compensatory payments, while retaining grade A and distance differentials, would provide an alternative source of supply at a lower cost. This change, by itself, would not reduce required minimum fluid milk prices, but it might cause some market prices to fall by reducing the ability of local producers to negotiate above-minimum prices, known as over-order premiums. This could lower producer receipts in markets in which over-order premiums are frequently received. In addition, to the extent that adopting this option results in increased inter-order transporting of concentrated milk solids, producers in receiving markets would then be forced to sell more of their milk for manufacturing uses, lowering the blend price they receive and, therefore, their receipts from milk production. On the other hand, producers in orders that would be supplying more concentrated milk solids to other markets would receive a somewhat higher price for milk used for manufacturing purposes, as a result of the increased demand for manufacturing purposes.

The classified pricing system, with grade A and distance differentials, would be difficult or impossible to maintain because competitive forces would result in displacement of fluid milk with concentrated milk solids. As a result, in both the short and long term, the M-W price would rise because of reduced production in regions with high production costs and increased demand for concentrated milk solids. Thus regions with low fluid use, such as the Upper Midwest, would benefit relative to other parts of the country.

Orderliness

In both the short and long term, eliminating down allocations and compensatory payments would be likely to decrease the orderliness of milk marketing by making milk available to processors from concentrated sources at lower prices. As a result, the prices paid by processors would differ depending on source of supply. While the level of producer prices would decline within an order receiving concentrated milk, differences in prices among producers would not be expected to increase. However, negotiation of premiums would be more difficult.

National Production

In the short term, the elimination of down allocation and compensatory payment provisions would reduce milk production in markets far from Eau Claire, such as those located in the South and Southeast, because these markets would experience the largest difference in cost of transportation between fluid milk and the reconstituted product. In the long term, however, reductions in these southern markets would be likely to

be offset to some extent by increases in production in the Minnesota and Wisconsin areas.

Local Supply

In both the short and long term, the elimination of down allocation and compensatory payment provisions would mean that less reliance would be placed on local supplies of milk, particularly in southern markets where lower cost reconstituted milk could be used to replace local production. In such markets, the producer price would fall the most, resulting in the greatest decline in production.

Consumer Prices

In both the short and long term, the elimination of down allocation and compensatory payment provisions could result in lower consumer prices in distant markets where the savings from lower transportation costs are the greatest.

Establish Transportation Pools

Transportation pools pay for the cost of obtaining and transporting milk for fluid use from distant markets. This cost is then spread across all producers and/or processors operating in the market order area that is receiving the milk. This cost may be either reimbursed out of the pool of market receipts, or charged equally to all class I sales as an addition to the class I price. In either case, payment is made to the processor or cooperative that hauls milk into the market.

Transportation pools cover two main types of costs: (1) transportation costs from the source to the receiving processor and (2) premiums paid over the local class I price to get the seller to give up the milk. This premium or "give-up charge" is levied because to sell class I milk a manufacturer must operate a plant at less than full capacity, thus incurring higher costs per cwt of milk processed. The more milk given up, the higher the cost associated with giving up that milk.

Without a transportation pool, the total cost of obtaining the milk falls on the cooperative or processor buying it. The main argument against a transportation pool is that the extra cost of milk should be borne by the firm that takes the risk by obtaining milk at a higher cost from a distant market and moving it to the deficit area in the hope of selling it at high prices. In other words, the processor or cooperative that finds itself without a milk supply does so as a result of its own business judgment.

Producer Receipts

In both the short and long term, a transportation pool would not change the level of producer receipts either nationally or regionally. Only the distribution of prices and receipts within a market would be affected.

Orderliness

In both the short and long term, a transportation pool would increase orderliness by providing for equal sharing of the cost among processors and/or producers (cooperatives) of obtaining and transporting milk from outside the market. As a result, those processors and/or producers who would otherwise pay a higher cost for out-of-market milk are not placed at a cost disadvantage.

National Production

In both the short and long term, a transportation pool would have no effect on the national level of milk production because producer receipts would not change.

Local Supply

In both the short and long term, a transportation pool has the potential for making markets less reliant on local milk supplies because it facilitates the bringing of milk into the market. Equal distribution of transportation costs among processors reduces the pressure to rely on local milk supplies.

Consumer Prices

In both the short and long term, a transportation pool would not affect the level of consumer prices for milk because prices paid by processors to acquire milk would be unchanged. If anything, it would hold prices down during fall deficit times in deficit markets.

Establish a Standby Pool

With a standby pool, payments are made to producers in surplus-producing areas in return for supplying milk to distant markets when it is needed. The payments are derived from a deduction from the price paid producers (checkoff) who are located in potential deficit markets and need a reserve supply. The standby pool creates a call option, or obligation, on the part of producers who receive payments to supply milk when it is needed. Such standby pool payments, therefore, substitute for give-up charges.

Producer Receipts

In both the short and long term, a standby pool would not significantly affect the national level of producer receipts. Some small regional

effects might occur. Producers in Minnesota and Wisconsin, or other surplus areas, would receive a regular payment from producers in deficit markets in return for providing an alternative source of supply. The extra receipt is likely to be only a few cents per cwt.

Orderliness

In both the short and long term, a standby pool would add to the orderliness of milk marketing both by assuring a supply of milk when it is needed without the incidence of give-up charges and by providing a uniform return to Minnesota and Wisconsin producers, or other surplus area producers, for making milk available when needed. With a nominal contribution per cwt, southern processors, or processors in other deficit areas, would be assured of receiving a supply of milk as well as more uniform costs for milk obtained from outside markets.

National Production

In both the short- and long-term, a standby pool would not affect the level of national production because the checkoff from receipts to producers in deficit areas would be redistributed to Minnesota and Wisconsin producers. In other words, the receipts of producers in deficit areas would decrease in the same amount as the returns of producers in surplus areas would increase.

Local Supply

In both the short and long term, a standby pool would be likely to result in less reliance on local milk supplies because it makes an outside source of milk supply more readily available to processors. This should create less incentive to build a local milk supply large enough to meet local demand at all times. Correspondingly, milk production in Minnesota and Wisconsin and other surplus areas may increase, but probably not much because of little increase in producer prices.

Consumer Prices

In both the short and long term, a standby pool is not likely to have an effect on consumer prices for milk because prices paid by processors are not changed. Producer receipts are merely redistributed. If anything, it would keep prices down in deficit periods.

Establish Marketwide Service Payments

Marketwide service payments would reimburse cooperatives for functions they perform to benefit all producers in a market, including nonmembers. Payments would cover costs of such activities as preparing and presenting testimony in federal milk marketing order hearings and

maintaining processing facilities that are not used at full capacity but are needed to process milk in peak supply periods.

The administrator of the federal order market would make marketwide service payments to qualified processors from the pool of receipts from milk sold. The size of the payments would be determined through a hearing. This option would involve a considerable increase in the degree to which orders regulate prices.

Independent producers and processors are viewed by major cooperatives as free riders because the independents rely on the major cooperatives to maintain processing facilities for the purpose of disposing of milk in excess of fluid needs—"performing the balancing function." Balancing is costly because in markets with high fluid use the plant may be operated at less than full capacity for most of the year, resulting in high fixed costs per unit of production processed.

Independent producers and processors argue that cooperatives made a business decision to take on the balancing function and should live with the consequences of that decision without government intervention. They also assert that there are no true marketwide services. That is, independent producers and processors do their own balancing and pay for its cost in terms of lower prices for disposing of surplus milk, sometimes selling it to the major cooperative in their area. If marketwide service payments were to be made, they contend that all firms performing those services should get payments, including independent processors and smaller cooperatives.

Producer Receipts

In both the short and long term, marketwide service payments would not directly increase the overall level of producer receipts either nationally or regionally. An indirect increase in receipts might occur if, as discussed below, the payments give the major cooperative sufficient market influence to negotiate larger over-order premiums. Receipts are simply redistributed within local markets between cooperative and independent producers.

Orderliness

In both the short and long term, marketwide service payments would improve the orderliness of milk markets. Independent producers and processors are a primary source of competition in milk markets. This competitive factor exists because the independents either have found a less expensive means of performing functions covered by the payments

or have transferred the cost of performing them to the cooperative. The correctness of either rationale depends on whose argument is considered to be the strongest.

While orderliness is improved, it may be at the expense of the independent producer and processor. With marketwide service payments, there would be reduced economic incentive to be an independent producer because the independent would not only have to pay the cost of operating as an independent but would also be required to pay for cooperative services. Therefore, all producers would probably become members of the major cooperative in a given area. In this case, the market could become cooperative-controlled, which also implies greater orderliness and higher milk prices.

National Production

In both the short and long term, marketwide service payments would not directly increase national milk production because the overall price level is not affected. Receipts are merely redistributed between members of the major cooperative and independent producers. An indirect impact on national production could occur if the payments gave the major cooperative sufficient market influence to increase over-order premiums.

Local Supply

In both the short and long term, marketwide service payments would not directly increase the reliance on local supplies. It would only redistribute receipts among producers within the market. An indirect impact could occur if the payments gave the major cooperative sufficient market power to exclude outside supplies.

Consumer Prices

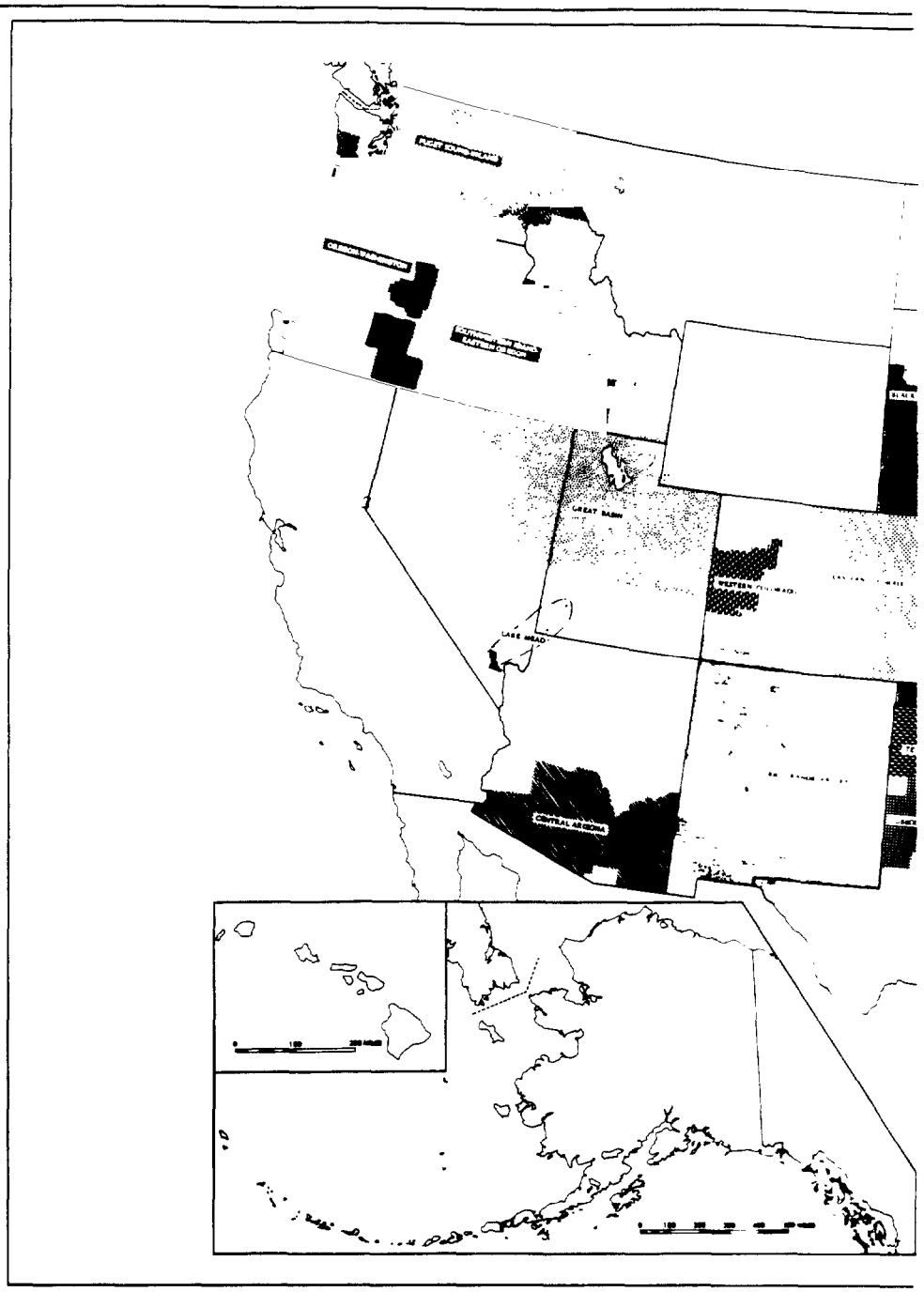
In both the short and long term, marketwide service payments would not directly affect consumer prices. An indirect increase could occur if the payments gave the major cooperative sufficient market power to exclude outside suppliers and to raise over-order premiums.

Establish Regional Orders

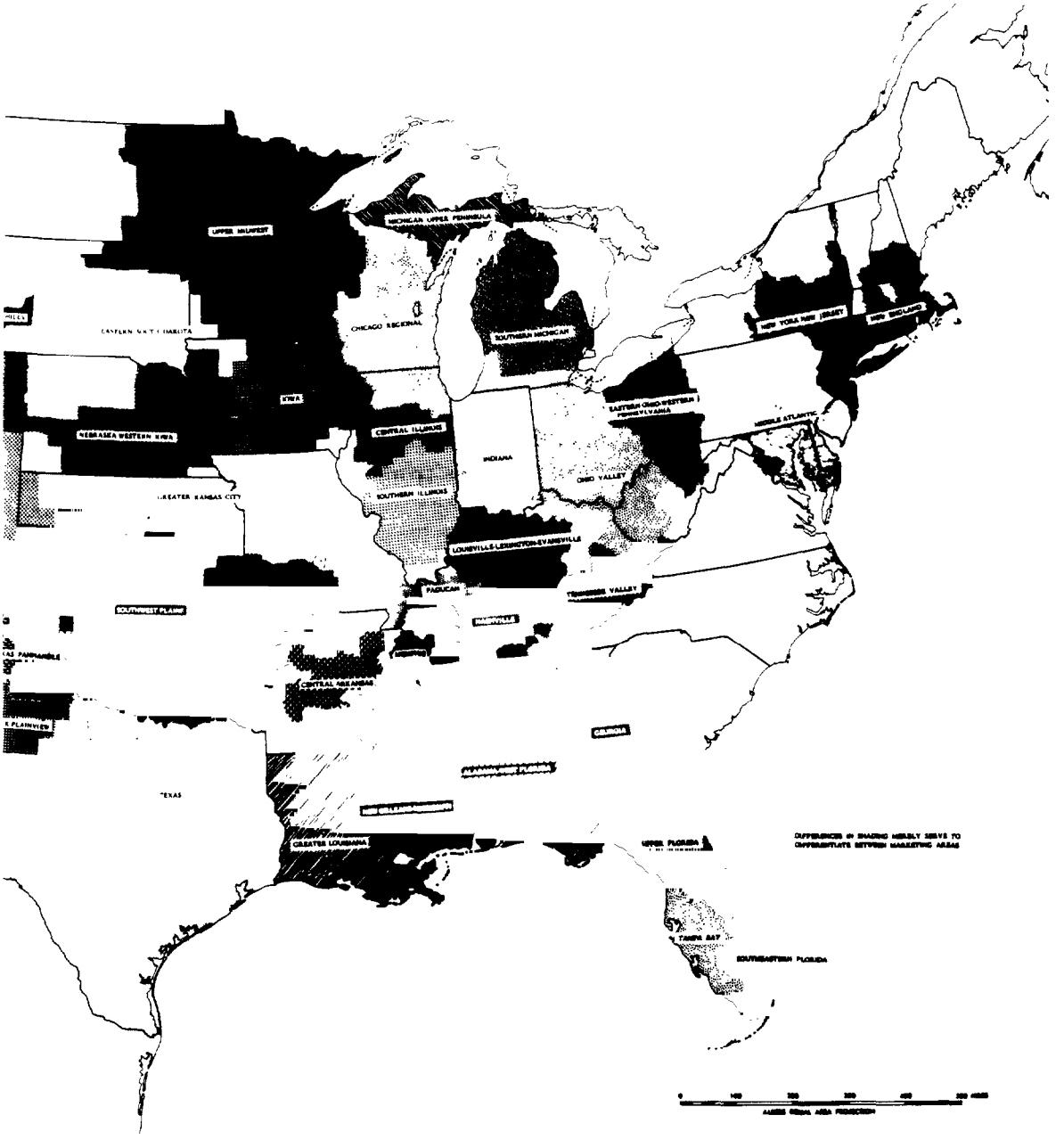
Regional orders would reorganize the existing national milk marketing order system into a system of large regional orders. Each regional order would include all producers, cooperatives, and processors that rely on the same general geographic area for their procurement and disposition of milk, including both fluid and manufactured products.

The number of milk marketing orders has declined from a peak of 83 in 1962 to 44 in 1986. These orders ranged in volume of milk in 1985 from less than 25 million pounds to over 14 billion pounds. The consumer population located within order areas ranged from only 89,000 to about 20 million. The wide range in area covered by orders is shown in figure 3.1.

Figure 3.1: Marketing Areas Under Federal Orders as of July 1, 1987



Source: AMS, USDA.


UPPER MIDWEST
MICHIGAN UPPER PENINSULA
CHICAGO REGIONAL
SOUTHERN MICHIGAN
NEW YORK NEW JERSEY
NEW ENGLAND
EASTERN OHIO-WESTERN PENNSYLVANIA
MIDDLE ATLANTIC
NEBRASKA WESTERN IOWA
CENTRAL ILLINOIS
INDIANA
OHIO VALLEY
GREATER KANSAS CITY
SOUTHERN ILLINOIS
LOUISVILLE-LEXINGTON-EVANSVILLE
PADUCAH
TENNESSEE VALLEY
SOUTHWEST PLAINS
CENTRAL ARKANSAS
TEXAS
GREATER LOUISIANA
UPPER FLORIDA
TAMPA BAY
SOUTHEASTERN FLORIDA

Between 1962 and 1986, the milk industry changed from a group of local milk markets to a group of regional markets. Milk moves long distances in both fluid and processed form. Some markets have responded to this regionalization by consolidating orders. The Chicago Regional, Eastern Ohio-Western Pennsylvania, Iowa, Middle Atlantic, New England, Ohio Valley, Southwest Plains, Tennessee Valley, Texas, and Upper Midwest orders are all excellent examples of consolidated orders.

Cooperatives and processors frequently cover several order areas. Cooperatives could use this multi-order coverage to their advantage. For example, they may maintain a high fluid use in markets where they have a large share of the sales and a low fluid use in markets where their share is lower. The effect of this strategy is to enhance the cooperatives' competitive advantage relative to independent producers and processors. Since cooperatives are not required to pay the order blend price, they may pay their producers less in the market with higher fluid use and transfer the proceeds from that market to the market with lower fluid use where a higher cooperative price is paid. The independent processor is restrained by the minimum pricing requirements of the order from making such transfers and cannot afford to meet this higher price. As a result, independent producers in this market may join the cooperative. The more orders that are maintained under the control of a cooperative, the more opportunity for gaining and maintaining cooperative control. Therefore, consolidation of small orders into large regional orders has the potential for reducing cooperative control.

Producer Receipts

In both the short and long term, regional orders would not significantly change the overall level of producer receipts. Some redistribution of returns might occur among producers serving individual markets. If the market influence of cooperatives declines through consolidation, then there might be a small decline in producer receipts.

Orderliness

In both the short and long term, regional orders would increase the orderliness of milk marketing. There would be fewer opportunities for particular producers, processors, or cooperatives to be at a disadvantage in their position in a particular order because in markets with large volumes it is more difficult to influence either the fluid use or the price paid producers. All producers, processors, and cooperatives would be more likely to be treated uniformly with larger regional orders.

National Production

In both the short and long term, regional orders would not greatly affect the national milk production supply because producer receipts would not be substantially affected. Small reductions in production might occur if producer receipts decline slightly because of reduced market influence of cooperatives.

Local Supply

In both the short and long term, regional orders would result in less reliance on local production. Within a region, artificial barriers to the movement of milk associated with individual orders would be eliminated. Milk could move more freely. Production would be lowered when markets having a high class I utilization rate and/or a high class I price are merged with markets having a lower class I utilization rate and/or a lower class I price. Restrictions on milk movements among regions would depend on the provisions of the new regional orders.

Consumer Prices

Regional orders may not change consumer prices. Average prices within the new regional order would probably remain about the same, although the distribution of prices within the region might change some, and over-order premiums might be reduced because of the reduced market influence of cooperatives. However, we have no assurance that this would happen since we do not know how prices would be set. Therefore, the short- and long-term impact of creating regional orders on consumer prices is indeterminate.

Establish a National Order

A national milk marketing order would cover the entire United States, replacing the current system of orders serving local or regional milk markets. It would also preempt states from regulating milk prices at the producer level. For example, prices in the second largest milk-producing state, California, are not federally regulated. Yet the federal government is responsible for purchasing all surplus dairy products nationwide, whether federally regulated or not.

Aside from the achievement of greater uniformity, the specific effects of a national order would depend upon its provisions, which could range from substantially reduced regulation to increased regulation. For example, a national order has been suggested as a possible means for implementing a marketing quota program. If this were done, the current marketing order system would need to be expanded not only to cover all of the United States, but also to regulate both grade A and grade B production.

Alternatively, a bill (H.R. 723) has been introduced in the 100th Congress that would use a national order to establish a multiple basing point system of milk prices. If enacted, it would require a minimum of three basing points, and it authorizes a maximum of six. It would also reduce the proportion of producers who must approve an order to 51 percent of the producers, or producers marketing at least 51 percent of the volume. The proportion presently necessary to approve an order is two-thirds. This change would allow for easier approval of orders.

National orders do not resolve many of the issues surrounding marketing orders. Detailed provisions would still be needed for classified pricing, distance differentials, and reconstituted milk. The following analysis recognizes this heavy dependence on specific order provisions. It analyzes impacts based on two specific options for a national order—marketing quotas and basing points.

Producer Receipts

The short- and long-term impact of a national order on producer receipts depends on its provisions and, therefore, is indeterminate. A national order with marketing quotas would presumably be designed to maintain higher producer prices than are possible without quotas (see quota option). A national order with multiple basing points would reduce prices in some markets but tend to increase prices in Minnesota and Wisconsin (see basing point option).

Orderliness

In the transition to a national order with either multiple basing points or marketing quotas, disruptions may occur either as the pricing base is changed, or as unregulated areas and areas subject to state regulation, such as California, are brought under the provisions of the order. Therefore, in both the short and long term, the effect of a national order on orderliness is indeterminate.

National Production

A national order's effect on national production depends upon its provisions. The effect on national production, in both the short and long term, therefore, is indeterminate.

Local Supply

A national order should result in less reliance on local milk supply because barriers to the movement of milk associated with individual orders should be reduced. Yet issues such as the pricing of reconstituted milk would still remain. Thus, whether all artificial barriers to milk

movements would be removed would depend on the specific order provisions. On balance, however, the degree of reliance on local supplies, in both the short and long term, should be decreased.

Consumer Prices

A national order's effects on consumer prices would depend on the order's specific provisions. A national order with marketing quotas would be likely to increase consumer prices while a national order that establishes multiple basing points would reduce consumer prices. The effect, both in the short and long term, therefore, is indeterminate.

Establish Marketing Quotas

Marketing quotas establish a limit on the quantity of milk that can be marketed. The objective of a quota generally is to raise prices by restricting supply. Accordingly, quotas are an alternative to government purchases as a method for keeping the price above the level that would equate supply and demand in an unregulated market. A national quota could be set at a level that would eliminate excess supply.

The quota for an individual producer could be set on the basis of the producer's historical production, such as the average of the past 3 years. Production in excess of the quota would have to be sold at a very low price if the quota were to be effective in reducing production. If the price for over-quota production exceeds the variable or out-of-pocket cost, there is no incentive to reduce production because the revenue from an extra unit of production contributes to recovering the fixed costs of production.

Producer Receipts

Quotas limit the quantity of milk to be marketed at a specified price. Since the price of milk would be set sufficiently high to generate an adequate supply, it would also generate a profit for many producers, in both the short and long term. The quota takes on a value that is directly proportional to the extra receipts from milk production that are attributable to the quota. This value would be a windfall to current producers, a barrier to the entry of new producers, and a cost of production in the long term. If the quota were negotiable, its value would be readily visible in the market price of the quota. If the quota were not separately negotiable, its value would become part of the price of milk production assets, such as the dairy cows and/or land that is particularly suited to milk production. In both the short and long term, a quota could yield larger benefits to Minnesota and Wisconsin producers because lower

national production would yield a higher M-W price. However, this outcome would depend on how quotas were implemented. For example, if established on the basis of class I use, Wisconsin and Minnesota might need to reduce production significantly, lowering producer receipts.

Orderliness

Quotas might affect orderliness, depending on the level at which they are set. If quotas were set too high, surpluses might result, leading to orderliness comparable with that existing in the early 1980s. If quotas were set too low, handlers would vigorously compete for milk supplies; thus, less orderly conditions would result. Thus, the effect of quotas on orderliness is indeterminate.

National Production

In both the short and long term, marketing quotas would decrease national production. The pressures for increased production, brought on by higher prices, would be restrained by the quota below the level that would otherwise exist.

Local Supply

In both the short and long term, marketing quotas would result in less emphasis on local supply as long as the quota was applied on a uniform national basis. Milk production would probably be cut uniformly, requiring increased transportation of milk to meet local needs. However, if production was cut more in low utilization markets, there would be greater reliance on local supply.

Consumer Prices

The purpose of marketing quotas is to restrain production and thereby increase prices. In the short term, these high prices are captured in the form of excess profits. However, in the long term, the resulting higher profits increase the value of the quota itself, or the value of milk production assets, thereby increasing the cost of milk production. These higher costs, in turn, lead to pressure for even higher milk prices and, thus, even higher consumer prices.

Eliminate Orders

The federal system of milk marketing orders would be abolished under the option of eliminating orders. Milk is the only commodity that has both price supports and federal orders. Without the orders, federal involvement would more closely conform to that of most other commodities. The basis for selecting this option would be that conditions in the

dairy industry had changed enough to eliminate the need for milk marketing orders. The formation of regional cooperatives is one indicator that orders might be eliminated. In effect, regional cooperatives may provide producers with some power to negotiate premiums over federal order prices. However, it is difficult to maintain market power. Those who do not want to eliminate orders contend that in the absence of marketing orders many of the market disorder issues that resulted in the formation of the order system would occur again.

Many of the effects of eliminating orders would resemble the combined effects of several previously discussed options: eliminating the grade A differential, distance differentials, and down allocations and compensatory payments. A support price would remain and would adjust to maintain government purchases at a targeted level.

Producer Receipts

Eliminating orders would be most likely to reduce producer receipts initially because actual prices paid for milk used for fluid purposes are likely to fall if current minimum prices are no longer required. The prices paid for milk used for fluid purposes may remain higher than the prices paid for milk used for manufacturing purposes. However, without orders, cooperatives and other producers would have more difficulty maintaining high class I prices, which would result in lower producer receipts. Producer receipts may fall most in regions far from Eau Claire because in those regions prices for milk used for fluid purposes are currently the highest above prices for milk used for manufacturing purposes. Milk for manufacturing purposes would continue to be supported by the price support program.

In the long term, the extent to which producer receipts can fall is limited by possible increases in the support price and/or milk prices determined by market forces. Without down allocations and compensatory payments, sales of concentrated milk solids are likely to replace some fluid milk sales, particularly in regions having high production costs. The increased demand for concentrated milk solids could increase the manufacturing demand for milk in regions with low fluid use, such as the Upper Midwest. This may result in an increase in producer receipts in these regions if the manufacturing price rises above the average price the Upper Midwest producers currently receive. Nationwide, however, producer receipts would be expected to fall in the absence of federal orders.

Orderliness

In both the short and long term, the elimination of milk marketing orders would reduce orderliness. With no established minimum prices, milk would be exchanged at negotiated prices. As a result, both the prices paid by processors and the prices received by producers may vary, particularly in areas such as the Upper Midwest, in which there are many processors and more than one cooperative. The degree of disorderliness may depend on the ability of the cooperatives to use their market power to establish uniform prices to producers and processors within their regions. There is disagreement among industry experts over the degree to which cooperatives could maintain market control and thus prevent the degree of disorderliness that led to the creation of the federal milk marketing order system.

National Production

Eliminating orders would be most likely to reduce national production in the short run. Because this change would almost certainly lower the average price producers receive, producers could be expected to reduce production. In the long term, upward adjustments in the manufacturing milk prices in Minnesota and Wisconsin and support prices could limit the decline in national production. Nonetheless, a decline in the long term might be expected because the incentive for increased production resulting from price discrimination would be reduced.

Local Supply

In both the short and long term, eliminating orders would reduce the incentive to rely on local supply. Because local prices would reflect the cost of obtaining milk through either local production or an alternative source of supply, prices might be substantially lower in markets distant from Eau Claire that have high fluid milk prices now because of distance differentials. Lower prices in those areas would be expected to result in lower production. A 1985 USDA study by Fallert and Buxton, Alternative Pricing Policies for Class I Milk Under Federal Marketing Orders—Their Economic Impact, suggests that the most significant reduction would be in the Northeast, Southeast, and Southern Plains. In some of these regions, lower cost reconstituted milk might replace local production.

Consumer Prices

Eliminating marketing orders would be likely to cause the consumer price for fluid milk to fall because the prices processors pay to acquire milk would be likely to fall. Market conditions may keep fluid milk prices above the prices paid for milk used for manufacturing purposes.

but some decline in price seems almost certain in most places, particularly because, without orders, reconstituted milk would be able to compete more evenly with local production. The largest price reductions would be likely to occur in regions far from Eau Claire in which high distance differentials have kept minimum fluid milk prices high.

Eliminate Order Pricing Provisions, but Retain Order Supervision

To eliminate classified pricing (eliminate grade A and distance differentials, and down allocations and compensatory payments) but retain order supervision involves removing the pricing provisions of orders but retaining functions involving pooling, auditing, supervision, verifications of weights and butterfat content, and statistical information. With this option, fluid milk prices would be determined by market forces, but the market order administrator would see that order proceeds are properly pooled; milk is used for the purposes indicated; producers are properly paid; milk weights and tests are accurate; and information is collected and made available to all market participants.

Producer Receipts

The elimination of order pricing provisions would be most likely to reduce producer receipts initially because actual prices paid for milk used for fluid purposes are likely to fall if current minimum prices are no longer required. With orders continuing to pool milk sale proceeds and pay producers the equivalent of a blend price, cooperatives may be more successful in maintaining higher prices on milk used for fluid purposes (i.e. price discrimination) than if orders were abolished altogether because pooling reduces independent handlers' advantage in engaging in price competition with cooperatives. Therefore, producer receipts may not fall as much as they would if orders were abolished. Producer receipts may fall the most in regions far from Eau Claire because in those regions prices for milk used for fluid purposes are currently the highest above prices for milk used for manufacturing purposes.

In the long term, the extent to which producer receipts can fall is limited by possible increases in the support price and/or the manufacturing milk prices in the Upper Midwest. Without down allocations and compensatory payments, sales of concentrated milk solids are likely to replace some fluid milk sales, particularly in regions with high production costs. The increased demand for concentrated milk solids could increase the manufacturing demand for milk in surplus production regions with low fluid use, such as the Upper Midwest, having the effect of increasing producer receipts in these regions but lowering national receipts.

Orderliness

The elimination of order pricing provisions would reduce orderliness in both the short and long term, but the amount of disorderliness created would probably be less than what would result from the elimination of orders. With no established minimum prices, milk would be exchanged at negotiated prices. As a result, prices paid by processors may vary. However, because the orders would retain their pooling function, there would be no increased variation in prices received by producers. In addition, by continuing to carry out other supervisory functions, such as butterfat and weight testing, orders would assure equitable treatment for producers and processors.

The degree of disorderliness that would result from this option may depend on the ability of the cooperatives to use their market power to establish uniform prices within their regions. There is disagreement among industry experts over the degree to which cooperatives could maintain market control and thus prevent the degree of disorderliness that led to the establishment of classified pricing.

National Production

The elimination of order pricing provisions would be most likely to reduce national production in the short run. Because this change would almost certainly lower the blend price producers receive, producers could be expected to reduce production. In the long term, upward adjustments in the M-W and support prices could limit the decline in national production. Nonetheless, a decline in the long term might be expected because the incentive for increased production resulting from price discrimination would be reduced. This decline might be smaller than the decline likely to result from order elimination. If order pricing provisions are removed but orders retained, cooperatives may be able to maintain a higher degree of price discrimination than could be possible without orders.

Local Supply

In both the short and long term, the elimination of order pricing provisions would reduce the incentive to rely on local supply. Because local prices would reflect the cost of obtaining milk through either local production or an alternative source of supply, prices might be substantially lower in markets far from Eau Claire that have high fluid milk prices now because of distance differentials. Lower prices in these areas would be expected to result in lower production. In some of these regions, lower cost reconstituted milk might replace local production. In the long term, production may rise in the Upper Midwest and other orders that now have relatively low minimum prices and fluid utilization rates. This

would occur if producer receipts rise because support or market prices increased as a result of the elimination of order pricing provisions.

Consumer Prices

The elimination of order pricing provisions would be likely to cause the consumer price for fluid milk to fall because the prices processors pay to acquire milk would be likely to fall. Market conditions may keep fluid milk prices above the prices paid for milk used for manufacturing purposes, but some decline in price seems almost certain in most places, particularly because without order pricing provisions reconstituted milk will be able to compete more evenly with local production. The largest price reductions would be likely to occur in regions far from Eau Claire in which high distance differentials have kept minimum fluid milk prices high.

Prices may not decline as much as they would if orders were eliminated. If orders remain even without classified pricing, cooperatives may be more successful in maintaining higher prices on milk used for fluid purposes.

Summary

Our discussion of the impact of options for change obviously includes predictions about the future. Because a degree of uncertainty exists, a few words of caution are necessary. It is possible that the economic condition(s) eliminated by an option could continue to exist. For example, consumer preferences for fresh milk, and the unresponsiveness of consumer demand for fresh milk to price changes, may mean that premiums continue to be paid for fluid use milk. Also, cooperatives may have sufficient market power to effectively impose a classified pricing process very similar to that which has existed under marketing orders. We believe such a condition would probably be temporary. Since the major buyers of milk are large integrated chain stores, it seems doubtful to us that cooperatives could gain the same degree of market power as they have under marketing orders, particularly in the long term. Finally, adoption of many of the options we have analyzed might affect the degree of risk—as opposed to the expected receipts—that milk producers perceive. These changes in perceived risks might affect production decisions. With these caveats, tables 3.1 and 3.2 summarize the short- and long-term impact of each of the options analyzed in terms of the selected consequences.

Table 3.1: Summary of Short-Term Consequences of Federal Milk Marketing Order Options

Option	Orderliness	National production	Local supply	Consumer prices	Producer receipts	
					Natl.	MN/WI
Eliminate grade A differential	D	D	D	D	D	D
Eliminate distance differentials	D	D	D	D	D	N
Establish more basing points	D	D	D	D	D	N
Eliminate down allocations and compensatory payments	D	D	D	D	D	
Establish transportation pools	I	N	D	N	N	N
Establish standby pool	I	N	D	N	N	
Establish marketwide service payments	I	N	N	N	N	N
Establish regional orders	I	N	D	*	N	N
Establish a national order	*	*	D	*	*	*
Establish marketing quotas	*	D	D	I	I	I
Eliminate orders	D	D	D	D	D	D
Eliminate order pricing provisions, retain order supervision	D	D	D	D	D	D

Legend:
D=Would Decrease
I=Would Increase
N=Neutral (would not affect)
*=Indeterminate

Table 3.2: Summary of Long-Term Consequences of Federal Milk Marketing Order Options

Option	Orderliness	National production	Local supply	Consumer prices	Producer receipts	
					Natl.	MN/WI
Eliminate grade A differential	D	D	D	D	D	I
Eliminate distance differentials	D	D	D	D	D	I
Establish more basing points	D	D	D	D	D	I
Eliminate down allocations and compensatory payments	D	D	D	D	D	I
Establish transportation pools	I	N	D	N	N	N
Establish standby pool	I	N	D	N	N	I
Establish marketwide service payments	I	N	N	N	N	N
Establish regional orders	I	N	D	*	N	N
Establish a national order	*	*	D	*	*	*
Establish marketing quotas	*	D	D	I	I	I
Eliminate orders	D	D	D	D	D	I
Eliminate order pricing provisions, retain order supervision	D	D	D	D	D	I

Legend:
D=Would Decrease
I=Would Increase
N=Neutral (would not affect)
*=Indeterminate

Conclusions and Matters for Consideration by the Congress

Conclusions

By fostering local production of milk, the federal milk marketing system has contributed to the national milk surplus and benefited producers in some regions of the country at the expense of others. The justifications for federal marketing order pricing policies are outdated because dairy market conditions have changed. Specifically:

- The grade A differential, originally created to provide farmers with financial incentives to produce grade A milk, is far higher than the additional costs of producing grade A milk rather than grade B milk. The added cost is no more than about 15 cents per cwt, whereas the differential is $1.04; about 88 percent of all milk produced is grade A.
- The distance differential, created to compensate producers in the Upper Midwest surplus-producing areas of the country for transporting milk to deficit areas, is no longer appropriate. The Upper Midwest is not the lowest cost producing area. The differential, based on a producer's distance from the Upper Midwest, results in a regional price structure that bears no consistent relationship to regional variations in the cost of production or of obtaining an alternate source of supply.
- Down allocations and compensatory payments (marketing order provisions designed to economically discourage the shipment of surplus milk from one market area to another where it is not needed) effectively prohibit the use of reconstituted milk, a more efficient means for moving milk between distant locations to satisfy any local deficits that may occur.

National milk production increased an average of 15 percent between 1977-79 and 1984-86. The economic incentives provided by the milk marketing orders, through the grade A and distance differentials, contributed to this increase in production. The effect of marketing order pricing policies on milk production levels depends on how high the support price is set for milk used for manufacturing purposes. When the support price exceeds what otherwise would be the market-clearing price, a surplus develops, and the government purchases dairy products to remove that surplus. At any given support price, federal orders add a price differential to that price, which encourages additional milk production. In the past, any such additional production led to larger surpluses. However, as a result of the supply-demand adjuster provisions in the Food Security Act of 1985, any increases in production because of marketing orders that could result in annual federal purchases in excess of 5 billion pounds will now trigger a downward adjustment in the support price. These same provisions will cause the price support to rise whenever estimated government purchases are to be not more than 2.5 billion pounds, thus eliminating any long-run decline in production

Distance differentials provide production incentives in all regions of the country, except the Upper Midwest. The greater these differentials, the greater the production incentives, and therefore, the more likely that surpluses will rise high enough to cause the support price to fall. A combination of higher differentials and lower support prices can have a particularly adverse impact upon traditional milk-producing regions of the Upper Midwest, which receive little or no benefit from the differentials, but which would be hurt by declines in the support price.

Under existing marketing order pricing policy, whenever the price support program is changed because of the supply-demand adjuster provisions of the Food Security Act of 1985, the regional incentives provided by the orders will remain in place. As a result, federal milk marketing order policies will continue to benefit producers in some regions of the country at the expense of others. In the long run, it is possible that if these increases in production in certain regions trigger reductions in the price support, some regions may no longer be profitable. For example, the Upper Midwest, which does not benefit from distance differentials and has a higher cost of production than some regions, would have reduced profitability. The same would be true for the Corn Belt, the Northeast, and the Southeast, which, while they benefit from the distance differential, have a higher cost of production. Regions with a lower cost of production and high distance differentials, such as the Southwest, Southern Plains, and Northwest may become the major milk-producing regions of the country.

Two basic strategies for changing federal milk marketing orders could be pursued. One strategy involves establishing programs that control production, and the other involves program changes that would lessen government influence on milk prices to permit market forces to play a greater role.

If production controls were chosen, some industry sources have suggested the option of a marketing quota system. Such a system would limit the quantity of milk that could be marketed at a given price by each producer and in total. It could reduce national production, but it has numerous drawbacks. Regional production patterns would be likely to be frozen. Such a system would improve market orderliness; however, consumer prices would also be likely to increase. In addition, quotas tend to be a windfall for current producers, an entry barrier to new producers, and a cost of production in the long run. A quota system would be a major change that would need to be made swiftly; any delay would encourage producers to increase production in an attempt to capture a

higher quota. A quota system would also be highly controversial because of the impact it would have on individual producers and consumers. For these reasons, we do not prefer a production control strategy.

We prefer the second strategy of lessening government influence on milk prices so that market forces can play a greater role. Overall, with about 88 percent of milk production classified as grade A, improved transportation, and new technology on the horizon, there is substantially less need for extensive government regulation of fluid milk markets than in the past. There are a number of possible options for decreasing government influence. These options include establishing more basing points and eliminating the grade A differential, distance differentials, down allocations and compensatory payments, orders themselves, and order pricing provisions while retaining order supervision.

As discussed in chapter 3, all these options reduce the influence of marketing orders on regional production patterns, and have varying effects on consumer prices and market orderliness. National production would also fall, but such decline may be offset if the supply-demand adjuster causes the support price to rise. Although any or all of these options could be adopted, the steps should be made incrementally to allow time for the dairy industry to adjust and for the government to monitor such adjustments to assure that unanticipated adverse effects do not occur.

The sequence of steps to change the system might be to

- establish new basing points in various regions of the United States to minimize the influence on regional production patterns;
- assess the impact;
- remove down allocation and compensatory payment provisions to make reconstituted milk competitive;
- assess the impact; and
- eliminate the grade A and distance pricing differentials in federal orders.

With these changes, the price support level, as set by the trigger provision in the Food Security Act of 1985 and competitive market forces, would play a larger role in setting prices paid to producers. Elimination of the pricing provisions would also lessen the likelihood that the support price supply-demand adjuster would trigger price reductions in the future. The above steps would eliminate the pricing aspects of orders

but supervision would still exist. If appropriate, the next step would be to eliminate orders completely.

Matters for Consideration by the Congress

The Congress should consider establishing the goal of decreasing the federal role in milk pricing; working with USDA to develop and adopt legislation necessary to accomplish that goal; and directing the Secretary of Agriculture to (1) monitor the conditions in the industry that result from changes to pricing policies and (2) act, if necessary, to help the industry adjust.

Agency Comments and Our Evaluation

In its January 21, 1988, letter, USDA stated that it shared our interest in resolving the dairy surplus problem and lessening government influence on milk prices while preserving dairy policy goals. (See app. VII.)

With respect to the options we discuss in our report for changing the milk marketing orders, USDA stated that many have already been proposed and analyzed by industry, consumer, and government organizations. We agree. Our methodology for conducting the study included, as a starting point, developing an inventory of options proposed by others for changing the orders. While some of the options have been extensively studied, we believe our report provides a more comprehensive analysis of the options selected in terms of their impact on dairy policy goals.

USDA stated that several options, if any or all were to be implemented, would require new legislation by the Congress. We agree that legislation could be needed to implement certain of the options we discussed, and we are suggesting that the Congress work with USDA to develop and adopt legislation necessary to accomplish the goal of reduced federal involvement in milk pricing.

USDA stated that widespread support for changes to milk marketing orders does not exist in the dairy industry. We agree that a consensus does not exist for change; however, support for change does exist in some regions. Our work indicated that the milk marketing orders have treated producers in some regions unfavorably compared with producers in other regions. Our interviews with industry representatives throughout the country and our review of trade publications found that support for change varies from one region of the country to another. Regions, such as the Upper Midwest, that do not benefit as much as other regions tend to want changes, while benefiting regions generally

oppose changes that tend to reduce their receipts. For example, severa markets benefited substantially from the higher class I differential con tained in the Food Security Act of 1985. On the other hand, lower price supports have disadvantaged those producers who did not obtain comparable increases in their class I price.

In addition USDA commented on major topics discussed in our draft report, including

- the effect of down allocation and compensatory payment provisions or inter-order movement of dairy products;
- the need for the class I differential, including the distance differential component;
- the relative impacts of marketing orders and price supports on dairy surpluses; and
- the use of the Minnesota-Wisconsin (M-W) price as a mover of minimum class prices in all federal order markets.

Down Allocations and Compensatory Payments

USDA quoted the legislation for the milk marketing order program that marketing order "shall prohibit or in any manner limit, in the case of t products of milk, the marketing in that area of any milk or milk produ thereof produced in any production area in the United States." Becaus of this provision, USDA states that marketing orders cannot limit the movement of any milk product into any marketing area. USDA stated th all that is required is that milk moved between markets be accounted f in the classification system in such a way that (1) the cost of milk fron various sources in comparable uses is uniform among handlers and (2) returns to producers who serve the regulated area regularly are not undermined. USDA stated that down allocation provisions are used to provide equitable pricing treatment of milk from sources not regulatec by an order and milk from producers regulated by another order.

However, as noted earlier, the use of down allocation and compensato payment provisions, in practice, discourage the movement of milk between marketing areas, except when there is a deficit situation in th receiving market. Under compensatory payment provisions, processor who desire to use reconstituted milk are forced to pay the differences between the class I price and the class III price. The effect is to make reconstituted milk noncompetitive with class I milk.

Down allocation provisions price milk from distant markets in a lowe price class regardless of use, thereby eliminating any financial incenti

for shipping milk into a market except in cases of shortage. While down allocation helps to enforce the classified pricing system, it also excludes lower priced milk from other orders. The need for down allocation provisions simply suggests that the price of milk in the receiving market is too high relative to alternative sources of supply. In other words, if milk can be produced and transported to the receiving market at a lower cost than local milk supplies, it should be allowed to compete fairly.

Class I Differential—Including Distance Differential

USDA stated that supplying milk to fluid processors costs significantly more than supplying milk to manufacturing plants. According to USDA, added costs include the transportation of milk from production areas to consumption areas, and the supplying of milk to processing plants in the form and on the schedule desired by the processor. USDA stated that these costs must be covered by the pricing system, whether or not it is called a class I differential.

We agree that additional costs are likely to be associated with handling and marketing fluid milk. Specific policy tools discussed in the report are available for dealing with these costs of handling and marketing fluid milk. For example, distance differentials are used to cover the costs of transportation from production to consumption areas. However, over-order premiums currently serve the function of adjusting for additional costs; therefore, we believe that there is no need for federal regulation to cover the additional marketing costs.

Effects of Marketing Orders and Price Support on Surpluses

USDA also stated that our premise—economic incentives provided by milk marketing orders, through class I differentials, contributed to increases in production—overlooked a number of significant factors. First, USDA indicated that class I differentials have not been increased since 1968, with the exception of those mandated by the Congress in the Food Security Act of 1985. Consequently, class I price increases in federal milk orders have come about almost entirely from changes in the price support level.

We recognize the interrelationship of the price support program and the milk marketing order program, including their effect on milk prices, and we discuss it on pages 14 through 17. Basically, we stated that whenever market prices for milk used in manufacturing are at or below the support price level, any change in the support price results in a change in the market order minimum prices in all classes, including milk used for fluid consumption. Therefore, through the classified pricing aspect

of the federal order program, higher support prices are translated into higher prices for all milk.

USDA also stated that, as a percentage of the total class I prices, class I differentials have become substantially smaller and the price support program planted the seeds for the larger increases in milk production that followed. USDA's statement was true when the price support was increased from $9.00 to $13.10 per cwt between October 1977 and October 1980.

Past GAO reports have noted that the price support program was a principal cause of the surplus problem (see CED-80-88, July 21, 1980 and GAO/RCED-85-132, Sept. 18, 1985). However, since 1980 the Congress has periodically decreased the price support level from $13.10 to $10.60 per cwt (as of January 1988). In the Food Security Act of 1985, the Congress increased the class I differential in many markets. As a result, the class I differential, when considered as a percentage of the total milk price, actually increased and probably plays a larger role in attracting resources into dairying—especially in those regions of the country that have higher differentials and/or lower costs of production.

USDA also stated that federal order prices are minimum prices and in most markets cooperatives have established class I prices in excess of federal order prices. We agree that cooperatives receive over-order premiums in some markets and discuss this issue on pages 36 through 39. The major point is that these over-order premiums are determined by market forces, not by government mandate. Premiums are designed to cover the extra costs incurred in supplying markets with milk, and, therefore, there is no need for orders to attempt to reflect the extra costs through the regulatory process.

USDA commented that milk prices alone do not impact milk production, but rather milk prices in relation to feed costs, cull cow prices, the profitability of other farm enterprises, and off-farm employment opportunities for dairy farmers. We agree that all these factors influence milk production. When such factors are favorable for milk production, excess capital resources are attracted into dairying and ultimately, surpluses and high government costs result. One of the points of our report is that federal orders have not adjusted to changing production costs in pricing milk.

Minnesota-Wisconsin Price Series

USDA stated that we failed to recognize that the Minnesota-Wisconsin price, as the mover of minimum class prices, provided coordination between the milk order and price support program, assuring that federal order prices will not be rising when increasing price support purchases might require a reduction in the support level. We do recognize that the Minnesota-Wisconsin price provides coordination between the milk marketing orders and the price support programs and our report addresses this relationship in detail on pages 14 through 17.

USDA offered several suggestions to improve the technical accuracy of the report. We revised the report, where appropriate, on the basis of the suggestions made. USDA's comments are reprinted in their entirety in appendix VII.

Federal Dairy Programs—A Historical Perspective

The federal government has been involved in the dairy industry for more than 50 years. It has set policies and created programs to achieve various goals: to stabilize and preserve the industry during the Great Depression, to increase production of manufactured milk during World War II, and to protect dairy farmers' incomes during periods of high inflation. By creating programs to assure both adequate incomes for dairy farmers and an orderly system for marketing milk, the government has sought to assure an adequate milk supply for the country.

The price support and marketing order programs that the Congress created achieved these income, marketing, and supply goals. However, they provided so much incentive to produce milk that by the late 1970s the government was faced with large milk surpluses and growing government dairy purchases and inventories. In 1980, the Congress began a series of efforts to halt increases in milk production, efforts that have so far not solved the milk surplus problem. In addition, technological advances in the dairy industry threaten to increase milk production further.

The Federal Government Responds to a Chaotic Dairy Industry: 1929-41

Federal involvement in the dairy industry began in reaction to low prices before and during the Great Depression. The Congress' first attempt to increase producers' incomes, the Agricultural Marketing Act of 1929, authorized loans to cooperatives to help them purchase surplus commodities such as manufactured dairy products. Prices continued to fall, however, in the face of world depression and continuing increases in milk production.

In 1933, the Congress passed the Agricultural Adjustment Act, the objective of which was to restore farm purchasing power to the 1909-14 level, or parity (see glossary). After 1948, the base period used to establish price supports was 1910-14. To increase milk prices and farmers' incomes, the act designated milk and its products as basic commodities and authorized purchases and distribution of surplus dairy products and marketing agreements.

Under the act's purchase and distribution program, the government purchased manufactured dairy products but only in amounts needed for specific purposes—the school lunch program, for example. These programs were intended to improve not only dairy farmers' incomes but also the nation's health and well-being.

Under the marketing agreement and license provisions of the act, dairy farmers and milk processors were permitted to enter into voluntary agreements with the Secretary of Agriculture to establish minimum milk prices. Not all producers and processors were obliged to sign the agreements, but the Secretary could issue a license to ensure compliance by all processors in a market. In 1933, producers and processors entered into 15 marketing agreements with the Secretary. Almost immediately, however, producers and processors began to disagree about fluid milk pricing.

In 1935, the Congress revised the 1933 act. The new act replaced licenses with orders and authorized classified pricing, distance differentials, and pooling arrangements.

The Agricultural Marketing Agreement Act of 1937

The Agricultural Marketing Agreement Act of 1937 added several new provisions for the administration of the orders. First, it gave the Secretary of Agriculture authority to arbitrate disputes among milk handlers and cooperatives. Second, it added a producer referendum provision, which required dairy farmers to approve changes and additions to any federal milk marketing order covering an area in which they shipped milk.

And third, the act established criteria for setting minimum producer prices within the orders. It required the Secretary of Agriculture to set minimum milk prices at parity in each order. The act also required that each marketing area's milk prices reflect local economic conditions, including feed costs and supply and demand for milk and manufactured dairy products. In addition, minimum milk prices had to be established at a level that would insure a sufficient quantity of pure and wholesome milk and would be in the public interest.

To ensure that farmers received proper payments for their milk, the act also gave USDA the authority to audit the financial records of dairy companies operating under the orders. By the mid-1930s, a few national dairy companies handled a large percentage of the country's milk: in 1934 three firms accounted for 32 percent of national fluid milk sales. Some processors paid farmers improperly, fraudulently reporting milk weights, butterfat percentages, and milk use. Dairy farmers and their cooperatives did not always have the authority to audit these companies' records to make sure they were being paid properly. The act required that USDA verify processors' calculations of milk weight and butterfat percentages and their reporting of how the milk was used

USDA was to assure that farmers were paid according to the use provisions in the milk marketing orders.

The Federal Government Encourages the Production of Manufactured Dairy Products: 1941-49

World War II increased the demand for milk and milk products. Our troops' and allies' needs for manufactured dairy products, along with increased domestic demand for fluid milk, put pressure on U. S. milk production capability. To meet these needs, the federal government encouraged farmers to increase production and thus expanded U. S. milk manufacturing capacity.

In March 1941, USDA began to purchase substantial quantities of American cheese, evaporated milk, and nonfat dry milk solids for shipments to the British, under the Lend-Lease Act. In April 1941, USDA began to support dairy prices through open market purchases of butter at 31 cents per pound. In July 1941, the Steagall Amendment was enacted, requiring milk to be supported at not less than 85 percent of parity, and, in October 1942, an amendment to the Emergency Price Control Act was passed, requiring the support price for milk to be not less than 90 percent of parity.

The price support program encouraged production. However, because it takes time to increase dairy herds, only about half of our wartime needs were filled by increasing milk production. The other half was met by changing how we used milk. Before the war, many farmers, especially those remote from metropolitan fluid markets, had separated their milk on the farm, shipping only the butterfat and dumping the skim milk or providing it to their animals. During the war, the federal government used direct subsidies to encourage farmers to ship whole milk to market so nonfat dry milk could be manufactured.

Changes in Market Relationships Lead to National Pricing System: 1949-76

After the war, the demand for manufactured dairy products dropped, adversely affecting manufacturing-grade milk producers and processors. In 1949 the Congress permanently adopted the price support programs it had created during the war, hoping these programs could preserve the higher milk prices and farm purchasing power. Preserving dairy profits also helped assure that the milk processors who expanded to meet wartime needs would be able to continue operating at high capacity.

By establishing a national minimum price for manufacturing milk, the permanent price support system linked milk markets that had been separate. As markets became interrelated, the federal government decided to regulate the price of fluid milk in these markets, and developed a national pricing scheme for milk marketing orders east of the Rocky Mountains. In part because of the mountains, the western federal orders became influenced by California regulations.

The Agricultural Act of 1949 Made Milk Price Supports Permanent

The Agricultural Act of 1949 (7 U.S.C. 1421-1449) created a permanent price support program. The law required the Secretary of Agriculture to support the price of milk at 75 to 90 percent of parity. To maintain minimum prices, USDA's CCC was to purchase any quantity of butter, cheese, and nonfat dry milk that was offered and met specifications. The program's purpose was to assure an adequate supply of pure and wholesome milk by recognizing cost-of-production changes and keeping farm income high enough to maintain sufficient production capacity for meeting current and future needs.

Through purchases of manufactured dairy products, the Agricultural Act of 1949 established a national price floor for all milk. Previously, federal milk marketing orders had established classified pricing at local market levels, insuring that farmers received a greater price for milk used in fluid products than for milk used in manufactured products. The industry was now faced with determining the value of fluid milk. Local markets became interrelated through price supports that insured nationwide minimum milk prices to farmers and technologies that permitted the transportation of milk between markets.

Federal Milk Orders Adopt a National Pricing System

A national pricing system for milk used in fluid products was not established until the 1960s. Before the war, markets had been geographically separated and located around major cities. Each market had developed its own pricing scheme, without regard to the pricing policies of neighboring markets. Markets were free to establish prices on the basis of general economic conditions and the local supply and demand for fluid milk.

In the 1960s, local pricing policies were replaced by a uniform pricing system for federal milk marketing orders. This system was based on the M-W price series. To arrive at the M-W price, USDA obtained price information on milk purchased by milk processing plants it surveyed in Minnesota and Wisconsin. The competitive price paid for milk by these plants

became the basis for all prices paid to farmers delivering milk to plants regulated by federal milk orders. Because milk support prices generally have been kept relatively high, they have become a floor for manufacturing milk prices.

Uniqueness of Western Milk Pricing

Milk pricing west of the Rocky Mountains is different from milk pricing east of the Rocky Mountains. California, the major milk-producing state west of the Rocky Mountains, is not covered by a federal milk marketing order. It has employed its own state milk pricing regulation since the mid-1930s. It uses much the same classified pricing system as in federal orders with the following two major differences:

- Producer pricing gives heavy emphasis to milk production costs to periodically adjust the overall price level. An economic formula, as opposed to the M-W price, is used to change prices on a monthly basis for milk used for fluid purposes.
- A base plan is used to allocate receipts from fluid use (class I) sales. Only those producers that have an allocated production base have access to the preferred class I market.

For other western milk-producing states, the M-W price is used as the base for setting the manufacturing use (class III) as well as for changing the fluid price (class I). However, the distance differential does not solely depend on the distance from Eau Claire. The California price also becomes, in effect, a base that influences the distance differential, and has lowered it. The class I differentials in the west are lower because they appear to be influenced by the California pricing formula, which in part is based on lower production costs. For example, while the Black Hills order class I differential is $2.05, the Puget Sound-Inland order class I differential is $1.85. Likewise, while the Texas order class I differential is $3.28, the Central Arizona order class I differential is $2.52. The California price appears to have influenced prices in the Puget Sound-Inland and Central Arizona orders while Eau Claire is the base for the Black Hills and Texas orders.

If the Puget Sound-Inland milk prices were based on a distance differential of 15 cents per 100 miles from Eau Claire, their distance differential alone would be about $2.35, compared with the class I differential of $1.85, which includes both the grade A and distance differentials. Using the same base, the Central Arizona distance differential would also be about $2.55, compared with a class I differential of $2.52, which also includes both components.

Large Surpluses and the Congress's Attempts to Balance Supply and Demand: 1976 to Present

In the late 1970s, farmers began to produce more milk, largely because of high price support levels. Because consumption did not keep up with this production, large inventories of CCC-owned surplus milk products began accumulating. Since then, the Congress has changed the price support program several times to reduce production of milk and government surplus inventories. However, the Congress also increased some federal milk market order class I differentials, which has the effect of encouraging increased production.

Financial Incentives to Produce Milk

Prices in general, and the price of many factors involved in producing milk, such as cattle feed, fertilizer, and petroleum products, increased rapidly in the 1970s. The Congress responded to these inflationary conditions in the Food and Agriculture Act of 1977 (P. L. 95-113, Sept. 29, 1977) by increasing dairy price support levels. This legislation raised the minimum price support level from 75 percent of parity to 80 percent through March 31, 1979, and added a provision for semiannual adjustments through March 31, 1981. These adjustments were to reflect estimated changes in the parity index during the preceding 6 months. Before the 1977 act, the support price for milk was set annually at the beginning of the marketing year and remained in effect throughout the year unless the Secretary of Agriculture changed it.

Excess milk supplies eventually developed, primarily because of the high level of price supports. The price support began to rise sharply, primarily because of these semiannual adjustments in an inflationary economy. This provided a strong financial incentive for dairy farmers to produce more milk. To illustrate, the support price went from $9.00 to $13.10 per cwt between 1977 and 1980—an increase of $4.10, or 46 percent. By comparison, during this same period, the overall inflation rate was 27 percent.

Congressional Steps to Balance Supply and Demand

The Congress has taken steps to reduce the price support level. The first was to set the support price at $13.10 per cwt, starting in October 1980. The price support level was allowed to increase to $13.49 in October 1981. Since then, it has been adjusted downward to the January 1988 level of $10.60. The Congress also took several other steps to reduce dairy inventories and production.

The Agriculture and Food Act of 1981 (P. L. 97-98, Dec. 22, 1981) directed USDA to use all available authorities to reduce CCC's dairy product inventories. In December 1981, USDA responded by making cheese

available to states for distribution to the needy. The Temporary Emergency Food Assistance Act of 1983 (Title II of P.L. 98-8, Mar. 24, 1983) formalized the Special Distribution Program under the Temporary Emergency Food Assistance Program (TEFAP). The act directed USDA to make all CCC commodities, such as cheese, butter, nonfat dry milk, rice and honey, in excess of quantities needed for other programs and activities, available for distribution to the needy. In September 1983, under Public Law 98-92, TEFAP was extended through fiscal year 1985, and Public Law 99-88, enacted August 15, 1985, extended TEFAP through March 31, 1986. The Food Security Act of 1985 (P.L. 99-198) extended TEFAP through September 1987, and the Urgent Relief for Homeless Act (P.L. 100-77, July 22, 1987) extended TEFAP through fiscal year 1988.

The Dairy Production Stabilization Act of 1983 (P.L. 98-180, Nov. 29, 1983), reduced the dairy price support level by 50 cents per cwt to $12.60 and authorized additional 50-cent reductions on April 1 and July 1, 1985, if estimated government purchases for the following 12-month period exceeded specified levels. The Secretary of Agriculture reduced the support price on April 1, 1985, to $12.10, and on July 1, 1985, to $11.60. The act also established two programs to stabilize the supply and demand for dairy products—a 15-month Milk Diversion Program beginning January 1, 1984, and ending March 31, 1985, and a Dairy Promotion Program.

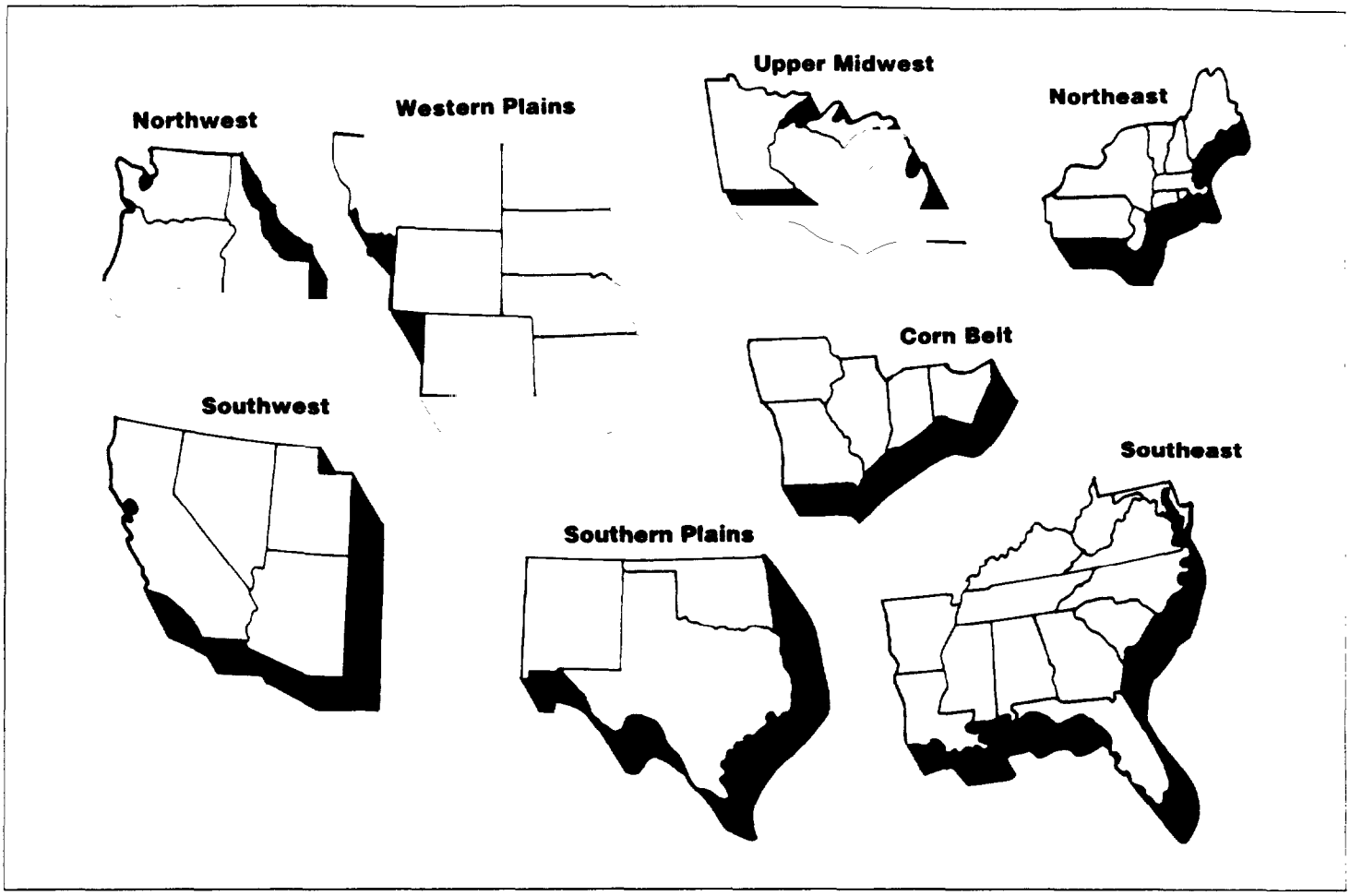
Under the terms of the Milk Diversion Program, dairy farmers voluntarily contracted with CCC to reduce their milk marketings during the 15-month period that ended March 31, 1985, to a level from 5 to 30 percent below their milk marketings during a legislatively established base period (1982 or, at the dairy farmer's option, an average of 1981-82 marketings). In return, dairy farmers received $10 for each cwt of milk marketing reduction. The payments were funded primarily through a 50 cents per cwt assessment on all milk marketed commercially from December 1, 1983, through March 31, 1985, by milk producers in the 48 contiguous states.

The nationwide Dairy Promotion Program, designed to promote the sale of dairy products, includes promotion, research, and nutrition education activities. The program is financed by a mandatory assessment of 15 cents per cwt on the proceeds of the sale of milk marketed commercially by producers in the 48 contiguous states.

The Food Security Act of 1985 (P.L. 99-198, Dec. 23, 1985) authorized the Dairy Termination Program to reduce dairy surpluses and government purchases. The program covered an 18-month period beginning April 1, 1986. Any dairy farmer who wanted to suspend production could submit to the Secretary of Agriculture a dollars-per-cwt bid based on milk marketings during a base period. These bids had to be submitted by March 7, 1986. If the bid was accepted, the dairy farmer was required to leave the industry for at least 5 years, slaughter or export his female dairy animals, and idle his dairy facilities for 5 years. The act set a national program goal of reducing milk production by 12 billion pounds during the 18-month period. Total program costs were estimated to be about $1.8 billion, with dairy farmers paying a portion of the costs. At the end of the bidding period, the Secretary accepted about 14,000 bids at $22.50 or less per cwt of milk, and USDA estimated that about 1.6 million female dairy animals would go to slaughter or be exported under the program. As of August 1, 1987, about 1.2 million animals had been slaughtered or exported.

The act also realigned the national pricing system for fluid milk. It increased most federal milk market order class I differentials (see app. III)—increases that will remain in effect unless modified by an order amendment. Further, the act established a supply-demand adjuster, whereby the price-support level is decreased or increased on the basis of an estimated level of CCC purchases. This supply-demand adjuster resulted in a price support of $10.60 per cwt as of January 1988.

GAO-Designated Dairy Production Regions in the United States



Minimum Federal Order Class I Differentials Before and After the Food Security Act of 1985

Region	Marketing order	Before act[a]	After act[a]	Change[a]
Corn Belt	Central Illinois	$1 39	$1 61	$0 22
	Eastern Ohio-W Pa.[b]	1 85	1 95	0 10
	Indiana	1 53	2 00	0 47
	Iowa	1 40	1 55	0 15
	Ohio Valley	1 70	2 04	0 34
	Southern Illinois	1 53	1 92	0 39
Northeast	Eastern Ohio-W Pa.[b]	1.85	1 95	0 10
	Middle Atlantic[b]	2.78	3 03	0 25
	New England	3.00	3.24	0 24
	New York-New Jersey	2.84	3 14	0 30
Northwest	Oregon-Washington	1.95	1 95	0.00
	Puget Sound-Inland	1.85	1 85	0.00
	SW Idaho-E. Oregon	1.50	1 50	0.00
Southeast	Alabama-West Florida	2.30	3.08	0.78
	Central Arkansas	1.94	2 77	0 83
	Fort Smith, Arkansas	1 95	2 77	0 82
	Georgia	2.30	3 08	0 78
	Greater Louisiana	2.47	3 28	0 81
	Louisville-Lex.-Evans.	1.70	2 11	0 41
	Memphis, Tennessee	1 94	2 77	0 83
	Middle Atlantic[b]	2.78	3 03	0 25
	Nashville, Tennessee	1.85	2 52	0 67
	New Orleans-Miss.	2.85	3 85	1 00
	Paducah, Kentucky	1 70	2 39	0 69
	Southeastern Florida	3.15	4 18	1 03
	Tampa Bay	2.95	3 88	0 93
	Tennessee Valley	2.10	2 77	0 67
	Upper Florida	2.85	3 58	0 73
Southern Plains	Lubbock-Plainview, Tex.	2.42	2 49	0 07
	Rio Grande Valley	2.35	2 35	0 00
	Southwest Plains	1 98	2 77	0 79
	Texas	2.32	3 28	0 96
	Texas Panhandle	2.25	2 49	0 24
Southwest	Central Arizona	2.52	2 52	0 00
	Great Basin	1 90	1 90	0 00
	Lake Mead	1 60	1 60	0 00

(continued)

Region	Marketing order	Before act[a]	After act[a]	Change[a]
Upper Midwest	Chicago Regional	1.26	1 40	0 14
	Michigan Upper Pen.	1 35	1 35	0 00
	Southern Michigan	1.60	1 75	0 15
	Upper Midwest	1.12	1 20	0 08
Western Plains	Black Hills	$1.95	$2 05	$0 10
	Eastern Colorado	2.30	2.73	0 43
	Eastern South Dakota	1.40	1 50	0 10
	Greater Kansas City	1 74	1 92	0 18
	Nebraska-W. Iowa	1.60	1 75	0 15
	Western Colorado	2.00	2.00	0 00

Note: GAO has listed orders in the region in which they are predominantly located.

[a]Dollars per cwt

[b]These orders are listed by GAO in two regions since they represent a significant area in each region

Source: USDA-AMS.

Fluid Utilization Rates by Marketing Order by Region, 1986

Region	Marketing order	Fluid utilization rate
Corn Belt	Central Illinois	59.9
	Eastern Ohio-Western Pennsylvania[a]	51.1
	Indiana	62.4
	Iowa	27.8
	Ohio Valley	54.7
	Southern Illinois	59.0
Northeast	Eastern Ohio-Western Pennsylvania[a]	51.1
	New England	52.7
	New York-New Jersey	39.8
	Middle Atlantic[a]	46.6
Northwest	Oregon-Washington	39.7
	Puget Sound-Inland	35.4
	Southwestern Idaho-Eastern Oregon	17.7
Southeast	Alabama-West Florida	82.0
	Central Arkansas and Ft. Smith[b]	80.0
	Georgia	81.3
	Greater Louisiana	81.0
	Louisville-Lexington-Evansville	59.9
	Memphis	77.1
	Middle Atlantic[a]	46.6
	Nashville	92.1
	New Orleans-Mississippi	70.9
	Paducah	79.9
	Southeastern Florida	89.3
	Tampa Bay	86.0
	Tennessee Valley	73.1
	Upper Florida	86.3
Southern Plains	Lubbock-Plainview	89.1
	Rio Grande Valley	67.2
	Southwest Plains	49.0
	Texas	65.8
	Texas Panhandle	68.5
Southwest	Central Arizona	57.6
	Great Basin	43.5
	Lake Mead	

(continued)

Region	Marketing order	Fluid utilization rate
Upper Midwest	Chicago Regional	20 2
	Michigan Upper Peninsula	
	Southern Michigan	43 0
	Upper Midwest	13 8
Western Plains	Eastern Colorado	60 8
	Eastern South Dakota and Black Hills[b]	42 4
	Greater Kansas City	47 9
	Nebraska-Western Iowa	38 3
	Western Colorado	71 3

Note GAO has listed orders in region in which they are predominantly located, except as noted

[a]These orders are listed by GAO in two regions since they represent a significant area in each region

[b]Data for these two orders were combined by USDA to mask restricted data.

[c]Data for 1986 restricted by USDA.

Source: Dairy Market Statistics—1986 Annual Summary, USDA

Regional Change in Milk Production, Average 1977-79 to Average 1984-86

(Pounds in millions)

Region and State[a]	Average 1977, 1978, and 1979[b]	Average 1984, 1985 and 1986[b]	Percent change
Corn Belt			
Illinois	2,446	2,694	10
Indiana	2,208	2,394	8
Iowa	3,970	3,914	(1)
Missouri	2,804	2,851	2
Ohio	4,332	4,819	11
Total	**15,759**	**16,672**	**6**
Northeast			
Connecticut	614	610	(1)
Maine	639	670	5
Massachusetts	577	576	•
New Hampshire	341	365	7
New Jersey	523	481	(8)
New York	10,437	11,639	12
Pennsylvania	7,919	9,853	24
Rhode Island	54	43	(20)
Vermont	2,138	2,393	12
Total	**23,241**	**26,631**	**15**
Northwest			
Idaho	1,641	2,335	42
Oregon	1,073	1,416	32
Washington	2,675	3,660	37
Total	**5,389**	**7,411**	**38**
Southeast			
Alabama	639	537	(16)
Arkansas	725	804	11
Delaware	132	142	8
Florida	1,969	2,030	3
Georgia	1,299	1,278	(2)
Kentucky	2,307	2,218	(4)
Louisiana	1,058	897	(15)
Maryland	1,545	1,598	3
Mississippi	836	853	2
N. Carolina	1,571	1,697	8
S. Carolina	521	563	8
Tennessee	2,139	2,203	3
Virginia	1,913	2,055	7

(continued)

Region and State[a]	Average 1977, 1978, and 1979[b]	Average 1984, 1985 and 1986[b]	Percent change
West Virginia	344	375	9
Total	**16,998**	**17,251**	**2**
Southern Plains			
New Mexico	463	1,059	129
Oklahoma	1,093	1,168	-
Texas	3,414	3,968	16
Total	**4,971**	**6,195**	**25**
Southwest			
Arizona	917	1,313	43
California	12,125	16,434	36
Nevada	195	264	35
Utah	941	1,110	18
Total	**14,179**	**19,120**	**35**
Upper Midwest			
Michigan	4,795	5,441	14
Minnesota	9,239	10,595	15
Wisconsin	21,414	24,467	14
Total	**35,448**	**40,503**	**14**
Western Plains			
Colorado	859	1,083	26
Kansas	1,387	1,270	(8)
Montana	296	342	16
Nebraska	1,303	1,305	•
North Dakota	910	1,083	19
South Dakota	1,626	1,724	6
Wyoming	119	132	11
Total	**6,501**	**6,940**	**7**
Total	**122,485**	**140,721**	**15**

[a]Alaska and Hawaii not included.

[b]Totals may not add due to rounding.

Source: Dairy Situation, USDA, March 1980; Dairy Situation and Outlook Report, USDA April 1987

Changes in CCC Purchases by Region, Milk Equivalents, 1977-79, Compared With 1984-86

(Pounds in millions)

Region	1977-79	1984-86	Percent change
Corn Belt	809.7	1,344 9	66
Northeast	402 5	548 6	36
Northwest	162.0	1,288 4	695
Southeast	80.9	284 4	252
Southern Plains	8 9	384 9	4,227
Southwest	524.9	1,897 8	262
Upper Midwest	1,848.0	4,689.5	154
Western Plains	61.9	932.2	1,407
Total	**3,898.7[a]**	**11,370.7[a]**	**192**

[a]May not add due to rounding.

Source. ASCS Commodity Fact Sheet, USDA March 1987 (milk equivalents calculated by GAO using USDA conversion factors).

Comments From the U.S. Department of Agriculture

Note: GAO comments supplementing those in the report text appear at the end of this appendix.

DEPARTMENT OF AGRICULTURE
OFFICE OF THE SECRETARY
WASHINGTON, D. C. 20250

January 21, 1988

Mr. J. Dexter Peach
Assistant Comptroller General
Resources, Community, and Economic
Development Division
United States General Accounting Office
Washington, D. C. 20548

Dear Mr. Peach:

Thank you for the opportunity to review a draft of the General Accounting Office (GAO) report, "MILK MARKETING ORDERS: Options for Change." We share GAO's interest in resolving the dairy surplus problem and lessening Government influence on milk prices while preserving dairy policy goals.

GAO contends that Federal milk order pricing policies, designed to encourage and maintain a local supply of milk, are outdated, no longer needed and contribute to excess milk production. The pricing policies drawing specific attention are (1) Class I differentials, (2) down allocation and compensatory payments, and (3) tying changes in Class I prices to changes in the dairy support level through the use of the Minnesota-Wisconsin series as the price mover. According to the report, Class I differentials and tying Class I price changes in Federal order markets to price support changes have contributed to surplus milk production. Down allocation and compensatory payments allegedly discourage the production and sale of reconstituted fluid milk products. GAO claims that all of these provisions in combination encourage and maintain locally-produced supplies of Grade A milk and discourage shipments of surplus supplies among markets.

Federal milk orders are part of the broad program of marketing agreements and orders authorized by the Agricultural Marketing Agreement Act of 1937. Under this authority, the Secretary of Agriculture is empowered to help stabilize market conditions by issuing Federal orders that apply to handlers of milk and milk products.

The objectives of Federal milk orders are to promote orderly marketing conditions in fluid milk markets, to improve the income situation of dairy farmers by establishing minimum milk prices, to supervise the terms of trade in milk markets in such a manner as to achieve more equality of bargaining between producers and milk handlers, and to assure consumers adequate supplies of good quality milk at reasonable prices.

The 1937 Act authorizes the terms that are contained in a Federal milk order. These include classifying milk according to its use, establishing minimum prices that milk handlers must pay dairy farmers, distributing milk proceeds equitably among producers in the market, providing for an impartial audit to insure payments to producers and to verify reported utilization of milk, and verifying weights and tests of milk delivered by producers.

Producers and their cooperatives are the motivating force behind milk orders. They develop proposals for a new order or order amendments and submit them to the Department of Agriculture for consideration. When the Secretary believes that such proposals would tend to effectuate the purposes of the 1937 Act, he will conduct a public hearing. The Department follows a formal rulemaking procedure beginning with this public hearing at which producers, handlers, and consumers present evidence regarding the proposal. Each provision of an order must be based solely on evidence received at the hearing. A new milk order or amendments to existing milk orders can be made effective only after approval by producers. The USDA administers milk orders through market administrators whose duties are prescribed in each order.

The Federal milk order program has been in operation for a long time. Milk marketing conditions today are vastly different than they were at the time the program started in the late 1930's. On the surface, the need for Government involvement in pricing and marketing arrangements may be less clear than it once was. On the other hand, many of the same product and market fundamentals which gave rise to the development of the Federal order system still exist. Nevertheless, the program has continuously adapted to the changes in the structure and organization of the dairy industry. With the increased mobility of milk, local markets lost their identity. Local supply-demand adjustors were deleted from orders and uniform classification, pricing and administrative provisions were adopted, all designed to facilitate the movement of milk among markets.

Furthermore, the legislation authorizing the program provides that no marketing order "shall prohibit or in any manner limit, in the case of the products of milk, the marketing in that area of any milk or product thereof produced in any production area in the United States." Because of this provision, marketing orders cannot limit the movement into any marketing area of any milk product. All that is required is that milk moved between markets be accounted for in the classification system in such a way that the cost of milk from various sources in comparable uses is uniform among handlers and returns to producers who serve the regulated area regularly are not undermined.

Allocation provisions are used to provide equitable pricing treatment of milk from sources not regulated by an order and milk from producers regulated by another order. Compensatory payment provisions were adopted under orders to accommodate partial regulation rather than full regulation of fluid milk handlers that have a minimal association with the regulated area.

There are significant costs in supplying milk to fluid processors which are not incurred when supplying milk to manufacturing plants. They include the costs of transporting milk from areas of production to areas of consumption and in supplying fluid milk processing plants in the form and on the schedule desired by the processor. These costs must be covered by the pricing system, whether or not it is called a Class I differential.

Deliveries to plants regulated under Federal milk orders account for 70 percent of the total milk marketed by U.S. dairy farmers. Consequently, increases and decreases in the amount of milk marketed under Federal orders have a substantial impact on changes in U.S. milk production. However, the GAO conclusion that economic incentives provided by milk marketing orders, through Class I differentials, contributed to increases in production overlooks a number of significant factors. First, Class I differentials have not been increased since 1968, with the exception of those mandated by Congress in the Food Security Act of 1985. Consequently, Class I price increases in Federal milk orders have come about almost entirely from changes in the price support level, and as a percentage of the total Class I price, Class I differentials have become substantially smaller. Second, Federal order prices are minimum prices and in most markets cooperatives have established Class I prices in excess of Federal order prices. However, these payments to a considerable extent reflect the cost of services performed by cooperatives in providing Class I milk when and where needed and in the quantities and forms desired. They also reflect in some cases additional transportation costs not reflected in Federal order prices. In some cases, prices negotiated by cooperatives do not cover the cost of the services provided. Thus, over-order prices do not tend to encourage the production of additional milk. Third, the Food and Agriculture Act of 1977, which increased the minimum support price to 80 percent of parity and mandated semi-annual adjustments in the support level, planted the seeds for the large increases in milk production that followed. Originally provided for two years, these provisions were extended another two years. As a result, the dairy support price rose from $9.00 on October 1, 1977, to $13.10 on October 1, 1980, an increase of almost 46 percent in just three years.

It is not milk prices alone that impact milk production, but rather milk prices in relation to feed costs, cull cow prices, the profitability of other farm enterprises, and off-farm employment opportunities for dairy farmers. During the late 1970's and early 1980's, these factors were generally favorable to milk production. Low slaughter cow prices discouraged herd culling, favorable milk-feed price relationships increased feeding rates, and unfavorable employment opportunities both in other farm enterprises and off the farm not only discouraged movement out of dairy farming but attracted resources into dairy farming. Feed costs have remained favorable to milk production.

The use of the Minnesota-Wisconsin manufacturing grade milk (M-W) price as the mover of minimum class prices in all Federal order markets is identified in the report as another factor contributing to increased production. When market prices are at support levels, increases or decreases in the support level result in corresponding increases and decreases in the M-W price. Consequently, the incentive to increase or decrease production can be traced to the support price change. What the report fails to recognize is that using the M-W price as the mover of minimum class prices provides coordination between the milk order and price support programs, assuring that Federal order prices will not be rising at a time that increasing price support purchases might require a reduction in the support level. Without this tie, there would have been no assurance of a reduction in Federal order minimum prices following mandated reductions in the support price. Also, the current procedures for pricing Class I milk under milk orders, which tend to reflect price support changes in Class I prices, enables the Secretary of Agriculture to carry out the statutory objective of supporting the price of all milk, not just manufacturing grade milk.

In its report, GAO recommends several options regarding Federal milk orders. Many of these have been considered and analyzed by industry, consumers and government agencies in the past.

One such option, eliminating down allocation and compensatory payments with respect to reconstituted milk, was proposed by the Community Nutrition Institute in 1979. Following a detailed analysis, the Department rejected the petition to hold a hearing to consider such changes under all orders. The Department concluded that the proposed changes would be inconsistent with the intent of the 1937 Act authorizing milk orders. Several of the key points made in denying the petition were:

See comment 1

--Adoption of the reconstituted milk proposal would make meaningless the classified pricing of milk and thus thwart the intent of Congress. Classified pricing, specifically authorized by the Agricultural Marketing Agreement Act of 1937, provides for uniform class prices among all handlers in a regulated market.

--The proposal would result in negligible benefits to consumers, but would substantially reduce returns to dairy farmers. It was estimated that total consumer expenditures could decline by $186 million annually, that government purchases would decline by $165 million, and that dairy farmer returns would drop by $520 million, with the latter impact having a multiplier effect in terms of the economic loss to rural communities.

Other options discussed by GAO include eliminating Class I differentials, eliminating Federal milk orders completely, and eliminating pricing provisions in Federal orders while retaining order supervision.

The proposed option of establishing more basing points would retain classified pricing while creating a series of regional bases for setting Class I prices. These options involved complex issues and need to be thoroughly researched and analyzed to determine their overall impact.

There has not and does not appear to be widespread support in the dairy industry for any of the options recommended by GAO. At this time, therefore, prospects appear very dim for industry approval of proposals to amend milk orders to carry out any of the GAO options. In addition, legislation amending the 1937 Act would be required before several of the options could be considered by the Department of Agriculture.

Since the changes recommended by GAO would require extensive and major changes in the Federal milk order program, the future of the program, as has been the case in the past, is up to Congress and the industry.

See comment 2

Enclosed are comments on the GAO report by USDA's Agricultural Stabilization and Conservation Service, Economic Research Service, and Office of Budget and Program Analysis.

Sincerely,

KAREN K. DARLING
Deputy Assistant Secretary
Marketing and Inspection Services

3 Enclosures

The following are GAO's comments on the U.S. Department of Agriculture's letter dated January 21, 1988.

GAO Comments

1. The study to which USDA refers is 9 years old and may not reflect current conditions. As discussed in our report, the provision could be removed to allow market forces to determine whether reconstituted milk would be acceptable to consumers.

2. The referenced comments are not included in this appendix. They reinforced many of the same points made in the Department's January 21, 1988, letter, adding only points of a technical nature, which we incorporated into our final report, as appropriate.

Major Contributors to This Report

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Glossary

All Milk Wholesale Price	The average price paid for all milk at the first handler (processor) level of the market.
Balancing	The process of rationalizing the allocation of total milk supplies between fluid and manufacturing plants.
Basing Point	A location, generally in an area of surplus milk production, from which milk is priced based on distance from that location.
Blend Price	Minimum prices required to be paid to market order producers. Producers are paid a weighted average of all class values of milk used by all processors.
Class I Differential	The combination of the grade A differential and the distance differential.
Class I Milk	Grade A milk used to produce fluid milk products.
Class II Milk	Grade A milk used to manufacture soft products, such as ice cream and cottage cheese, under orders with three classes of milk. Grade A milk used to produce any manufactured dairy product under orders with only two classes of milk.
Class III Milk	Grade A milk used in manufacturing hard products, such as butter, cheese, and nonfat dry milk, under orders with three classes of milk.
Classified Pricing	A pricing system under which the price of milk depends on the use made of the milk. Higher prices are charged for milk used for fluid purposes.
Compensatory Payments	A charge placed on milk or concentrated milk solids shipped into a market from another market.

Distance Differential	A difference in the price paid for milk based on the distance the milk is located from a specified basing point.
Down Allocation	Pricing unneeded milk from distant markets in a lower price class regardless of its use.
Fluid Use	Use of milk in fluid form, e.g. whole, skim, lowfat, and flavored milk.
Give-Up Charge	A payment to a manufacturing plant over the class I price to get that plant to sell milk for fluid use.
Grade a Differential	A price differential for milk used for fluid purposes at the basing point. Initially used to encourage grade A milk production.
Marketwide Service Payment	Payments to qualified handlers to reimburse them for services they provide that benefit all dairy farmers and/or processors.
Milk Equivalents	The volume equivalent of whole milk used in making other dairy products.
Milk Handler	Milk handlers are processors and/or cooperatives regulated by market orders.
Minnesota-Wisconsin Price	The average price per cwt paid to farmers for grade B milk in Minnesota and Wisconsin as estimated by USDA.
Over-Order Premium	A payment charged by a producers' cooperative excess of the minimum price specified by a marketing order; usually applies to Class I milk.
Parity	A term implying that a product's value is placed on a par with the purchasing power of the same product value sometime in the past. In the case of milk, parity reflects the current price level at which a unit of

	milk would have the same purchasing power it held between 1910-14, when prices received and paid by farmers were considered to be in good balance.
Processor	Any firm that bottles fluid milk.
Reconstituted Milk	A fluid milk product made from a combination of concentrated milk solids and water.
Standby Pool	Cooperatives in high priced markets deduct an amount per cwt from their producers price to pay producers in distant areas that have milk in excess of fluid use to ship them only when requested.
Supply-Demand Adjuster	A systematic procedure for changing the milk price support level to avoid building up large government stocks or creating a shortage. For example, if purchases rise above a certain level, the price-support level would be reduced, and vice versa.
Transportation Pool	A mechanism for spreading the cost of shipping milk into the market from other markets over all milk procured. This equalizes the cost of milk to all handlers in the market.

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