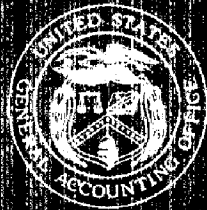


GAO

December 1993

DAIRY INDUSTRY

Potential for and Barriers to Market Development



**RESTRICTED--Not to be released outside the
General Accounting Office unless specifically
approved by the Office of Congressional
Relations.**

RELEASED

[Redacted content]

[Redacted content]



United States
General Accounting Office
Washington, D.C. 20548

Resources, Community, and
Economic Development Division

B-252971

December 21, 1993

Congressional Requesters

This report responds to your request that we (1) compare and contrast the U.S. dairy industry's export activities with those of other major milk-producing nations, (2) examine opportunities to develop and expand dairy markets, and (3) identify potential obstacles that the U.S. dairy industry faces in expanding markets. This report contains matters for congressional consideration for changing federal policies that would increase marketing incentives.

As arranged with your offices, unless you publicly announce its contents earlier, we plan no further distribution of this report until 7 days after the date of this letter. At that time, we will send copies to the appropriate House and Senate Committees and Subcommittees; interested Members of Congress; the Secretary of Agriculture; the Director, Office of Management and Budget; and other interested parties. We will make copies available to others on request.

This work was performed under the direction of John W. Harman, Director, Food and Agriculture Issues, who can be reached at (202) 512-5138 if you or your staffs have any questions. Major contributors to this report are listed in appendix IV.

A handwritten signature in cursive script, appearing to read 'J. Dexter Peach'.

J. Dexter Peach
Assistant Comptroller General

B-252971

List of Requesters

The Honorable E (Kika) de la Garza
Chairman

The Honorable Pat Roberts
Ranking Minority Member
Committee on Agriculture
House of Representatives

The Honorable Harold L. Volkmer
Chairman

The Honorable Steve Gunderson
Ranking Minority Member
Subcommittee on Livestock
Committee on Agriculture
House of Representatives

Executive Summary

Purpose

Since 1981, the Congress has taken a number of actions that make the dairy industry less dependent on federal financial support. As a result, the government's costs of purchases under the U.S. dairy program have been reduced from a high of about \$2.7 billion in fiscal year 1983 to about \$395 million in fiscal year 1992. In addition, the outcomes of international trade agreements may create pressures to promote freer trade, causing the dairy industry to be more responsive to market forces. In light of this changing environment, the House Committee on Agriculture and its Subcommittee on Livestock—both of which are interested in ensuring the long-term viability of the dairy industry—requested that GAO (1) compare and contrast the U.S. dairy industry's export activities with those of other major milk-producing nations, (2) examine opportunities to develop and expand markets, and (3) identify potential obstacles the industry faces in expanding markets.

Background

Federal involvement in the dairy industry began in reaction to unstable domestic market conditions and low milk prices during the Great Depression. The objectives of federal dairy policies are to support farmers' prices and ensure an adequate supply of milk and dairy products. The major program directed at achieving these objectives is the federal price support program. Under this program, the Department of Agriculture (USDA) stands ready to buy, at designated prices, bulk cheese, butter, and nonfat dry milk that are offered to it for sale. Federal outlays for these purchases depend on the extent to which milk production exceeds commercial purchases. Generally, high support prices lead to high milk production, which leads to surpluses and more government purchases, assuming a relatively stable commercial demand for dairy products.

Another outlet for excess domestic production is export markets. USDA has a number of programs and activities that can assist the industry in developing export markets. For example, the subsidized Dairy Export Incentive Program (DEIP) was established, in part, to help U.S. dairy farmers, processors, manufacturers, and exporters gain access to foreign markets, especially those in which U.S. products are competing with subsidized dairy products from the European Community (EC). DEIP, which cost about \$140 million in calendar year 1992, focuses primarily on bulk sales of cheese, butter, and dry milk. USDA's Foreign Agricultural Service, which is responsible for facilitating agricultural trade, including dairy products, has several methods and programs that are available to help industry initiatives to expand the U.S. presence in global markets. USDA's

market development resources include a network of overseas agricultural attachés and trade offices.

Results in Brief

The dairy industry is not taking full advantage of what could be an expanding international market for dairy products. Although the United States is the world's third largest producer of milk, it plays a relatively small role in most foreign dairy export markets, exporting only about 1 million out of 68 million milk-equivalent¹ metric tons of the annual domestic milk output.

By comparison, New Zealand, which provides little or no subsidies to its farmers, is a major player in international dairy export markets. It has developed extensive international marketing expertise and, according to USDA, exports dairy products equating to almost 4 million out of about 8 million milk-equivalent metric tons of annual milk production. In contrast, the EC exports about 7 million milk-equivalent metric tons out of an annual production of 114 million metric tons, but it has relied upon export subsidies as a major tool for penetrating world markets for bulk commodities.

According to industry market research studies, the U.S. dairy industry has opportunities to develop and expand markets. Exports to Mexico and Pacific Rim countries appear to offer the greatest potential for new market development and expansion because of the growing economies, current low dairy consumption levels, and changing diets and eating habits. Although these studies indicate some opportunity for expanding the domestic market for high-value dairy products, the domestic market is generally a mature market and offers only modest potential for expansion.

Industry leaders assert that two major interrelated factors have impeded the industry's ability to more effectively expand and compete in global markets. First, federal dairy policies, particularly the price support program, encourage the production of dairy products that do not always meet customers' requirements, and often the result is that U.S. market prices exceed world prices.² For example, the 1992 U.S. market price for cheese was \$1.19 per pound, while the world price was \$0.81 per pound. Second, these leaders believe the U.S. dairy industry has placed more

¹"Milk equivalent," as used in this report, is the amount of milk used in making various dairy products and is measured in terms of the total solids in milk.

²The world price for dairy products represents a simple average of the reported range of prices from major exporting countries.

emphasis on production than on marketing and has not developed a marketing mind-set that focuses on global consumers' preferences. Instead, it has adapted to the existing federal support environment, including import restrictions, and emphasized domestic commercial sales and sales to the federal government under the price support program.

Principal Findings

The U.S. Participation in Export Markets

The U.S. dairy industry ranks third in world production volume behind the 12-nation EC and the former Soviet Union. Most of the U.S. industry's marketing efforts are focused domestically; about 98 percent of the nation's annual dairy production is consumed in domestic markets. The remaining 2 percent, or about 1 million milk-equivalent metric tons, moves into world export markets in the form of butter, cheese, or dry milk, most of which are subsidized under DEIP. However, a recent University of Wisconsin study points out that market development opportunities are limited under DEIP because the dominant exporters of U.S. dairy products under the program are EC firms with U.S.-based operations and not U.S. firms.

The U.S. industry's share of many export markets is small compared with other countries' or trading blocs' share. In 1990, for example, U.S. cheese exports accounted for only about 18 percent of the Mexican cheese import market and less than 1 percent of the Japanese cheese import market. Exports of other dairy products, including ice cream, whey, and lactose, hold a better position in export markets or have shown marked increases in recent years. Collectively, export sales of whey, lactose, and related products increased from \$90.3 million in 1990 to \$248.9 million in 1992.

By contrast, the dairy industries of some countries, such as New Zealand and Australia, have developed extensive international marketing expertise and depend heavily on export markets for their sales. From 1990 to 1992, for example, dairy exports accounted for as much as 48 percent of New Zealand's dairy production and averaged 3.9 million milk-equivalent metric tons annually. The EC, whose dairy industries are highly subsidized, is also a major player in world markets and since 1990 has exported an average of about 7 million milk-equivalent metric tons, or about 6 percent of its production annually.

Opportunities to Expand Markets

According to industry market research, the greatest potential for market expansion exists in international markets where economic development has led to higher incomes and consumers' changed preferences for value-added products. For example, Pacific Rim countries, which have some of the world's fastest growing economies and populations, have been shifting their diets from traditional home-prepared foods to Western consumer-ready foods, including cheese, butter, frozen desserts, and ready-to-eat foods. Furthermore, these countries are dependent on imports to satisfy their needs for dairy products. In addition, data on per capita consumption as an indicator show that a potential exists for expanded markets for major U.S. dairy products in many countries. Industry studies also indicate that domestic markets could offer some modest growth for lowfat products and specialty cheeses.

Obstacles to Expanding Markets

Recent declines in the support price have provided some incentives for the U.S. dairy industry to be more responsive to commercial market forces and less dependent on the federal price support program. These reductions in the support price are consistent with positions taken by GAO in reports issued since 1980. However, according to many leading dairy processors and producers GAO spoke with, two interrelated factors have impeded the industry's ability to more effectively expand and compete in global markets. First, while there is some sentiment among producers for maintaining high support price levels, leaders of both industry sectors agree that the price support program results in U.S. prices that very often exceed world market prices. For example, the December 1992 U.S. market and support prices for bulk cheddar cheese were \$1.19 and \$1.11 per pound, respectively, while the estimated world market price was \$0.81 per pound. The 1992 market and support prices for butter and nonfat dry milk were similarly above the world market prices. Therefore, even if export opportunities for bulk dairy products exist, U.S. dairy processors would have little incentive to sell on the world market without export subsidies. In addition, federal policies do not encourage the production of products that are always in greatest demand or meet consumers' preferences, such as specialty cheeses.

Second, most of the industry leaders stated the need to change the mind-set of the dairy industry. Acknowledging that changing this mind-set is primarily the responsibility of the industry, they noted that the industry needs to (1) move from a production to a marketing orientation and (2) develop the expertise to expand export markets for both bulk and value-added products. These leaders said that federal policies have

influenced the industry's mind-set to center more on production than on marketing. Most indicated, however, that USDA could facilitate the industry's adjustment to a stronger marketing mind-set by working with the industry to develop appropriate strategies for changing the industry's focus from production to identifying global customers and expanding markets for dairy products.

Matters for Congressional Consideration

GAO believes that the Congress, jointly with the executive branch and the dairy industry, needs to consider initiating efforts to develop a long-range dairy policy that better recognizes the importance of dairy exports to the continued viability of the dairy industry. Steps could include conducting hearings, gathering additional information on alternatives to overcome impediments to export development, and analyzing the implications of those alternatives on the current industry structure. Furthermore, the Congress should consider directing the Secretary of Agriculture to facilitate discussions with the dairy industry to help increase its attention to exploring global markets.

Agency Comments

In commenting on a draft of this report, USDA agreed with the fundamental premise that the dairy industry will have to shift away from reliance on the federal Price Support and Milk Marketing Order programs as income-enhancing mechanisms and toward greater market orientation to ensure long-term viability. USDA particularly agrees that exports hold the greatest potential for expanding the market for U.S. dairy products. USDA's comments and GAO's evaluation of them are discussed at the end of chapter 4 and in appendix III.

Contents

Executive Summary		3
Chapter 1		12
Introduction	Federal Milk Marketing Order Program	12
	Federal Milk Price Support Program	13
	USDA's Market Development Activities	15
	International Trade Agreements	16
	Objectives, Scope, and Methodology	17
Chapter 2		19
United States Is a Major Dairy-Producing Nation but Has Small Share of Many Export Markets	United States Is a Major Milk-Producing Nation	19
	U.S. Dairy Industry Has Predominant Share of Domestic Market	21
	United States Has Small Share of Many International Dairy Markets	23
Chapter 3		32
Markets for U.S. Dairy Products Could Be Expanded	International Market Potential	32
	Domestic Market Offers Modest Growth	39
Chapter 4		42
Obstacles to Expanding U.S. Dairy Markets	Federal Dairy Policies Create Obstacles to Market Expansion	42
	Industry Needs to Change Its Mind-Set to Global Markets	46
	Conclusions	49
	Matters for Congressional Consideration	51
	Agency Comments and Our Evaluation	51
Appendixes		
	Appendix I: Legislated and Inflation-Adjusted Milk Price Support Level Per Hundredweight, 1949-93	54
	Appendix II: Federal Dairy Price Support Program Purchases and Dairy Export Incentive Program Bonuses, Fiscal Years 1975-92	56
	Appendix III: Comments From the Department of Agriculture	57
	Appendix IV: Major Contributors to This Report	65

Related GAO Products 68

Tables

Table 2.1: U.S. Share of Cheese Import Market for Selected Countries, 1990	25
Table 2.2: U.S. Share of Ice Cream Import Market for Selected Countries, 1990	30
Table 3.1: Projected Real Gross Domestic Product for Selected Countries	33
Table 3.2: Estimates of U.S. Market for Selected Domestic Specialty Cheeses, 1992	40

Figures

Figure 1.1: Government's Net Market Removals, 1975-92, in Milk Equivalents	14
Figure 2.1: Milk Production for Selected Countries, 1990-92	20
Figure 2.2: Dairy Exports as a Percentage of Domestic Milk Production for Selected Trading Blocs, 1990-92	21
Figure 2.3: U.S. Cheese Imports and Exports, 1987-92	23
Figure 2.4: World Cheese Exports for Selected Trading Blocs, 1990-92	24
Figure 2.5: Share of Pacific Rim Cheese Import Market for Selected Countries, 1990	26
Figure 2.6: Nonfat Dry Milk Exports for Selected Trading Blocs, 1990-92	28
Figure 2.7: Butter Exports for Selected Trading Blocs, 1990-92	29
Figure 3.1: Per Capita Cheese Consumption for Selected Countries, 1990	34
Figure 3.2: Per Capita Frozen Dairy Dessert Consumption for Selected Countries, 1990	35
Figure 3.3: Per Capita Nonfat Dry Milk Consumption for Selected Countries, 1990	37
Figure 3.4: Per Capita Butter Consumption for Selected Countries, 1990	38
Figure 4.1: U.S. and World Market Prices and U.S. Support Price for Bulk Cheddar Cheese, 1987-92	44
Figure 4.2: U.S. and World Market Prices and U.S. Support Price for Butter, 1987-92	45
Figure 4.3: U.S. and World Market Prices and U.S. Support Price for Nonfat Dry Milk, 1987-92	46

Contents

Abbreviations

CCC	Commodity Credit Corporation
cwt	hundredweight
DEIP	Dairy Export Incentive Program
EC	European Community
FAS	Foreign Agricultural Service
GAO	General Accounting Office
GATT	General Agreement on Tariffs and Trade
LATS	Long-Term Agriculture Trade Strategy
USDA	Department of Agriculture

Introduction

According to the Department of Agriculture (USDA), dairy products account for about 13 percent of total cash receipts from all farm commodities. In 1991, cash receipts from dairy products totaled \$18.1 billion, ranking second only to cattle and calves at \$39.6 billion.

Federal involvement in the dairy industry began in reaction to unstable marketing conditions and low milk prices before and during the Great Depression. Before the Depression, farmers relied on cooperatives to secure an acceptable price for their milk. However, during the Depression, consumers purchased fewer dairy products, and milk production began to exceed consumption. This situation resulted in lower milk prices for farmers and contributed to unstable market conditions.

In response to these conditions, the Congress initiated actions intended to ensure an adequate supply of quality milk, stabilize milk prices, and improve farmers' income. More specifically, it created two interrelated programs—the federal Milk Marketing Order and the Price Support programs, both of which are administered by USDA. While the Congress has adjusted these programs periodically, they have remained the government's principal means of stabilizing the dairy industry. The Congress has also implemented import controls to help protect the domestic market.

USDA administers a variety of programs and activities to help facilitate agriculture-related industries, including the dairy industry, to develop commercial markets both domestically and abroad. These methods and resources are generally focused on further educating industries on how to identify and develop markets.

Federal Milk Marketing Order Program

The federal Milk Marketing Order Program, created in 1937 largely in response to disorderly market conditions, sets acceptable marketing practices, terms and conditions of milk sales, and milk prices. Marketing orders apply to grade A milk, which is the only milk eligible for fluid use. Each order fixes the minimum prices that must be paid by regulated plants that purchase milk and specifies how these payments are to be distributed among farmers. Federal orders are administered in areas where dairy farmers have voted for their adoption. As of May 1993, there were 40 marketing orders representing more than 80 percent of the grade A milk marketed in the United States.

Federal Milk Price Support Program

During World War II, the federal government encouraged farmers to increase production to ensure an adequate supply of milk. After the war, demand decreased and prices to farmers dropped. In 1949, the Congress permanently adopted the price support program it had created during the war, hoping that this program could preserve the higher milk prices and farm purchasing power. (Milk price support levels since 1949 are shown in app. I.)

The Milk Price Support program helps ensure dairy farmers a minimum price for the milk they produce. Under the program, USDA, through its Commodity Credit Corporation (CCC), purchases, at specified prices, all quantities of nonperishable milk products (butter, cheese, and nonfat dry milk)¹ that are offered and that meet USDA's specifications. Such purchases reduce excess supplies of dairy products on the commercial market and help maintain the minimum price received for milk by farmers. In general, the program's costs depend on the degree to which milk production exceeds commercial use. The larger the surplus, the more dairy products that the federal government purchases. Most of these purchases end up as an expense, since the government disposes of the inventory mostly through donations.

In response to relatively high price support levels, farmers began to produce milk at unprecedented levels in the late 1970s and early 1980s, increasing production by 26 percent between 1975 and 1988. Because the market was unable to absorb the additional dairy products, CCC purchases under the price support program were at all-time highs. During the 1982-83 marketing year, CCC purchased \$2.7 billion of dairy products, equivalent to about 19.2 billion pounds of milk. Figure 1.1 shows the government's net market removals of butter, cheese, nonfat dry milk, and evaporated milk during the marketing years from 1975 through 1992.

¹For purposes of this report, we consider butter, cheese, and nonfat dry milk purchased by the CCC to be bulk dairy commodities.

Figure 1.1: Government's Net Market Removals, 1975-92, in Milk Equivalents



Note: "Milk equivalent" is the amount of milk used in making various dairy products measured in terms of the total solids in milk.

Source: GAO's presentation of USDA's data.

Because of the high production and increasing inventories of government-owned surplus dairy products, the Congress took actions to control production and reduce surpluses. These actions included (1) reducing support prices; (2) paying farmers to reduce their milk sales under the Milk Diversion Program, which operated from January 1, 1984, to March 15, 1985; and (3) paying farmers to slaughter or export their herds and leave dairying for a period of 5 years under the Dairy Termination Program, which was authorized under the Food Security Act of 1985. Also, the ongoing Dairy Promotion Program was initiated to increase consumption of dairy products. The cost of purchases under the price support program in 1992 was \$395 million. (See app. II for historical program costs.)

In 1980 and again in 1985, we reported that consistent increases in support prices during the 1970s created incentives for farmers to increase milk

production despite accumulating surpluses. Similarly, in 1988, we reported that milk marketing orders created incentives for excessive production because the minimum fluid milk prices under certain orders were high in relation to the cost of producing milk or of obtaining supplies from alternative sources. We further reported that these prices also created regional pricing inequities because they guaranteed producers in some areas of the country higher prices than producers in other areas, even though production costs might be the same or less.

In our reports issued in 1985² and 1988,³ we concluded that the dairy diversion and termination efforts to control surpluses were not permanent solutions. The Milk Diversion Program operated from January 1, 1984, to March 15, 1985, and was intended to reduce surplus milk supplies and to help stabilize the supply and demand for dairy products. The Dairy Termination Program, authorized under the Food Security Act of 1985, paid farmers participating in the program to slaughter or export their herds and leave dairying for a period of 5 years. Also, in a 1990 report, we concluded that a more market-oriented federal dairy policy would provide a more permanent solution to periodic surpluses and resulting federal government purchases.

USDA's Market Development Activities

USDA is responsible for carrying out programs designed to help agriculture-related industries (including the dairy industry) identify and develop markets for agricultural products. USDA agencies, including the Agricultural Marketing Service, Extension Service, Agricultural Research Service, Agricultural Cooperative Service, Economic Research Service, Foreign Agricultural Service (FAS), and Cooperative State Research Service, are available to help the private sector achieve its goals.

Of these agencies, FAS has been given the primary responsibility to lead efforts to facilitate agricultural trade. As a part of these efforts, FAS developed, with the cooperation of the above agencies and others, USDA's Long-Term Agriculture Trade Strategy (LATS). The LATS discusses several methods and programs that are available to facilitate industry initiatives to expand global markets. The LATS methods for expanding global markets include the following:

²Effects and Administration of the 1984 Milk Diversion Program (GAO/RCED-85-126, July 7, 1985).

³Dairy Termination Program: An Estimate of Its Impact and Cost-Effectiveness (GAO/RCED-89-96, July 6, 1988).

- Encouraging industry cooperators to emphasize priority markets. Cooperators need to use their limited resources in the most cost-effective way, especially since these resources are often public funds.
- Focusing U.S. policies on both price and nonprice trade barriers. Public discussions of agricultural trade strategy often dwell almost exclusively on price-based policies. The problem is real enough, especially for bulk commodities, but according to FAS, not enough attention has been given to other obstacles, such as food safety scares in Asian markets. These issues pose a particular problem for high-value and consumer-oriented products.
- Encouraging a competitive work force. Competitive products are necessary but not sufficient conditions of prosperity. Competitive people are essential as well. USDA can seek ways to encourage the development of an internationally oriented, competitive work force for the 21st Century. While budget resources will limit how much can be done, USDA can encourage the development of university curricula and courses centered on agricultural trade within existing land grant institutions.
- Helping exporters acquire and improve competitive skills. USDA can provide information and training to current and prospective exporters to help them understand international market needs and compete effectively.
- Educating customers to use U.S. products and programs. USDA can help overseas buyers understand the U.S. marketing system and export programs. Outreach to customers is especially important in dealing with developing countries.

The LATS discusses several programs designed to promote trade. They include the Foreign Market Development Program and the Market Promotion Program. These programs provide funding for industry efforts intended to encourage the development, maintenance, and expansion of commercial export markets for agricultural products. Activities financed by the programs include market research, consumer promotions, technical assistance, and trade servicing activities. The FAS network of overseas trade offices and agricultural attachés is used to carry out these programs. However, USDA told us that these offices only carry out limited activities in these areas.

International Trade Agreements

During recent negotiations on the North American Free Trade Agreement and the General Agreement on Tariffs and Trade (GATT), participants from nearly all of the major agricultural trading nations expressed a broad measure of consensus that agricultural policies should be more responsive to international market signals. Further, there was a broad consensus that support and protection should be progressively reduced and provided in a

less trade-distorting manner. Concerns were focused not just on the trade barriers (tariffs, duties, safety and health standards, etc.) that countries use to control trade, but also on the appropriateness of the domestic policies that underlie their trade measures. Domestic policies have become increasingly vulnerable to criticism because of their contribution to budgetary expenditures by taxpayers and costs to consumers.

Objectives, Scope, and Methodology

The Chairman and Ranking Minority Member of the House Committee on Agriculture, and the Chairman and Ranking Minority Member of the Subcommittee on Livestock, House Committee on Agriculture, requested that we identify the issues impeding the development of domestic and international markets for dairy products. The requesters stated that, because of budget pressures, a challenge for the 1990s will be to avoid the temptation of using the dairy price support and federal milk marketing orders as the sole industry income-enhancing mechanisms and to search for other viable alternatives, such as expanded markets.

In light of this changing environment and Congress's interest in assuring the long-term viability of the dairy industry, we were asked to (1) compare and contrast the U.S. dairy industry's milk export activities with those of other major milk-producing nations, (2) examine opportunities to develop and expand markets, and (3) identify potential obstacles the industry faces in expanding markets.

To accomplish our first two objectives, we analyzed market data and industry studies indicating the performance of the U.S. industry in both domestic markets and selected international markets. The market data were obtained from USDA and industry sources. We reviewed documents and reports from USDA, various universities, and state government agencies. In addition, we met with several major U.S. companies that are currently exporting dairy products to foreign countries to get their views on the potential for market expansion.

To accomplish our third objective, we interviewed over 40 industry leaders knowledgeable about dairy product-marketing activities and issues. These individuals were associated with the dairy industry or were considered by dairy industry leaders as experts on the dairy industry and the marketing of dairy products. They were associated with major dairy cooperatives, colleges and universities, dairy-processing firms, trade associations, and state governments. They also included officials from such USDA agencies as

the Economic Research Service, FAS, Agricultural Cooperative Service, and Agricultural Marketing Service.

To validate the industry's views, we compared U.S. dairy commodity market and support prices with world prices. We also obtained information from USDA on industry participation in export assistance programs.

We limited our work to identifying obstacles that could be removed or substantially reduced by dairy policymakers and industry leaders. The scope of our study did not include an evaluation of other countries' import and export policies or other issues affecting U.S. competitiveness, such as environmental regulatory impacts or labor wage rates.

We were assisted in this study by Dr. Ronald D. Knutson, professor and extension economist at Texas A&M University, and formerly Administrator of the Farmer Cooperative Service and Chairperson of the 1972 USDA Milk Pricing Advisory Committee. Dr. Knutson has extensive experience with dairy marketing and policy matters and has consulted us on several previous reviews dealing with dairy programs. We also had our report reviewed by Dr. William Dobson, professor of agricultural economics at the University of Wisconsin. Dr. Dobson has conducted substantial research on dairy-marketing issues and the potential for expanding markets.

We conducted our review between November 1991 and February 1993 in accordance with generally accepted government auditing standards. We obtained written agency comments on a draft of this report. A summary of USDA's general comments and our evaluation of them are at the end of chapter 4. A complete set of USDA's comments and our evaluation of their specific comments appear in appendix III.

United States Is a Major Dairy-Producing Nation but Has Small Share of Many Export Markets

The U.S. dairy industry is the world's third largest milk producer, ranking behind only the 12-nation European Community (EC) and the former Soviet Union. Most of the U.S. industry's marketing efforts are focused on the domestic market. According to USDA's data, since 1990, about 98 percent of U.S. annual dairy production has been consumed domestically. The remaining 2 percent, or 1.06 million milk-equivalent metric tons, moved into world export markets in the form of butter, cheese, and dry milk.

The U.S. industry's share of many export markets is small compared with other countries'. In 1990, for example, U.S. cheese exports accounted for about 18 percent of the Mexican cheese import market and less than 1 percent of the Japanese cheese import market. Exports of other dairy products, including ice cream, whey, and lactose, hold a better position in export markets or have shown marked increases in recent years.

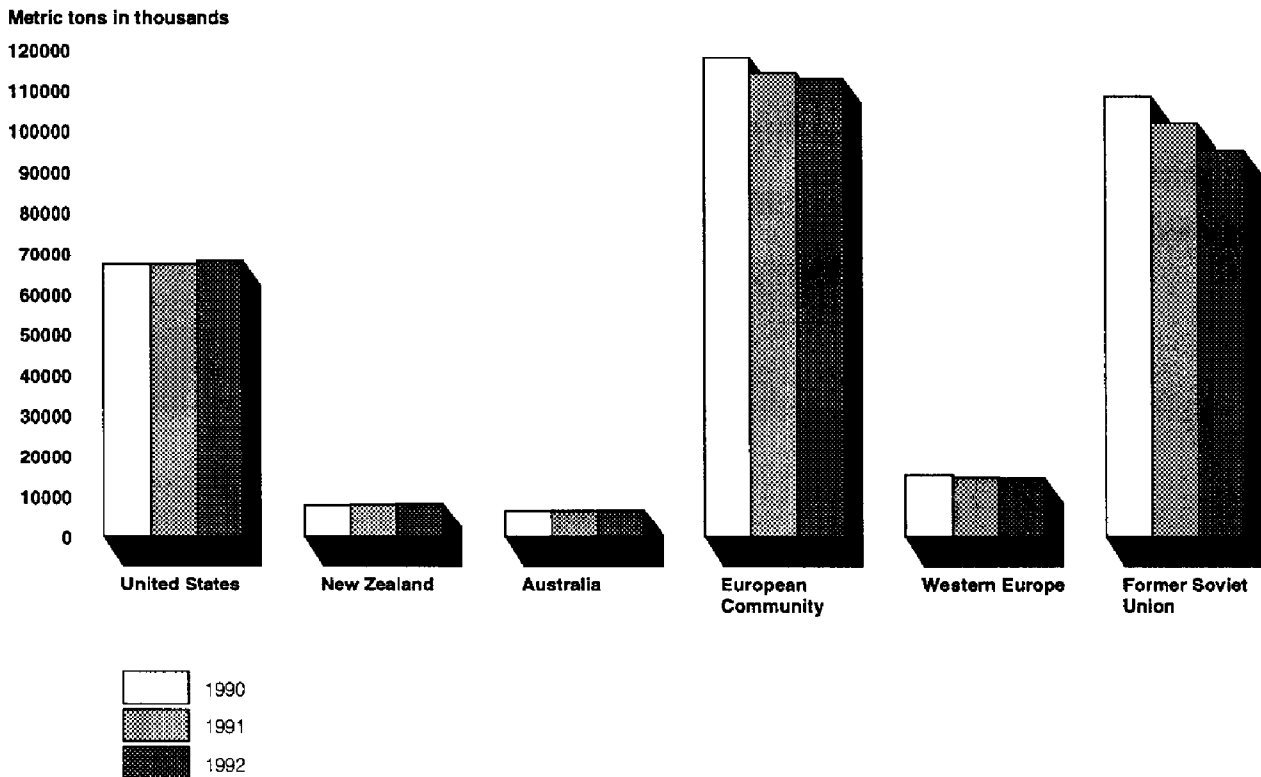
The dairy industries of some countries, such as New Zealand and Australia, have developed extensive international marketing expertise and depend heavily on world export markets for their sales. From 1990 to 1992, for example, dairy exports accounted for at least 48 percent of New Zealand's dairy production and averaged about 3.9 million milk-equivalent metric tons annually. The EC, whose dairy industries are highly subsidized, is also a major player in world markets, exporting an average of 7.2 million milk-equivalent metric tons of manufactured dairy products per year since 1990.

United States Is a Major Milk-Producing Nation

Figure 2.1 shows that, from 1990 to 1992, U.S. milk production averaged about 68 million metric tons annually compared with the EC's 114 million metric tons and the former Soviet Union's 99 million metric tons.

Chapter 2
United States Is a Major Dairy-Producing
Nation but Has Small Share of Many Export
Markets

Figure 2.1: Milk Production for Selected Countries, 1990-92



Notes:

1. For presentation purposes, Western Europe comprises the non-EC countries of Austria, Finland, Norway, Sweden, and Switzerland.
2. Data for 1992 are preliminary.

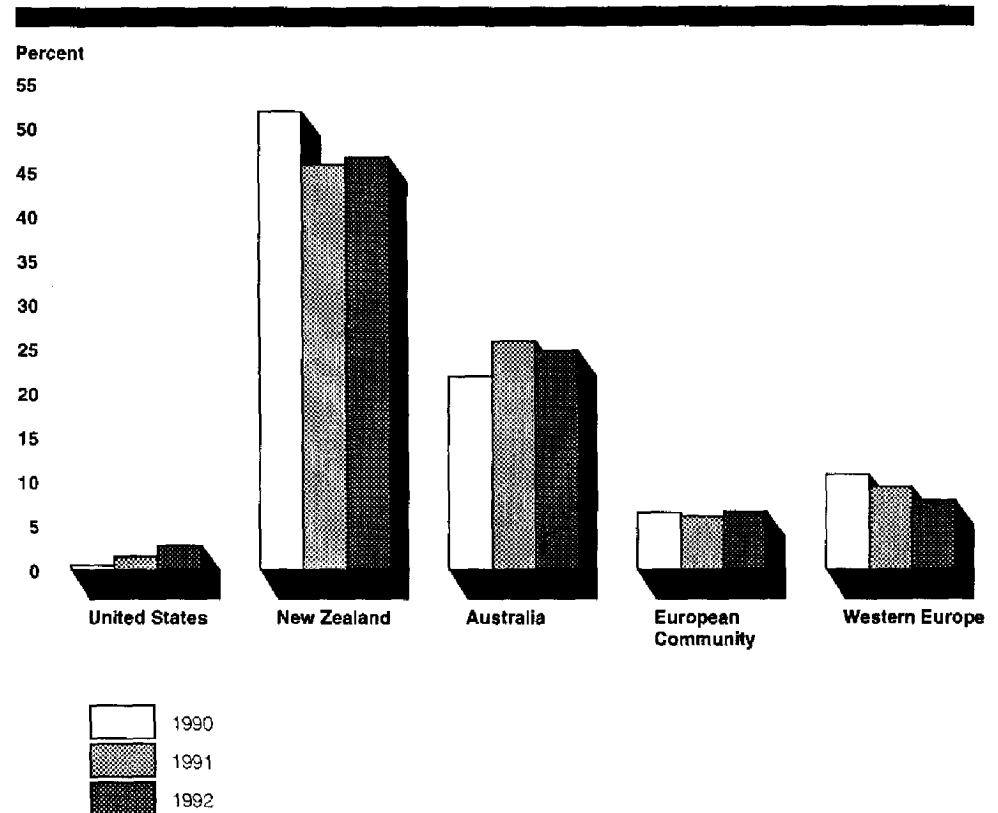
Source: GAO's analysis of USDA's data.

Figure 2.1 also shows that U.S. milk production far surpasses the milk output of either New Zealand or Australia—two large exporters on the international dairy scene.

U.S. Dairy Industry Has Predominant Share of Domestic Market

Nearly all U.S. domestic dairy consumption is supplied by the U.S. dairy industry in the form of various processed and manufactured products. In part, this occurs because of restrictions on imported dairy products. Because U.S. milk production is consumed domestically, little milk production moves into export markets. Figure 2.2 shows that, on a milk-equivalent basis, exports of butter, cheese, nonfat dry milk, and other dairy products accounted for about 2 percent annually—or 1.06 million milk-equivalent metric tons—of U.S. milk output from 1990 to 1992.

Figure 2.2: Dairy Exports as a Percentage of Domestic Milk Production for Selected Trading Blocs, 1990-92



Notes:

1. Data for 1992 are preliminary.
2. For presentation purposes, Western Europe comprises the non-EC countries of Austria, Finland, Norway, Sweden, and Switzerland.

Source: GAO's analysis of USDA's data.

Chapter 2
United States Is a Major Dairy-Producing
Nation but Has Small Share of Many Export
Markets

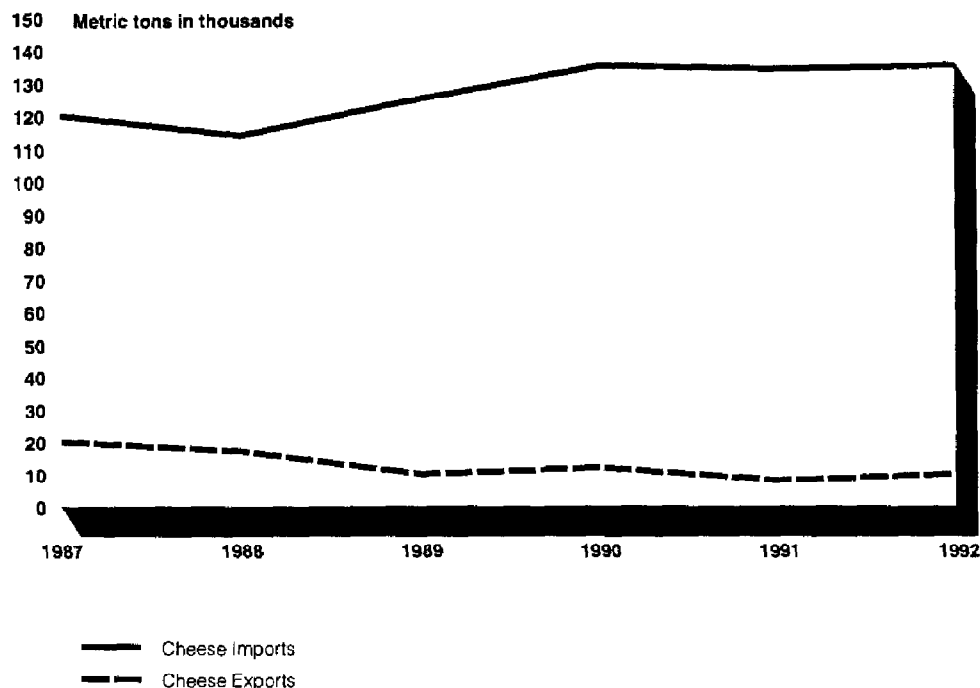
As figure 2.2 shows, during the same period, New Zealand and Australia exported large amounts of their domestic dairy production. According to data from FAS, from 1990 to 1992, New Zealand annually exported an average of about 3.9 million milk-equivalent metric tons of dairy products, or 48 percent of its total milk production. However, researchers and industry studies indicate that New Zealand's exports may be significantly higher—as much as 75 percent or more of production. Similarly, Australia's dairy exports averaged 24 percent of annual milk production, or 1.6 million milk-equivalent metric tons. EC exports have averaged 6 percent of annual milk production, or 7.2 million milk-equivalent metric tons, between 1990 and 1992.

Since 1990, U.S. milk production has provided 98 percent of the nation's dairy needs; fluid milk consumption has comprised about 40 percent of total use. Imports accounted for the remaining 2 percent of domestic needs. Cheese imports, particularly high-value specialty cheeses, made up a large share of this unmet need. Specialty cheeses comprise about 75 percent of U.S. cheese imports. Figure 2.3 shows that, since 1987, cheese imports have moved in a narrow range of about 115,000 to 135,000 actual product metric tons annually (instead of milk equivalent), reflective of section 22 import quotas.¹

¹Section 22 of the Agricultural Adjustment Act of 1933, as amended (7 U.S.C. 624), provides for the imposition of fees or quantitative restrictions (quotas) on imports to prevent interference with USDA's domestic commodity programs, such as the federal dairy price support program. These quotas cover most manufactured dairy products.

Chapter 2
United States Is a Major Dairy-Producing
Nation but Has Small Share of Many Export
Markets

Figure 2.3: U.S. Cheese Imports and Exports, 1987-92



Note: Data for 1992 are preliminary.

Source: GAO's analysis of USDA's data.

The EC is the largest foreign supplier of dairy products, including cheese, to the United States. Many of these cheeses are specialty cheeses not produced in the United States or produced in limited quantities.

United States Has
Small Share of Many
International Dairy
Markets

The United States' presence in world export markets for cheese, nonfat dry milk, and butter products is small, and exports of ice cream are only slightly better. Similarly, exports of dairy by-products, such as whey and lactose, are small but have shown some increase in recent years.

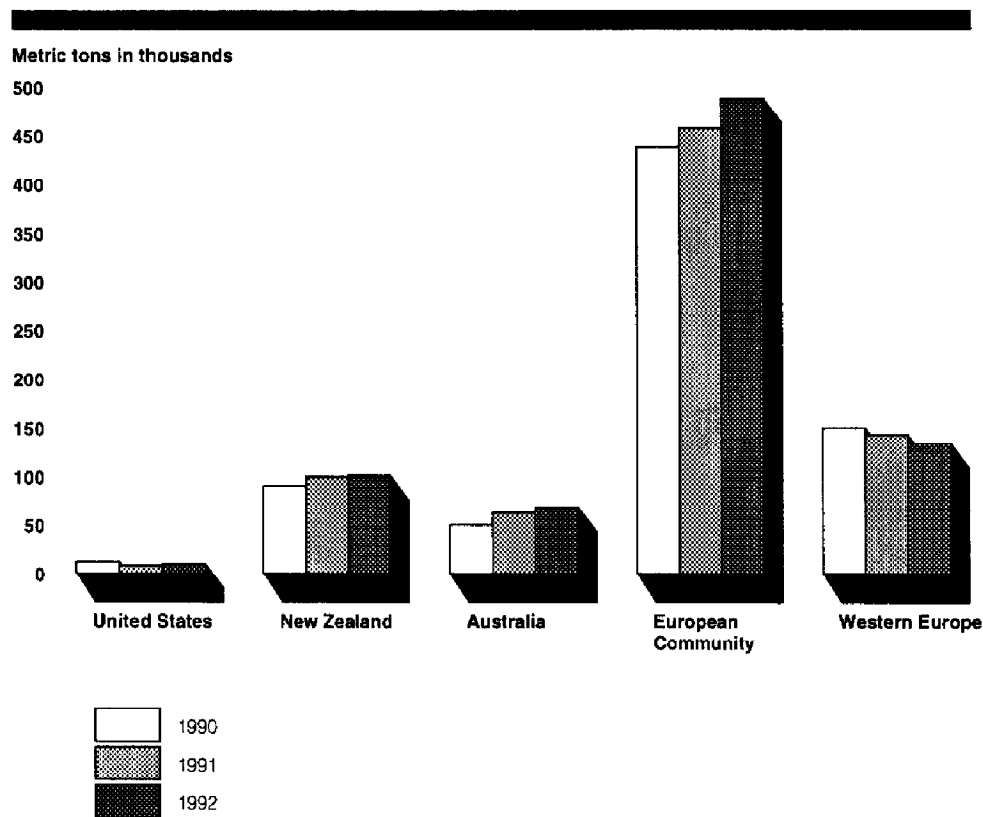
Cheese

Figure 2.4 shows that the United States moves small amounts of cheese abroad compared with New Zealand, Australia, and the European Community. From 1990 to 1992, U.S. exports of cheese averaged about

**Chapter 2
United States Is a Major Dairy-Producing
Nation but Has Small Share of Many Export
Markets**

10,000 metric tons annually, while New Zealand, Australia, and EC cheese exports averaged about 97,000, 60,000, and 460,000 metric tons, respectively. During the same years, exports from the Western Europe, non-EC countries of Austria, Finland, Norway, Sweden, and Switzerland collectively averaged 142,000 metric tons.

Figure 2.4: World Cheese Exports for Selected Trading Blocs, 1990-92



Notes:

- 1. Data for 1992 are preliminary.
- 2. For presentation purposes, Western Europe comprises the non-EC countries of Austria, Finland, Norway, Sweden, and Switzerland.

Source: GAO's analysis of USDA's data.

According to industry studies, much of the difference in cheese export volume between the United States and its European counterparts is

Chapter 2
United States Is a Major Dairy-Producing
Nation but Has Small Share of Many Export
Markets

attributed to the foreign markets' perception of the high quality of European cheeses. Table 2.1 shows that Mexico and Japan were among the largest importers of U.S. cheese in 1990. More importantly, however, table 2.1 shows that the U.S. share of the cheese import market of many countries is small. In 1990, for example, the United States accounted for about 18 percent of the total cheese imports entering neighboring Mexico and less than 1 percent of the cheese imports entering Japan's 108,000-metric-ton market.

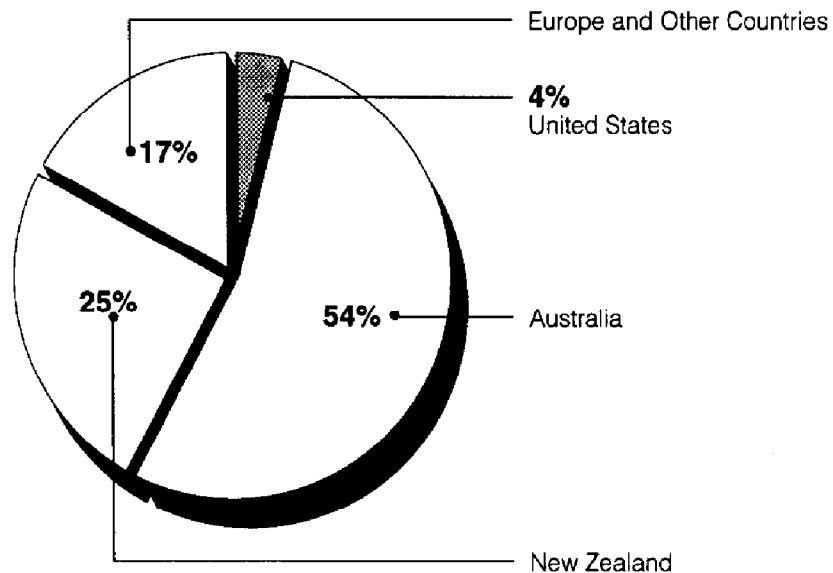
Table 2.1: U.S. Share of Cheese Import Market for Selected Countries, 1990

Metric tons			
Country	Imports from U.S.	Total imports	Percentage of U.S. share
Hong Kong	115	4,002	2.9
Indonesia	284	2,286	12.4
Japan	890	107,890	0.8
Malaysia	3	1,192	0.3
Mexico	1,827	10,357	17.6
Philippines	80	8,609	0.9
Singapore	266	3,327	8.0
South Korea	103	123	83.7
Taiwan	55	1,934	2.8
Thailand	1	878	0.1

Source: National Dairy Board.

Figure 2.5 shows that Australia and New Zealand have a dominant share of the Pacific Rim cheese import market. In 1990, Australia and New Zealand controlled 54 percent and 25 percent, respectively, of the Pacific Rim cheese market, while the United States had only 4 percent.

Figure 2.5: Share of Pacific Rim
Cheese Import Market for Selected
Countries, 1990



Notes:

1. For presentation purposes, the Pacific Rim includes Brunei, Hong Kong, Indonesia, Malaysia, Republic of the Philippines, Singapore, South Korea, Taiwan, and Thailand.
2. Includes 1987 or 1989 cheese imports for some Pacific Rim countries for which 1990 data were not available.

Source: National Dairy Board.

A number of factors help Australia and New Zealand compete well in Pacific Rim dairy markets. Both countries enjoy low-cost, pasture-based dairy industries; both incur relatively low transportation costs because of their close proximity to Pacific Rim countries; and neither provides its dairy farmers with significant subsidies, thereby allowing them to compete rather effectively in world markets. Australian and New Zealand cheese suppliers also have developed an understanding of the Pacific Rim market and have accomplished considerable education of consumers about their products' attributes and characteristics.

The New Zealand Dairy Board has helped its milk producers and cooperatively owned dairy-product manufacturing companies to compete

Chapter 2
United States Is a Major Dairy-Producing
Nation but Has Small Share of Many Export
Markets

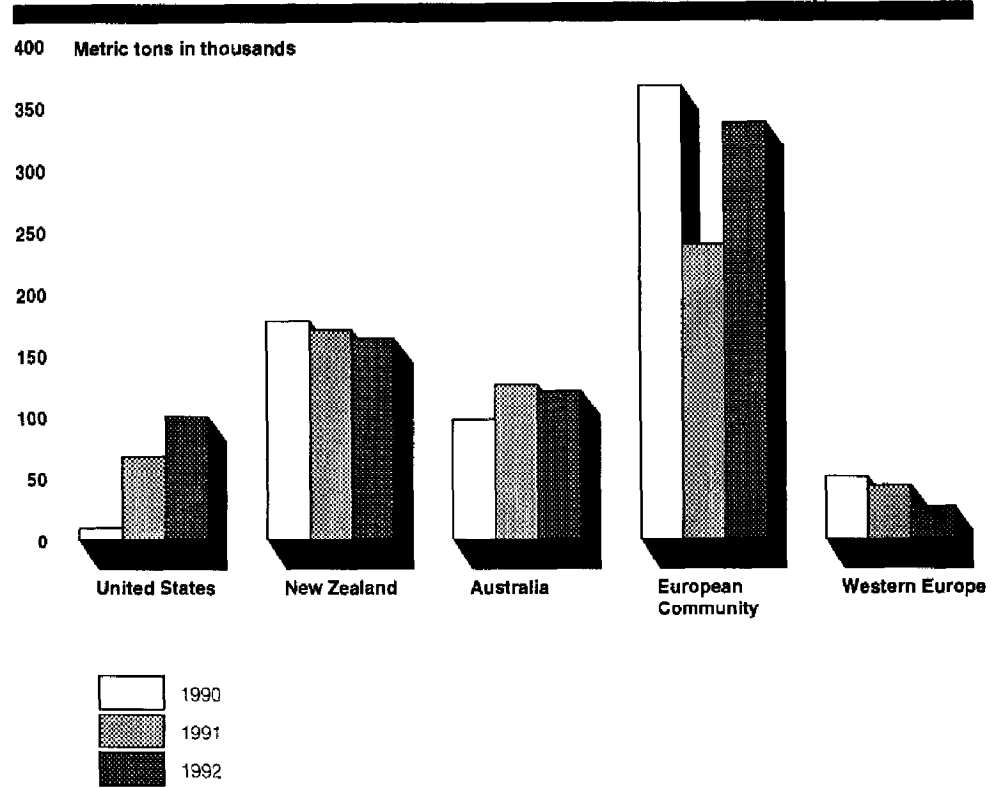
in world markets. The Board, New Zealand's single exporting arm, is a multinational dairy product and food-marketing firm with subsidiary and associated companies in as many as 25 countries, including the United States. This direct access to markets provides smooth export channels and allows New Zealand to partially overcome dairy import quotas and tariffs of other countries.

Nonfat Dry Milk and Butter

Similar to cheese exports, U.S. shipments of nonfat dry milk and butter are small compared with those of other countries. Figure 2.6 shows that New Zealand, Australia, and the EC are the major exporters of nonfat dry milk. Figure 2.7 shows that New Zealand and the EC are major exporters of butter.

Chapter 2
United States Is a Major Dairy-Producing
Nation but Has Small Share of Many Export
Markets

Figure 2.6: Nonfat Dry Milk Exports for Selected Trading Blocs, 1990-92



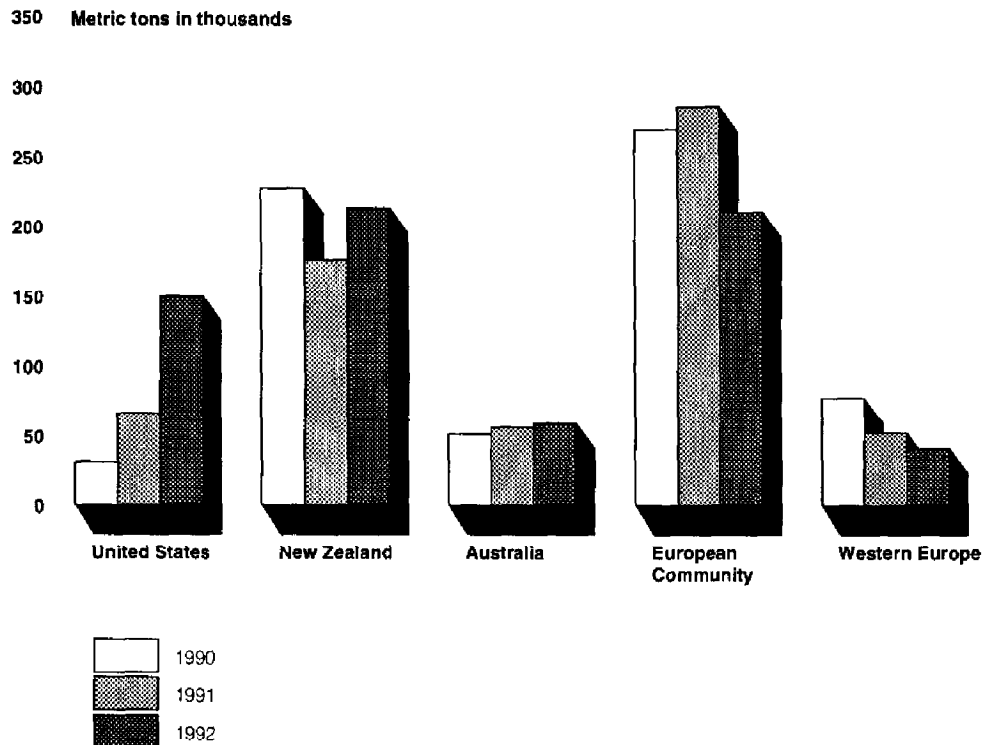
Notes:

1. Data for 1992 are preliminary.
2. For presentation purposes, Western Europe comprises the non-EC countries of Austria, Finland, Norway, Sweden, and Switzerland.

Source: GAO's analysis of USDA's data.

Chapter 2
 United States Is a Major Dairy-Producing
 Nation but Has Small Share of Many Export
 Markets

Figure 2.7: Butter Exports for Selected
 Trading Blocs, 1990-92



Notes:

1. Data for 1992 are preliminary.
2. For presentation purposes, Western Europe comprises the non-EC countries of Austria, Finland, Norway, Sweden and Switzerland.

Source: GAO's analysis of USDA's data.

The EC's high level of butter and nonfat dry milk exports has been largely driven by the need to dispose of government-accumulated stocks, and most of its bulk commodity nonfat dry milk and butter exports over the past decade have been highly subsidized. To combat the EC's trade practices of highly subsidizing its exports, in recent years, USDA has offered bonuses to U.S. exporters of nonfat dry milk, butter, and other dairy products under the Dairy Export Incentive Program (DEIP). By paying cash bonuses to exporters, our products are more competitive in foreign markets because foreign countries are able to purchase U.S. dairy products for less than they could in the absence of these bonuses. DEIP

**Chapter 2
United States Is a Major Dairy-Producing
Nation but Has Small Share of Many Export
Markets**

subsidies have helped propel the increase in nonfat dry milk and butter exports that occurred from 1990 to 1992. In calendar year 1992, 73 percent of all U.S. dairy exports were subsidized under DEIP, and DEIP subsidies totaled \$140 million in that year. However, a University of Wisconsin study concludes that market development opportunities are being missed under DEIP because the dominant exporters of U.S. dairy products under DEIP are EC firms and not U.S. firms.

According to USDA and some industry experts, DEIP cannot be expected to build permanent, long-term markets for dairy products. As long as U.S. dairy product prices are supported above world market prices, these leaders pointed out that DEIP export subsidies, or their equivalent, will be a necessary condition for exports in order for U.S. dairy products to be price competitive.

Ice Cream

The U.S. position in foreign ice cream markets is better than the U.S. position in cheese, nonfat dry milk, and butter markets. U.S. ice cream has a very high taste appeal, which is believed to contribute to its better performance in the international market. Table 2.2 shows that the United States is a dominant player in ice cream import markets among the industrialized countries of Taiwan, Japan, and Mexico. In other countries, such as Malaysia and Singapore, the United States has only a minimal presence.

**Table 2.2: U.S. Share of Ice Cream
Import Market for Selected Countries,
1990**

Tons are in metric tons			
Country	Imports from U.S.	Total imports	Percentage of U.S. share
Hong Kong	882	2,459	35.9
Japan	1,515	2,975	50.9
Malaysia	24	1,821	1.3
Mexico	1,561	3,535	44.2
Singapore	194	2,137	9.1
Taiwan	242	387	62.5

Source: National Dairy Board.

Other Products

The United States also exports whey, lactose, and various other dairy products. Although some are by-products of primary products and do not represent large exports, they have recently shown increases. Collectively,

Chapter 2
United States Is a Major Dairy-Producing
Nation but Has Small Share of Many Export
Markets

export sales of whey, lactose, and related products amounted to \$90.3 million in 1990, \$186.8 million in 1991, and \$248.9 million in 1992. These are products that the United States does not purchase under the price support program and apparently are price competitive in world markets.

Markets for U.S. Dairy Products Could Be Expanded

According to industry research studies, the potential exists for expanding markets for U.S. dairy products. The best opportunity for the U.S. dairy industry appears to be in international markets. In many export markets, including those of Pacific Rim countries, economic growth, low dairy consumption levels, and consumers' increased preferences for Western-style, consumer-ready foods have led to expanded value-added markets. In value-added markets, consumers' preferences tend to be more important relative to price than to bulk commodity markets. Bulk commodities are large units of a product, such as 600-pound blocks of cheese. Value-added products are more differentiated and more consumer ready. These studies used projected economic growth and data on per capita consumption as indicators for determining if dairy markets could be expanded in particular countries.

Although industry research studies indicate some opportunity for expanding domestic markets, the domestic market is generally a mature dairy market and probably offers only modest potential for expansion. Lowfat dairy products, specialty cheeses, processed foods, and other value-added dairy products seem to offer the best potential to expand domestic markets.

International Market Potential

The greatest potential for market expansion of U.S. dairy products exists on the international market. Projections of economic growth, changes toward Western-style diets, and data on per capita consumption suggest opportunities for market expansion in many foreign countries and particularly in Mexico and the Pacific Rim countries. Both value-added and bulk dairy products have potential for expansion in these markets.

Growing Economies Abroad Signal Opportunities for Expanding U.S. Dairy Exports

Projected economic growth data indicate potential dairy market expansion opportunities in Brazil, Mexico, Eastern Europe, and the Pacific Rim countries, including Japan, South Korea, and Taiwan, as shown in table 3.1.

**Chapter 3
Markets for U.S. Dairy Products Could Be
Expanded**

Table 3.1: Projected Real Gross Domestic Product for Selected Countries

Percentage increase (decrease) from previous year

Country	1993	1994	1995	1996	1997-2001 average
Australia	2.5	2.8	2.1	2.2	2.0
Brazil	4.1	5.5	5.5	4.6	4.6
Canada	4.7	4.2	4.2	3.4	3.4
Eastern Europe	1.9	3.0	3.3	3.6	3.4
EC-12	2.9	2.6	2.5	2.2	2.1
Mexico	5.2	6.3	5.4	5.8	4.4
Former USSR	(1.1)	3.2	2.4	4.1	3.8
United States	3.2	3.1	3.5	3.4	2.8
China	6.8	6.4	6.4	6.4	6.4
India	5.5	5.3	5.3	5.2	5.2
Indonesia	7.2	7.4	7.4	7.5	7.5
Japan	4.6	4.6	4.9	4.6	4.2
South Korea	8.2	8.7	8.8	7.3	7.9
Taiwan	7.4	7.4	7.2	6.2	6.6
Thailand	8.0	8.0	8.0	8.1	8.0

Source: 1992 World Agricultural Outlook, Food and Agricultural Policy Research Institute, Staff Report No. 2-92, June 1992.

With incomes increasing throughout developed and developing countries of the world, and with a higher proportion of women working outside of the home, market research data indicate that the best opportunity for exports perhaps exists in differentiated, value-added exports in which dairy products are a significant component of prepared foods.

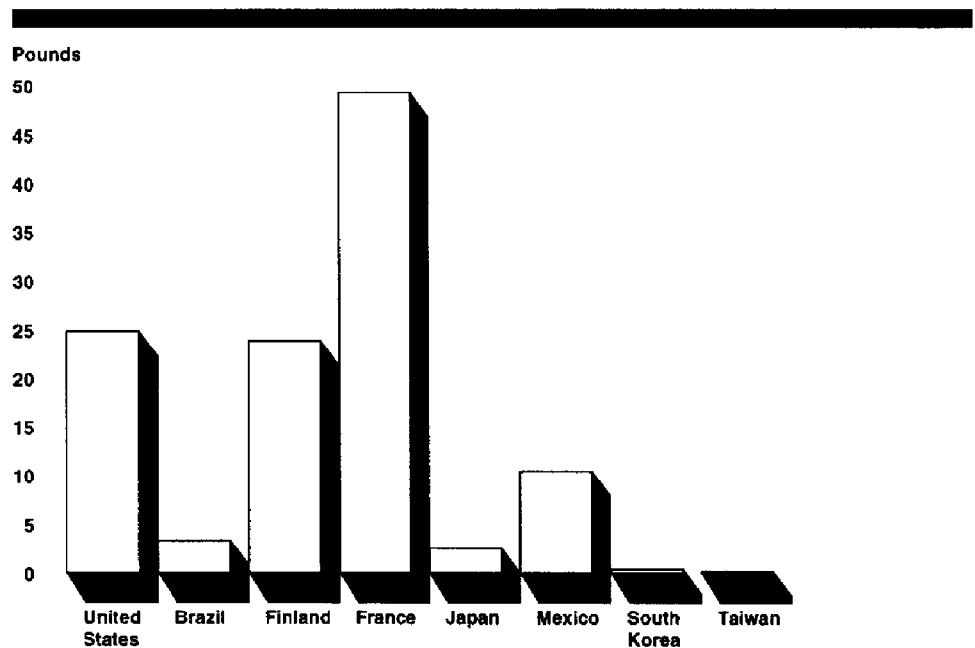
Consumption Data Also Signal Opportunities for Expanding U.S. Dairy Markets

Cheese

Per capita consumption data indicate that potential for expanding cheese markets exists in countries such as Japan, Mexico, and Taiwan. Traditionally, these markets have been dominated by the EC, New Zealand, and Australia, but the U.S. dairy industry could possibly increase its share in these markets because they have expanding economies and consumers'

preferences are shifting from traditional foods to more consumer-ready Western foods, including cheese. Figure 3.1 shows per capita consumption data for Brazil, Mexico, and a few Pacific Rim countries compared with some major cheese markets (United States, Finland, and France).

Figure 3.1: Per Capita Cheese Consumption for Selected Countries, 1990



Source: GAO's analysis of data from USDA and the National Dairy Board.

As shown previously in figure 2.5, the United States provided only 4 percent of the cheese imported into the Pacific Rim in 1990, and the National Dairy Board and the Wisconsin Milk Marketing Board consider this area of the world as a potential market for domestic cheese. As shown previously in table 2.1, Hong Kong imported only about 3 percent of its cheese from the United States in 1990. According to National Dairy Board data, Hong Kong may be attractive because its open port status eliminates tariffs and reduces other administrative barriers to imports. Furthermore, Hong Kong is receptive to Western foods and is considered a trendsetter among some Asian nations.

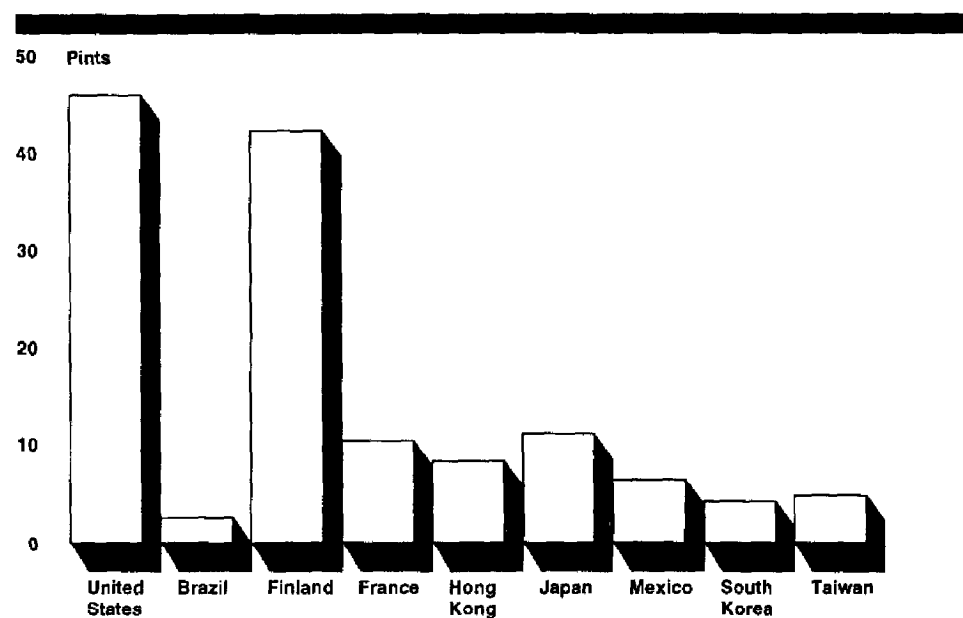
Although Japanese consumers view European cheese as high quality cheese, they are not always aware of the attributes of U.S. cheese and at times do not perceive it as high quality cheese. According to industry documents, U.S. manufacturers have an opportunity through trade shows and consumer education to sell cheese in Japan. This is particularly true, since the Japanese have an increasing interest in American ready-to-eat foods and have the ability to pay for these products.

U.S. cheesemakers enjoy a greater market share in South Korea, where they supplied about 84 percent of South Korea's imported cheese in 1990. Some potential may exist in South Korea for additional consumption of cheeses if that country's gross domestic product continues to increase.

Frozen Dairy Desserts

As shown in figure 3.2, opportunities may exist for increased U.S. exports of ice cream in some markets.

Figure 3.2: Per Capita Frozen Dairy Dessert Consumption for Selected Countries, 1990



Note: Includes 1987 or 1989 frozen dairy dessert consumption for some countries for which 1990 data were not available.

Source: GAO's presentation of the National Dairy Board's data.

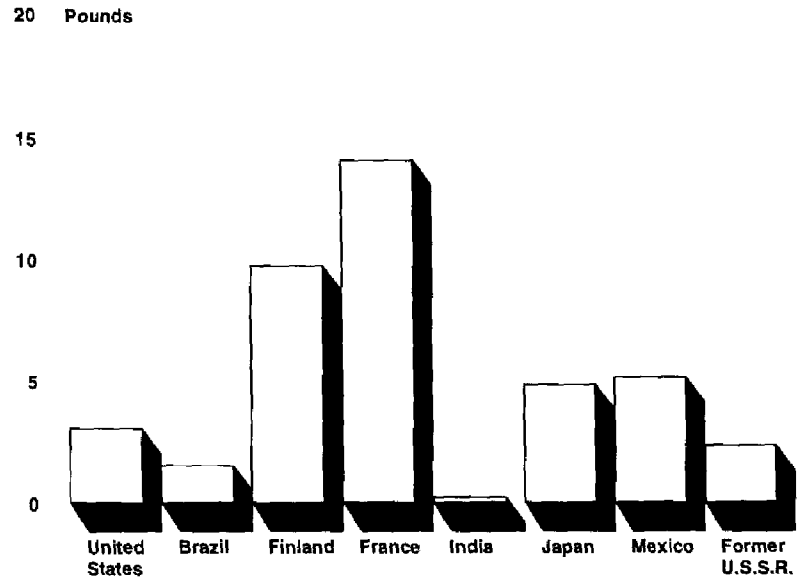
Frozen desserts are value-added products; therefore, consumers' preferences tend to be more important than they normally are with bulk commodities, and the price of these products tends to play a lesser role. U.S.-made ice cream, unlike other U.S. dairy products, has a strong image in the international marketplace, and several domestic ice cream makers export premium ice cream to France and Japan. This strong image is believed to exist because U.S. ice cream is made from butterfat, which has had positive taste appeal.

According to industry market research studies, consumption of ice cream has a positive correlation with income levels. Consequently, Pacific Rim countries, including Japan, South Korea, and Taiwan, may be attractive markets for U.S. ice cream makers because of their expanding economies and consumers' changing preferences for Western foods.

Nonfat Dry Milk

As the economies of Mexico, Japan, and Brazil continue to grow, it is likely that their per capita consumption of nonfat dairy milk will continue to grow, thus offering an opportunity for the U.S. dairy industry to supply that demand. Consumption of U.S.-produced nonfat dry milk could also be encouraged through additional exports of processed foods containing nonfat dry milk, according to market research. Figure 3.3 shows the per capita consumption of nonfat dry milk in eight countries in 1990.

Figure 3.3: Per Capita Nonfat Dry Milk
Consumption for Selected Countries,
1990

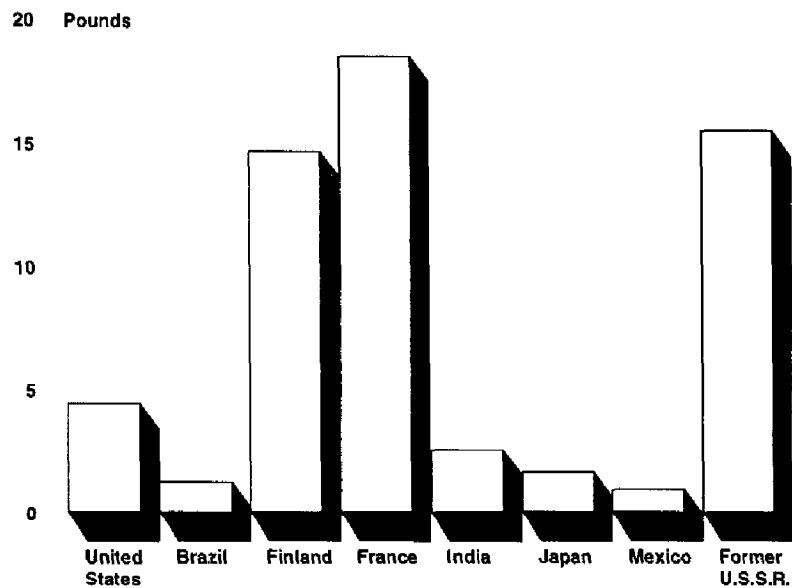


Source: GAO's analysis of USDA's data.

Butter

Butter is a bulk commodity; therefore, price plays a significant part in a country's purchasing decision to buy butter. Because of federal dairy price supports, U.S. bulk butter is generally priced above world prices. Therefore, bulk butter may have little potential for growth in international markets without pricing policy changes. This pricing competitiveness issue is discussed further in chapter 4. Figure 3.4 compares the per capita consumption of butter for eight countries in 1990.

Figure 3.4: Per Capita Butter
Consumption for Selected Countries,
1990



Source: GAO's analysis of USDA's data.

Butter is largely used for cooking and must compete with oils made from a variety of plants and animals throughout the world. These oils are generally less expensive than butter manufactured in the United States. Butter, unlike other cooking oils, needs refrigeration, which in many areas of the world is in short supply. Some countries have increased their butter exports by processing their butter into butter oil, which survives for some time without refrigeration. U.S. domestic manufacturers produce relatively little butter oil and therefore may not have taken advantage of potential butterfat markets.

Fluid Milk

The perishability of fluid milk naturally leads to its use in manufactured dairy products that spoil less quickly than milk itself. However, industry research shows that the U.S. dairy industry is also beginning to realize the potential for expanded exports of fluid milk to Mexico. Exports of fluid milk to Mexico are occurring in both bulk raw—tankers filled with milk directly from the farm—and finished bottle form. The potential benefits to the dairy industry from freer trade with Mexico were the subject of considerable speculation when the North American Free Trade Agreement was being debated.

Domestic Market Offers Modest Growth

Industry market research studies indicate that only modest growth of dairy products is likely in domestic markets because the domestic dairy market generally has been saturated, as indicated by the amount of government purchases over the years. Consumption data indicate that the demand for lowfat and specialty cheeses has increased but consumption of these products may be causing some of the decrease in the consumption of other, higher fat content cheeses. Processed foods may offer opportunities for milk fat, nonfat dry milk, and other milk components.

Market Expansion Opportunities Exist for Some Types of Cheeses

Although domestic cheesemakers manufacture several varieties of cheeses, domestic consumers have been heavily dependent on the EC for specialty cheeses generally not produced in this country. Specialty cheeses are perceived to be high in quality, which is generally reflected in prices consumers pay for such products. Traditionally, domestic cheesemakers have concentrated on a few higher-volume cheese types, including cheddar, American, and Italian-type cheeses, which are frequently added to other foods such as pizza and lasagna. Specialty cheeses are usually consumed by themselves or with other foods in which they do not lose their identity.

But the domestic market for many "niche" specialty cheeses is growing rapidly and provides an opportunity for the U.S. dairy industry to increase sales. For example, as shown in table 3.2, growth in domestic market demand for Hispanic, Romano, Feta, Havarti, and Gorgonzola cheeses is estimated to be in excess of 10 percent per year. Larger markets for Parmesan and string cheese also show above-average growth potential.

Table 3.2: Estimates of U.S. Market for Selected Domestic Specialty Cheeses, 1992

Market size in thousands of pounds		
Domestic variety	Market size	Percentage of yearly growth rate
Parmesan	102,000	8
String	70,000	6
Specialty jack	34,000	5
Hispanic	33,000	14
Aged provolone	30,000	5
Romano	28,000	14
Feta	28,000	12
Brie/Camembert	5,000	10
Havarti	3,000	11
Gorgonzola	500	12
Specialty ricotta	212	7

Source: University of Wisconsin Dairy Pipeline, Vol. 4, No. 4, Dec. 1992.

The University of Wisconsin, working with the Wisconsin Milk Marketing Board, developed Havarti cheese, which had been largely imported from Denmark. Wisconsin Havarti has been attractive to some cheesemakers because its manufacturing process is similar to that of cheddar and other hard cheeses traditionally produced in this country. Several Wisconsin cheesemakers have produced and marketed Havarti with some success, generating some interest in producing additional specialty cheeses.

American consumers concerned about the amount of fat in their diets have shown interest in purchasing lowfat cheeses, but while cheesemakers have been successful in removing milk fat from cheese, they have not been as successful in preserving taste, which is somewhat dependent on the amount of milk fat. According to a University of Wisconsin researcher, cheese sales could be improved if tasty lowfat cheeses could be developed and marketed. Some cheesemakers are attempting to replace fat with processed whey in their cheeses in an attempt to satisfy market demands for taste and lowfat products.

Milk Components in Processed Foods Offer the Potential for Increased Domestic Demand

Additional milk components could be used in processed foods. Raw milk contains several types of fats, proteins, and sugars that are extracted from milk and used in a variety of processed products. Traditionally, cheese, nonfat dry milk, and butter have been used in a variety of processed foods.

Chapter 3
Markets for U.S. Dairy Products Could Be
Expanded

Cheese is used in pizza and other Italian-type prepared foods, and nonfat dry milk is used in a variety of baked goods, candies, and flavored drinks; other milk components are also beginning to appear in processed foods.

Lactose, or milk sugar, is used in baby formula, a variety of candies, and flavored drinks. Whey, a byproduct of cheesemaking, is used in processed food and health beverages. Other milk components are promising. According to industry researchers, milk fat can be broken into fractions that are attractive to processed food manufacturers who need fats that exhibit specific behaviors when heated or cooled. For example, using butter fractions, the industry can manufacture cold spreadable butter. Researchers believe that milk fat components will satisfy these needs and are proceeding to develop the manufacturing technology to extract fat components from milk and utilize them in processed foods.

Obstacles to Expanding U.S. Dairy Markets

Opportunities exist to expand U.S. dairy markets, according to industry marketing research studies. However, according to many dairy processor and producer leaders we spoke with, two interrelated obstacles impede the industry's ability to expand and compete more effectively in global markets. First, while there is some sentiment among producers for maintaining high federal price support levels, leaders of both industry sectors agree that the price support program results in U.S. market prices that very often exceed world market prices. Second, federal dairy policies have helped contribute to the U.S. industry's mind-set, which is primarily focused on domestic production rather than on global markets and marketing. Furthermore, because of the production mind-set, the U.S. industry is not always producing to satisfy consumers' preferences.

Federal Dairy Policies Create Obstacles to Market Expansion

Since 1981, the Congress has gradually reduced the federal financial support provided the U.S. dairy industry by reducing the price support level for milk. Federal purchases of surplus dairy products have gone from a high of \$2.7 billion in 1983 to about \$395 million in 1992. The price support reductions are consistent with positions that we have taken in a series of reports issued since 1980. As the support price has declined toward world prices, the dairy industry has had more incentives to become more responsive to market forces. However, the federal dairy price support program remains an impediment to market development because U.S. market prices still exceed world prices for bulk commodities.

Support Program Reduces Price Competitiveness of U.S. Dairy Products

Despite a 48-percent real reduction¹ in the milk price support level between 1981 and 1990, the supported manufactured products—butter, cheese, and nonfat dry milk—are still not price competitive in the world export markets. The combination of relatively high support prices and import quotas increases U.S. dairy prices to levels that make it difficult for U.S. products to be price competitive in global markets. This is particularly true with bulk commodities (nonfat dry milk, cheese, and butter), for which price is the primary factor in customers' purchasing decisions. Even though price is less of a factor, it still is a factor for high-value dairy products in a customer's purchasing decision.

Import controls protect the U.S. industry from foreign competition in the domestic market. In addition, USDA, through its Commodity Credit Corporation, purchases, at specified prices, all quantities of domestic butter, cheese, and nonfat dry milk that are offered and meet USDA's

¹The percentage of decline is stated in terms of 1990 dollars.

specifications. Such purchases reduce excess supplies of dairy products on the commercial market and help maintain the minimum price received for milk by farmers.

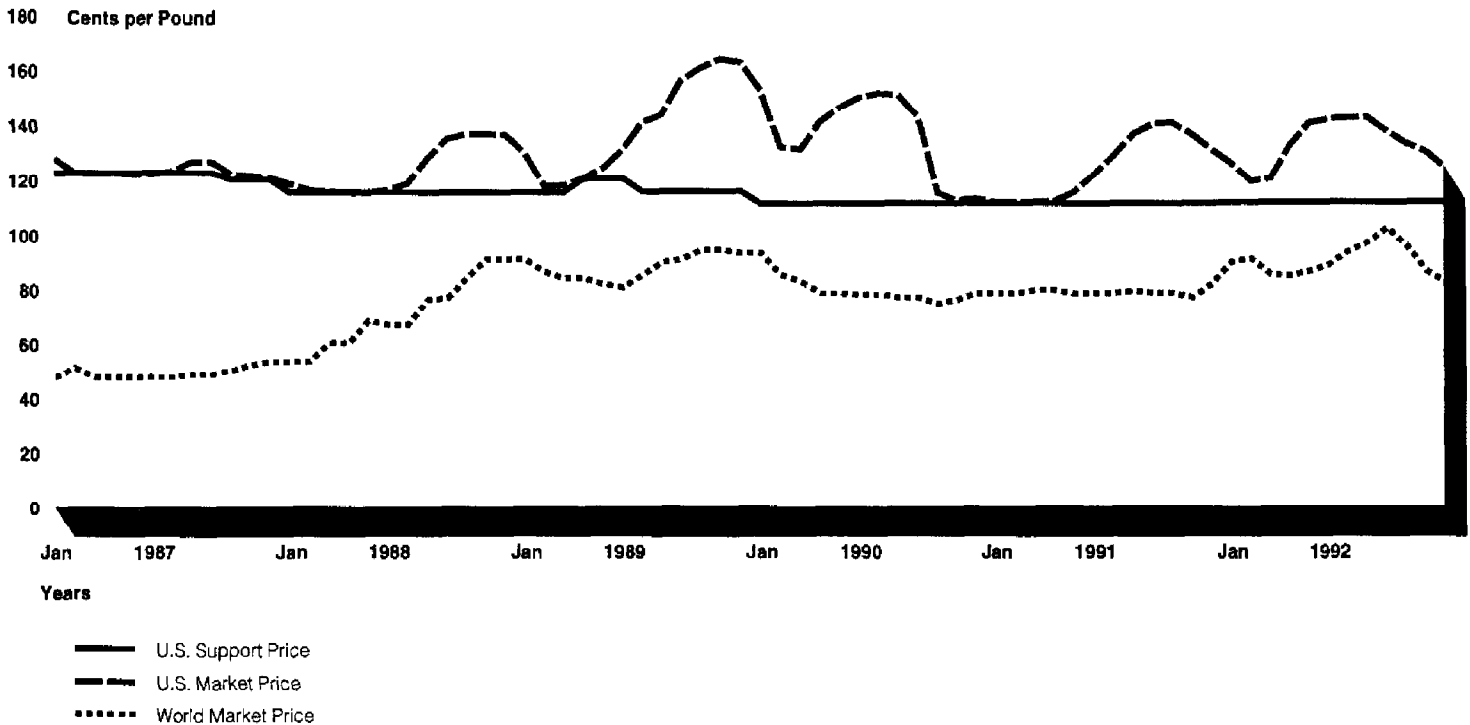
As shown earlier in figure 1.1, the government has purchased large quantities of manufactured dairy products under this program. In the mid-1980s, these stocks became so large and burdensome that the Congress authorized temporary programs designed to curb production. Concurrently, the milk price support level was lowered from \$13.49 per hundredweight (cwt) of milk in 1981² to \$10.10 in 1990—a 48-percent decrease in terms of 1990 dollars.

Despite this 48-percent reduction in the real price support level, neither bulk cheddar cheese, nonfat dry milk, nor butter became price competitive in the world market. This condition can be seen in figures 4.1, 4.2, and 4.3, which plot the U.S. market price, the federal support price, and the world price for bulk cheddar cheese, butter, and nonfat dry milk, respectively, from January 1987 through July 1992.

As figure 4.1 indicates, in recent years, the world price for bulk cheddar cheese has remained well below the U.S. market price as well as below the support price. The milk price support level, which is a floor on the U.S. cheese price, combined with section 22 import quotas, did not allow the U.S. bulk cheddar cheese price to approach the world price.

²This peak of \$13.49 was only in effect for a 20-day period in 1981. The support price during the remainder of the year was \$13.10. (See app. I.)

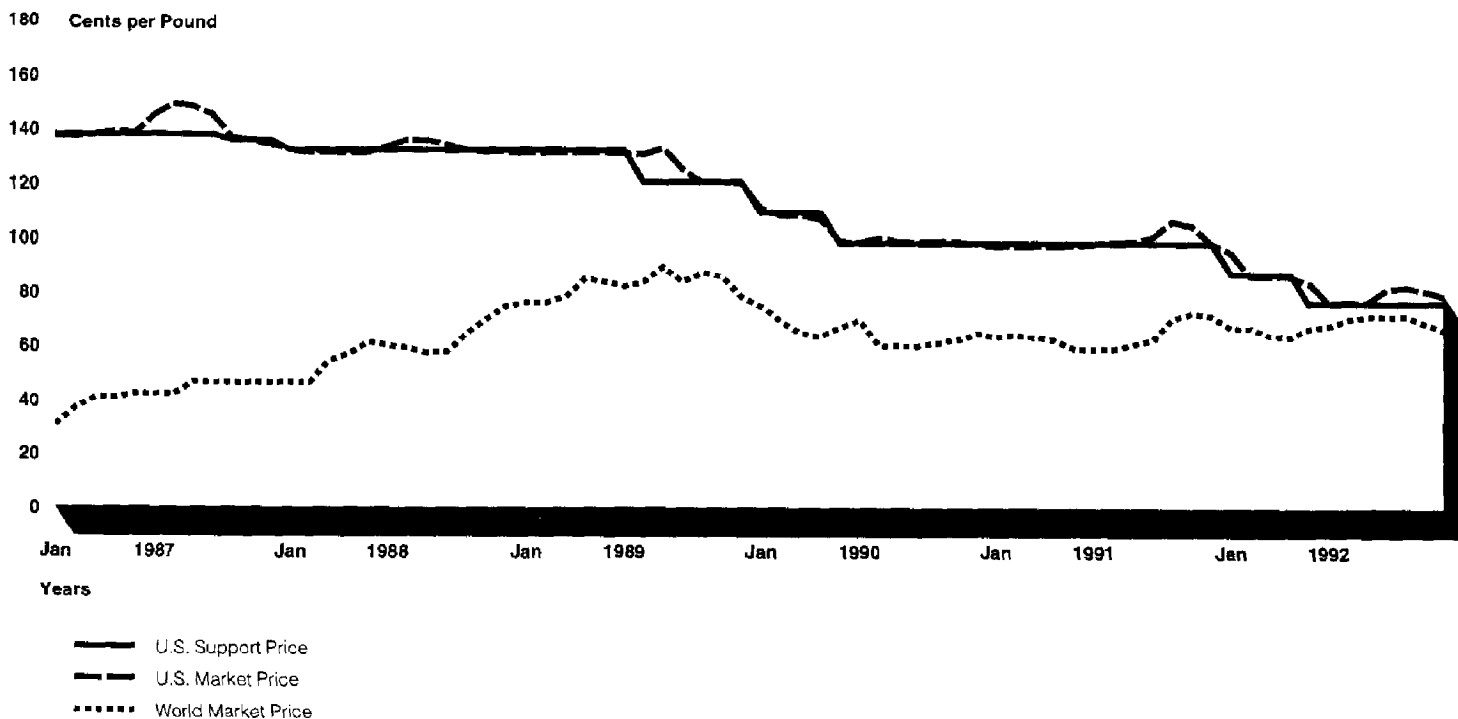
Figure 4.1: U.S. and World Market Prices and U.S. Support Price for Bulk Cheddar Cheese, 1987-92



Source: Agricultural and Food Policy Center, Texas A&M University.

Figure 4.2 indicates a more abrupt drop in the price support level for butter compared with the price support for bulk cheddar cheese, from nearly \$1.40 per pound in 1987 to only \$0.76 per pound in 1992—a reduction of over 45 percent. The U.S. market price for butter fell correspondingly, seldom deviating substantially from the support price. The lowering of the price support for butter has narrowed the gap between the domestic U.S. market price and the world market price.

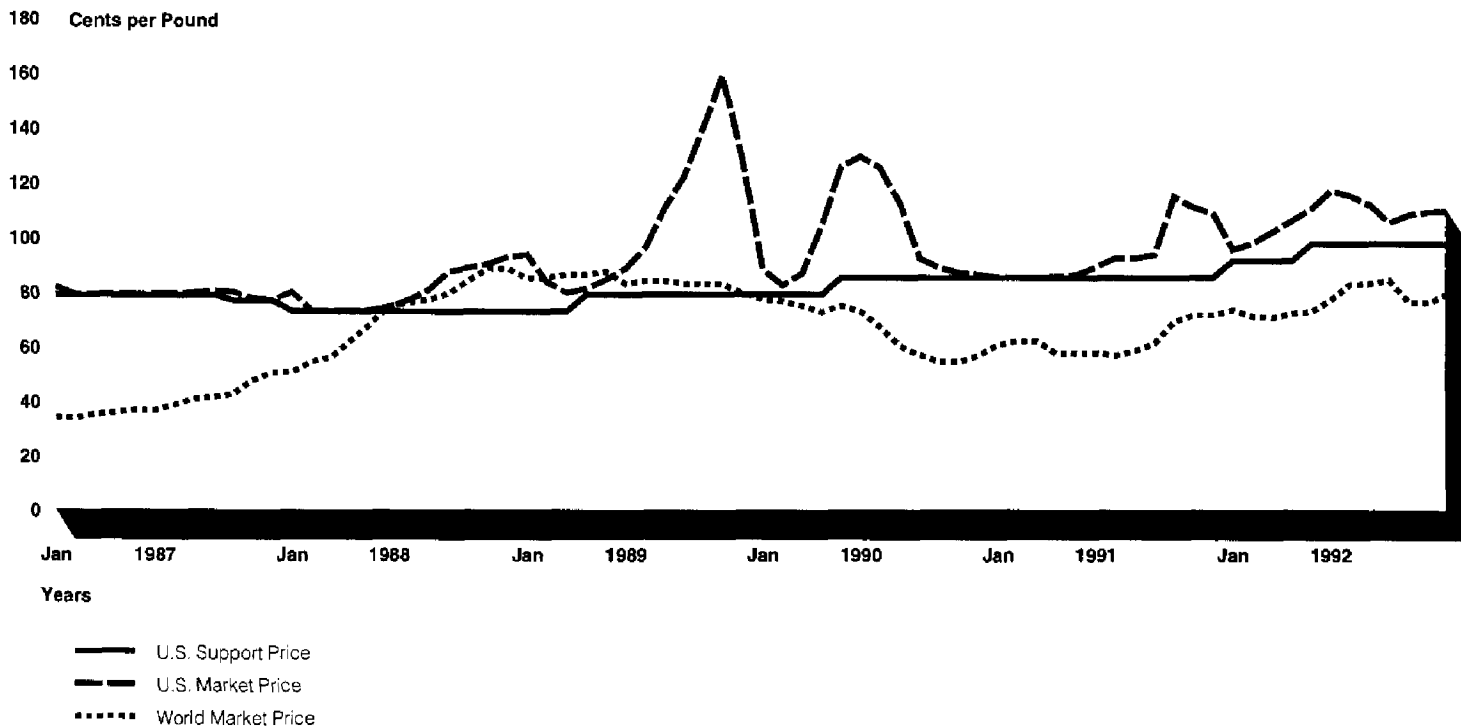
Figure 4.2: U.S. and World Market Prices and U.S. Support Price for Butter, 1987-92



Source: Agricultural and Food Policy Center, Texas A&M University.

Actions that USDA took to lower the butter price since January 1, 1990, meant that USDA had to raise the nonfat dry milk price in order to satisfy the requirement that the average support price for the two products must achieve the current price support objective of \$10.10 per cwt for milk. In our opinion, the effect of higher nonfat dry milk prices is to discourage its use as a food ingredient by increasing the cost of foods containing nonfat dry milk.

Figure 4.3: U.S. and World Market Prices and U.S. Support Price for Nonfat Dry Milk, 1987-92



Source: Agricultural and Food Policy Center, Texas A&M University.

The joint product trade-off between the price support level for nonfat dry milk and for butter presents a dilemma for USDA policymakers. With the overall milk price support fixed at \$10.10 per cwt, lowering the price support for butter to make it competitive in the world market causes the nonfat dry milk support price to be raised, making it less competitive. As a consequence, we believe that, for both butter and nonfat dry milk to be price competitive in global markets, a reduction in the price support level below \$10.10 would have to occur.

Industry Needs to Change Its Mind-Set to Global Markets

According to many industry leaders, the U.S. dairy industry needs to develop a global marketing mind-set in order for the industry to take advantage of opportunities to expand export markets. The needed mind-set changes are interrelated with the federal policy obstacles

discussed above, because federal policies have a significant influence on the behavior of the industry. These industry leaders believe that federal policies have influenced the industry's mind-set to be more focused on production than on marketing. They acknowledge that the resolution of this mind-set issue is primarily the responsibility of the industry. However, the government will have to also play a role in helping to bring about the needed mind-set changes because (1) current federal policies influence both the price and type of dairy products produced and (2) dairy policy changes may cause conflict within the industry because changes made to improve U.S. competitiveness in world markets may benefit one region of the country or one sector of the industry over another.

The Dairy Industry's Mind-Set Traditionally Has Been on Production and Domestic Markets

According to officials within the dairy-processing industry, the government's willingness to buy surplus production at the milk support price adversely affected market development activity in the processing sector in two basic ways. First, a tendency exists to produce high-volume cheeses and other bulk products rather than high-value and differentiated products because the government provides a safety net by purchasing bulk cheese, butter, and nonfat dry milk. Second, with world market prices much lower than domestic prices, the processing sector has little incentive to develop export markets; as a result, the industry lacks extensive know-how in selling dairy foods abroad.

These leaders also told us that dairy cooperatives have very little experience in developing export markets because sales of manufactured products to CCC are frequently a major market outlet. Therefore, commercial and international product-marketing expertise is lacking in some dairy cooperatives.

This lack of interest in marketing is indicated in a recent analysis of DEIP done by the University of Wisconsin. For example, this analysis points out that EC firms operating in the United States have been the dominant exporters of U.S. dairy products under DEIP, which suggests that market development opportunities are being missed. It says that many U.S. dairy firms either have been underbid by EC exporters or have chosen not to participate in DEIP. As a result, U.S. firms have not used DEIP extensively to gain exporting experience that would be advantageous for developing commercial foreign markets for dairy products. Although this program is primarily focused on exporting bulk dairy products, experience and knowledge of how to develop markets is being missed by the U.S. dairy industry.

However, the university's analysis also noted that (1) DEIP has helped to develop, expand, or maintain markets for U.S. dairy products; (2) trade sources indicate that expansion of dairy exports under DEIP has identified the United States as a reliable source of quality bulk dairy products; (3) U.S. dairy processors have been alerted to the need to produce cheeses and other dairy products to the specifications of foreign markets; and (4) a few U.S. firms have gained exporting experience under DEIP.

This analysis also points out that U.S. dairy processors are not always producing what foreign customers want. The Chief Executive Officer of a major dairy firm is quoted as saying "The U.S. stands out in splendid isolation with its 50-pound milk powder bags, its 40-pound cheese blocks, and its 68-pound butter boxes. Those packaging sizes are very reluctantly accepted by a few (foreign) buyers and downright refused by many." These packages, however, are the standard sizes sold to the federal government under the price support program. Recently, USDA took a step in the right direction by changing its purchases to metric measures.

The lack of extensive participation in USDA's market development programs is another indication of a production mind-set. Until 1991, the dairy industry had not made use of FAS' Foreign Market Development programs. FAS officials told us that they had no active agreements with a dairy-related organization until the National Dairy Board signed an agreement in 1991 to participate—8 years after the Board was authorized. These officials attributed this lack of interest to high support prices and the dairy industry's satisfaction with the domestic market. As a result, USDA and the U.S. dairy industry have not had much experience in developing international markets for dairy products. Dairy industry leaders acknowledged that changing this production mind-set to one more focused on marketing is primarily the responsibility of the industry. They noted that the industry needs to develop the expertise to expand export markets and reduce production costs to become more competitive. Many leaders believe that USDA could play an important facilitating role in this effort.

The industry has recognized this production mind-set problem and has begun to show interest in developing markets, particularly export markets. According to industry leaders, a few dairy companies have in the last several years taken steps to develop markets in Europe, Mexico, and countries of the Pacific Rim. For example, frozen desserts and cheese have been marketed in those areas. Also, some U.S. companies are

developing fluid markets in Mexico. However, the U.S. industry as a whole has not taken full advantage of the programs available to it.

Federal Involvement Is Needed to Help Industry Overcome Market Development Obstacles

Strong opposing views exist with respect to dairy policy changes needed to ensure the future viability of the dairy industry. The production sector tends to demand higher government subsidies in the form of increased price supports for milk. The processing sector tends to favor more market-oriented policies, including reductions in price supports. As illustrated during 1990 national hearings on federal milk orders, some leaders wanted to continue current pricing policies that benefit producers, while others wanted to change or eliminate those policies. Also, our interviews with industry leaders disclosed a range of views on the level of price support believed to be necessary.

Industry leaders acknowledged that some of these disagreements are inherent in any industry. However, they told us that compromises will need to be reached and acceptable strategies developed if the U.S. dairy industry is to enhance its position in global dairy markets. Some leaders also acknowledged that USDA could play an important facilitating role by working with the industry in developing appropriate strategies.

The Congress could also play an important role in joint cooperation with USDA and the industry in developing more longer-term dairy strategies and policies that better recognize the importance of dairy exports to the continued vitality of the U.S. dairy industry. An example of such an approach recently occurred on June 21, 1993, when the Chairman of the Senate Committee on Agriculture, Nutrition, and Forestry held the first ever National Dairy Summit in cooperation with the Secretary of Agriculture. All of the various sectors of the U.S. dairy industry, USDA officials, academia, state representatives, and others were invited to discuss and recommend dairy policies. Among the topics of discussion were supply management proposals and the development of export markets. Because of the complexity of the problem and the diversity of the interests involved, we believe that events like this are a step in the right direction in bringing the industry together to help resolve those obstacles facing this industry in expanding its export potential and markets.

Conclusions

Dairy policy has remained basically unchanged since the 1930s, yet much has changed affecting that policy. The domestic dairy industry is characterized by (1) excess production capacity, (2) a slow-growing

domestic market, and (3) continued budgetary pressures to reduce direct federal support. If the dairy industry is to maintain its long-term viability at its current capacity, it must begin to develop additional export markets.

As industry experts point out, however, current features of the U.S. dairy program are effectively limiting the industry's incentive to pursue these market opportunities. Thus, the future growth of the U.S. dairy industry will likely depend on (1) the nature and extent of alterations to existing dairy policies and programs and (2) the industry's ability to change its mind-set from a production to a market orientation.

Industry market studies suggest that a potential exists for the U.S. dairy industry to increase sales of dairy products in international markets and, at least to some extent, in domestic ones. But to do so, the industry must be more competitive and must satisfy consumers' preferences. The Congress has taken steps to make the federal dairy program more responsive to market forces, particularly by reducing the support price. These actions have been consistent with positions taken in our reports issued since 1980. Industry representatives point out, however, that by maintaining the prices the government pays for dairy products above prices that U.S. processors can receive abroad, the price support program still represents a major impediment to developing long-term export markets and encourages a production rather than a market orientation.

In the event that current dairy programs remain unchanged, the excess production that currently characterizes the industry is likely to persist for many years, and with it, related government program expenditures are likely to continue at or near current levels. Unless a slow-growing domestic market and the threat of reduced direct federal support cause a change in the industry's production orientation, industry adjustments would be minimal under the current program, and existing opportunities for expanding into new markets would largely be missed.

Additional government subsidies or export incentives could encourage producers to pursue additional international market opportunities, but only at added cost to the government. Furthermore, market share gains achieved through subsidies may be tenuous in that those gains might be maintained only as long as the subsidies were available.

Matters for Congressional Consideration

We believe that the Congress, jointly with the executive branch and the dairy industry, needs to consider initiating efforts to develop a long-range dairy policy that better recognizes the importance of dairy exports to the continued viability of the industry. Steps could include conducting hearings, gathering information on alternatives to overcome impediments to export development, and analyzing the implications of those alternatives on the industry's current structure. Furthermore, the Congress should consider directing the Secretary of Agriculture to facilitate discussions with the dairy industry to help increase its attention to exploring global markets.

Agency Comments and Our Evaluation

In commenting on a draft of this report, USDA concurred with the fundamental premise that the dairy industry will have to shift away from reliance on the federal price support and milk marketing order programs as income-enhancing mechanisms and move toward greater market orientation to ensure long-term industry viability. USDA particularly agreed that exports hold the greatest potential for expanding the market for U.S. dairy products. USDA comments indicated minor differences with some elements of the report. However, USDA pointed out that these differences should not be interpreted as implying anything less than a highly favorable opinion of the report.

USDA agreed that the federal price support program has tended to orient the U.S. dairy industry toward production, to the detriment of both domestic and international marketing, while largely pricing most bulk U.S. products out of the export market. It also stated that U.S. dairy policy in this regard is hardly unique, however, with the exception that, unlike many other dairy-producing nations, the United States did not consistently look to exports to dispose of surplus dairy products until the adoption of DEIP.

We agree that, with the adoption of DEIP, dairy exports significantly increased. However, as USDA points out in its comments, DEIP was instituted as a transitory measure to allow U.S. dairy product exporters to compete against subsidized exports. Consequently, it should not be expected to form the basis for permanent, long-term dairy product exports.

USDA said that it has been estimated that the price for manufacturing grade milk in the United States would have to fall to approximately \$6.50 per cwt to achieve significant exports of bulk dairy products in what would remain a highly distorted international trade environment absent a Uruguay

Round agreement. USDA believes that such a drastic reduction in the price support level would be too high a price to pay to achieve increased exports of bulk U.S. dairy products. Consequently, USDA believes it to be critically important for our report to link more clearly and decisively any substantial reduction in support prices for milk to the expanded opportunities for U.S. dairy product exports made possible through an acceptable Uruguay Round resolution.

We agree that, in the current trade environment, little potential exists for expanding markets for U.S. bulk commodities without significant additional reductions in price supports or subsidized export programs such as DEIP. However, as our report also points out, considerable potential may exist for developing and expanding markets for value-added dairy products. In value-added markets, consumers' preferences tend to be more important relative to price than in bulk commodity markets.

USDA provided information that elaborates on the U.S. objective in the Uruguay Round negotiations. Specifically, USDA said that the U.S. basic objective in the Uruguay Round negotiations was to reduce substantially the internal supports, export subsidies, and import barriers that have profoundly distorted international trade in all agricultural commodities. However, USDA pointed out that the U.S. position in the negotiations was not to unilaterally disarm the U.S. agricultural commodities, but rather to encourage all GATT signatory nations to simultaneously adopt the disciplines necessary for freer trade. It also pointed out that perhaps no other sector of international agriculture has been more marked by market distortions of all kinds than has dairy. Therefore, DEIP was instituted as a transitory measure to increase dairy exports while ultimately encouraging U.S. trading partners to the Uruguay Round negotiations to reduce all export subsidies and other unfair trade practices. Finally, USDA said that recent dairy support price reductions have already achieved the internal reforms necessary for current Uruguay Round negotiations.

USDA's information on the Uruguay Round negotiations sheds light on the current trade environment that the dairy industry must operate within. It also highlights the complexities involved in substantial reductions to dairy subsidies. However, it is increasingly important for the dairy industry to develop the marketing mind-set and culture changes needed to expand and effectively compete in global markets.

USDA said that our report is fundamentally correct in observing that significant export activity began only recently. It discussed some of the

activities of the National Dairy Promotion and Research Board in assisting the industry to expand export markets. USDA points out that the Board's principal focus in export markets has been on market research in the Pacific Rim countries and in Mexico, with emphasis on higher value-added dairy products like cheese, ice cream, and frozen yogurt. Finally, it said that, although the Board allocated \$700,000 in fiscal year 1993 (the largest allocation thus far) for export-related activities, this only accounts for less than 1 percent of the Board's total budget of over \$74 million and is therefore indicative of the still relatively limited importance that the U.S. dairy industry places on exports. We concur with these observations.

Finally, USDA said that the Foreign Agricultural Service and others in the Department have, through the years, also taken advantage of opportunities to alert and guide the U.S. dairy industry to the potential for expanding exports. USDA said it recognizes, however, that it can be difficult to redirect the dairy industry to focus more on marketing exports because the industry finds about 98 percent of its market domestically. We agree that a redirection will be a difficult effort; however, unless this industry adopts a greater market orientation, opportunities for expanding into new markets may largely be missed. Furthermore, it may be in the best interest of the industry to be proactive in developing a marketing mind-set to take advantage of potential opportunities resulting from the recently signed international trade agreements.

USDA indicated that we did not make any specific recommendations. While it is true that we did not make any direct recommendations to USDA, we did present some matters for consideration to the Congress. Should the Congress decide to act on these matters, it would more than likely require USDA's involvement. USDA may be required to assist in gathering information on alternatives to overcome impediments to export development, analyzing the implications of those alternatives, and facilitating the industry's adjustment to a stronger marketing mind-set by working with the industry to develop appropriate strategies.

In addition to its general comments, USDA provided eight additional specific comments. Appendix III provides a complete set of USDA's comments, along with our responses to the eight specific comments.

Legislated and Inflation-Adjusted Milk Price Support Level Per Hundredweight, 1949-93

Base year 1990			
Effective date	Legislated support price	Inflation-adjusted support price	
Feb. 8, 1949	\$3.14	\$17.03	
Jan. 1, 1950	3.07	16.65	
Apr. 1, 1951	3.60	18.10	
Apr. 1, 1952	3.85	18.99	
Apr. 1, 1953	3.74	18.31	
Apr. 1, 1954	3.15	15.31	
Apr. 18, 1956	3.25	15.62	
Apr. 1, 1958	3.06	13.84	
Sept. 17, 1960	3.22	14.22	
Mar. 10, 1961	3.40	14.86	
Apr. 1, 1962	3.11	13.46	
Apr. 1, 1963	3.14	13.41	
Apr. 1, 1964	3.15	13.28	
Apr. 1, 1965	3.24	13.44	
Apr. 1, 1966	3.50	14.12	
June 30, 1966	4.00	16.14	
Apr. 1, 1968	4.28	16.07	
Apr. 1, 1970	4.66	15.70	
Apr. 1, 1971	4.93	15.91	
Mar. 15, 1973	5.29	15.57	
Aug. 10, 1973	5.61	16.51	
Apr. 1, 1974	6.57	17.42	
Jan. 5, 1975	7.24	17.59	
Oct. 2, 1975	7.71	18.73	
Apr. 1, 1976	8.13	18.67	
Oct. 1, 1976	8.26	18.97	
Apr. 1, 1977	9.00	19.41	
Apr. 1, 1978	9.43	18.90	
Oct. 1, 1978	9.87	19.79	
Apr. 1, 1979	10.76	19.37	
Oct. 1, 1979	11.49	20.69	
Apr. 1, 1980	12.36	19.60	
Oct. 1, 1980	13.10	20.78	
Oct. 1, 1981	13.49	19.40	
Oct. 21, 1981	13.10	18.84	
Dec. 1, 1983	12.60	16.53	

(continued)

Appendix I
Legislated and Inflation-Adjusted Milk Price
Support Level Per Hundredweight, 1949-93

Base year 1990

Effective date	Legislated support price	Inflation-adjusted support price
Apr. 1, 1985 ^a	12.10	14.70
July 1, 1985	11.60	14.09
Jan. 1, 1987	11.35	13.06
Oct. 1, 1987	11.10	12.77
Jan. 1, 1988	10.60	11.71
Apr. 1, 1989	11.10	11.70
July 1, 1989	10.60	11.17
Jan. 1, 1990	10.10 ^b	10.10

^aBeginning in 1984, the federal government required dairy farmers to pay assessments for various purposes, such as promotion and supply control programs. The support prices shown in this appendix do not reflect those assessments.

^bThe legislated support price has not changed since 1990.

Federal Dairy Price Support Program Purchases and Dairy Export Incentive Program Bonuses, Fiscal Years 1975-92

Dollars in millions

Fiscal year	Price support program purchases		Dairy Export Incentive Program bonuses
	Actual	Inflation adjusted	
1975	\$475.8	\$1,155.9	\$0.0
1976	115.3	264.8	0.0
1977	720.8	1,554.6	0.0
1978	445.0	892.0	0.0
1979	246.7	444.1	0.0
1980	1,262.4	2,002.4	0.0
1981	1,990.7	2,862.3	0.0
1982	2,282.4	3,091.3	0.0
1983	2,716.0	3,564.1	0.0
1984	1,983.2	2,494.7	0.0
1985	1,819.8	2,210.5	0.0
1986	2,205.1	2,629.6	0.0
1987	1,205.0	1,386.4	0.3
1988	1,180.2	1,303.9	8.0
1989	611.1	644.1	0.0
1990	397.6	397.6	9.2
1991	756.8	726.2	39.3
1992	394.5	367.0	76.0

Notes:

1. Base year 1990.
2. Dairy export incentive bonuses include payments in kind.

Sources: Department of Agriculture's Agricultural Stabilization and Conservation Service and Foreign Agricultural Service.

Comments From the 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

OCT 08 1993

Mr. John W. Harman
Director
Food and Agriculture Issues
Resources, Community, and Economic Development Division
General Accounting Office
Washington, D.C. 20548

Dear Mr. Harman:

Enclosed is our response, on behalf of USDA, to the Draft GAO Report, "Dairy Industry: Potential for and Barriers to Market Development". Incorporated are views provided by the Agricultural Stabilization and Conservation Service and the Agricultural Marketing Service as well those of the Dairy, Livestock and Poultry Division, Foreign Agricultural Service.

Sincerely,

A handwritten signature in cursive script, appearing to read "Eugene Moos".

Eugene Moos
Under Secretary
International Affairs and
Commodity Programs

Enclosure

AN EQUAL OPPORTUNITY EMPLOYER

Appendix III
Comments From the Department of
Agriculture

COMMENTS TO OFFICIAL DRAFT REPORT
GAO DRAFT REPORT RCED-93-150, DATED AUGUST 17, 1993, ENTITLED
"DAIRY INDUSTRY: POTENTIAL FOR AND BARRIERS TO MARKET DEVELOPMENT"

General Comments

The Department of Agriculture (USDA) concurs with the fundamental premise of the GAO report; that increasing budgetary pressures have and will continue to require the U.S. dairy sector to shift away from reliance on the federal price support and milk marketing order programs as income-enhancing mechanisms and toward greater market orientation to ensure long-term industry viability. We particularly agree that exports hold the greatest potential for expanding the market for U.S. dairy products. We further concur with comments by dairy industry leaders cited in the report that subsidized exports under the Dairy Export Incentive Program (DEIP) cannot and should not be expected to form the basis for permanent, long-term dairy product exports. Although our subsequent comments will indicate minor differences with the emphasis of several of the elements of this report, this should not be interpreted as implying anything less than a highly favorable opinion for an outstanding report.

As highlighted by the report, the federal price support program has tended to orient the U.S. dairy industry toward production, to the detriment both of domestic and international marketing, while largely pricing most bulk U.S. dairy products out of the export market. U.S. dairy policy in this regard is hardly unique, however, with the exception that unlike many other dairy producing nations, the United States did not consistently look to exports to dispose of surplus dairy products until the adoption of the DEIP.

As a consequence of widespread manipulation of the global marketplace by many dairy product trading nations, perhaps no other sector of international agriculture has been more marked by market distortions of all kinds than has dairy. A basic objective of the United States in the Uruguay Round negotiations is to reduce substantially the internal supports, export subsidies, and import barriers that have profoundly distorted international trade in all agricultural commodities. In this regard, the DEIP was instituted as a transitory measure to allow U.S. dairy product exporters to compete against subsidized exports, particularly those of the European Community, while ultimately encouraging U.S. trading partners to agree to the reduction of all export subsidies and other unfair trade practices in the Uruguay Round negotiations. The DEIP has clearly succeeded in its first objective of increasing U.S. dairy product exports. Whether it will be equally effective in prodding competing nations to accept greater market orientation in international trade awaits the outcome of the Uruguay Round negotiations.

While strongly advocating the phasing-out of agricultural trade distortions, the United States has made it clear, through the aggressive use of the DEIP and other similar programs, that it will not 'unilaterally disarm'; that Uruguay Round disciplines must be adopted simultaneously by all GATT signatory nations. Due to reductions in the support price for milk that have been implemented in recent years, the United States has already achieved the reforms in internal supports for dairy that would be required by current Uruguay Round negotiations. However, it has been estimated that the price for manufacturing grade milk in the United States would have to fall to approximately \$6.50 per

Appendix III
Comments From the Department of
Agriculture

hundredweight to achieve significant exports of bulk U.S. dairy products in what would remain a highly distorted international trade environment absent an Uruguay Round agreement. In addition to being clearly unacceptable to the U.S. dairy sector, such a drastic reduction in the price of milk would violate the 'no unilateral disarmament' pledge the United States has consistently adhered to throughout the Uruguay Round negotiations.

While we look forward to the day when a U.S. dairy industry as innovative in marketing as it currently is in production can participate without subsidies in the international marketplace, we believe the elimination or a further sharp reduction in federal price supports that would be necessary for this to happen, in the absence of a GATT agreement, would be too high a price to pay to achieve this end. Consequently, we believe it to be critically important for the GAO report to link more clearly and decisively any substantial reduction in support prices for milk to the expanded opportunities for U.S. dairy product exports made possible through an acceptable Uruguay Round resolution.

In addition to underlining the policy environment that has acted as a disincentive for greater involvement by the U.S. dairy industry in the international marketplace, the report recognizes the recent increase in interest and activity by the U.S. dairy industry in pursuing exports. Although the Foreign Agricultural Service (FAS) and U.S. dairy organizations have engaged in some export promotional activities as far back as the 1950's, the report is fundamentally correct in observing that significant export activity began only recently. In 1990, the National Dairy Promotion and Research Board (NDB) established an Export Enhancement Committee, charged with exploring and evaluating export opportunities for U.S. dairy products. A Dairy Industry Export Advisory Committee was also established to provide communication between the Board and the dairy industry to help in the development of export markets. In 1991, NDB formally entered into a cooperator arrangement with FAS under the Foreign Market Development Program (FMD).

Using check-off funds collected from U.S. dairy farmers, NDB allocated to export activities \$225,000 in FY91, \$475,000 in FY92, and \$700,000 in FY93. Under the FMD Program, FAS contributed \$190,000 in FY91 and \$400,000 in both FY92 and FY93 to help expand dairy product exports. Also in FY93, an additional \$280,000 in Market Promotion Program (MPP) funds were provided to increase dairy product exports. While representing a considerable and growing expenditure of funds, it nevertheless remains true that the \$700,000 allocated in FY93 for export related activities accounts for less than 1 percent of NDB's total budget of over \$74 million, and is therefore indicative of the still relatively limited importance the U.S. dairy industry attributes to exports.

As noted in the report, the higher costs imposed on bulk dairy products by the federal price support program have encouraged NDB and other dairy interests to concentrate on exports of higher value dairy products. NDB activities have focused on the more affluent and accessible markets for dairy product exports in Pacific Rim countries and in Mexico as a neighboring, dairy-deficit nation. Emphasis has been placed on cheese, ice cream, and frozen yogurt through activities such as trade brochures and newsletters and in seminars. To date, market research has been a principal focus of NDB activity in export markets, both to determine the awareness of and interest in U.S. dairy products in overseas markets, and to educate the U.S. dairy industry of export opportunities. These studies have been influential in helping to define NDB

Appendix III
Comments From the Department of
Agriculture

marketing strategies. In addition, this research, together with an increased recognition of the role of the DEIP in expanding exports, has led to interest on the part of some sectors of the U.S. dairy industry to place greater emphasis on the promotion of bulk dairy commodities. As a result, for the first time in FY94, the NDB will promote fluid milk and other bulk dairy products. An example of the interaction of USDA, NDB, and the private U.S. dairy trade, together with such programs as the DEIP, FMD, and MPP, this redirection of interest could serve as a model for future U.S. dairy product export activities of the kind the report advises.

While not easy to quantify, FAS and other USDA staff through the years have also taken advantage of speaking opportunities to alert the U.S. dairy industry of the potential for expanded exports. Among these have been the annual meeting of the American Dairy Products Institute, the World Dairy Symposium (held annually in conjunction with Dairy Expo in Madison, Wisconsin), and a number of other trade association and regional dairy industry meetings.

In conclusion, in the export marketing of dairy products, both the U.S. dairy industry and FAS have reacted rationally to policy parameters, particularly the federal price support program. FAS has attempted to anticipate changes in dairy policy in recent years by alerting and guiding the dairy industry toward greater involvement in potential export opportunities. Although it is difficult to redirect an industry that, as the report points out, currently finds 96 percent of its market domestically, we agree that the remaining 2 percent that lies in exports holds the greatest opportunity for a healthy, self-supporting dairy industry in the future.

GAO Recommendation

No specific recommendations were cited.

Departmental Comments

1. On pages 3, 5, 26, 34, 39, and 46, unidentified industry market research studies are cited as the basis for report comments or policy prescriptions. Footnotes or a bibliography identifying these studies would be appreciated to help weigh the validity of their research and policy recommendations. Similarly, the recent study cited on page 4 is presumably the University of Wisconsin analysis not identified until page 52.
2. Page 7, last 3 lines: the usefulness of this recommendation is questioned because the dairy industry has held several meetings with the Secretary and other high-level USDA officials on the expansion of export markets.
3. Several comments referred to Figure 1.1 on page 12: the graph indicates that Government net market removals of dairy products were equivalent to over 35 billion pounds milk equivalent in 1983, however, according to the text above the graph, purchases were equivalent to 16.6 billion pounds of milk. The discrepancy is apparently because fat solids and skim solids were added with equal weights to obtain "total solids" milk equivalent. This contains some sense of double counting and overstates removal totals. The correct approach is to weight milk equivalent on a fat solids basis by 40 percent and skim solids on a milk equivalent basis by 60 percent to obtain a measure of total solids, milk equivalent. (ASCS staff have contacted GAO staff by phone to clarify this point.)

Now on pp. 4, 6, 24, 32,
36, and 42.

See comment 1.

Now on p. 5.

Now on p. 47.

See comment 2.

Now on p. 14.

See comment 3.

Appendix III
Comments From the Department of
Agriculture

Now on p. 16.
See comment 4.

Now on p. 43.
See comment 5.

Now on p. 45.
See comment 6.

Now on p. 48. See
comment 7.

Now on p. 56.
See comment 8.

4. Page 15, last sentence on page: it should be clarified that the FAS network of trade offices and agricultural attaches carries out only limited programs of market research, consumer promotions, technical assistance, and trade servicing. Through the funding of the Foreign Market Development and Market Promotion Programs, FAS assists U.S. private sector exporters to carry out the bulk of these activities in overseas markets.
5. Page 47, second line from the bottom: the \$13.49 support price in 1981 is technically correct. However, that price was only in effect for 20 days while Congress changed the law. A price of \$13.10 was the peak price other than for the 20-day period.
6. Paragraph at bottom of page 49 and top of page 50: this paragraph is incorrect and totally confusing because among other reasons, some of the adjustments which are referred to were not realignments of relative support prices among products, but the result of mandatory changes in the overall support level for milk. ASCS staff has contacted GAO staff by phone to clarify the paragraph content.
7. Paragraph at bottom of page 52 and top of page 53: while there are a number of examples of where the U.S. dairy products do not comply with international standards, the cited example of failure to convert to metric-sized packaging for purchases under the price support program is no longer correct, as indicated on the attached "Notice to Industry". We are advised that while government-held inventories are still largely in English-measure bags and boxes, suppliers have nearly exhausted their supplies of these bags and boxes and almost all current purchases are in 25 kilogram packages.
8. Page 60: it would be helpful if the Appendix table was labeled as fiscal year to differentiate from calendar year.

Attachment

September 13, 1993

Appendix III
Comments From the Department of
Agriculture



United States
Department of
Agriculture

Agricultural
Stabilization and
Conservation Service

P.O. Box 2415
Washington, D.C.
20013

September 10, 1992

NOTICE TO INDUSTRY

This notice is to advise you of the United States Department of Agriculture (USDA), Commodity Credit Corporation's (CCC) intent to purchase bulk dairy products--butter, nonfat dry milk (NDM), and cheese in metric-size packages under the Dairy Price Support Program.

As of September 1, 1992, CCC export sales of dairy products from inventory in Fiscal Year 1992 totaled 180 million pounds. In addition, 117 million pounds have been sold under the Dairy Export Incentive Program (DEIP). In order for CCC and the dairy industry to maintain and expand export markets for U.S. produced dairy products, it is essential that NDM, butter, and cheese are packaged using internationally accepted weights and measures.

CCC has discussed the proposed conversion to metric weights with industry associations and representatives during the last three months. CCC proposed that effective October 1, 1992, NDM purchases be converted to metric size and effective January 4, 1993, butter and cheese purchases be converted to metric sizes. It was also suggested that dimensions of a 25-kilogram corrugated shipping container for butter be a "brick-style" to facilitate more stable stacking of butter containers on 48" x 40" pallets.

Industry associations and representatives have canvassed their membership and provided us with their response. The response from NDM manufacturers has been primarily positive, while butter manufacturers stated concern about the proposed changes. Some of their concerns include the length and width dimensions of the "brick-style" container and stacking patterns on a standard 48" X 40" pallet, sealing requirements for the 25-kilogram containers--glue or tape, and whether containers require both metric and Avoirdupois (English) units.

To enhance CCC's and the dairy industry's ability to successfully compete with other exporting countries on the world market with U.S. produced dairy products, the decision has been made to adopt the proposed changes. Effective October 1, 1992, all NDM will be purchased in 25-kilogram multiwall paper bags. Effective January 4, 1993, all bulk butter will be purchased in 25-kilogram corrugated shipping containers and cheese will be purchased in current containers with the metric weight marked as the prominent weight with the appropriate pounds as a "secondary" weight.

We will continue to work with the butter industry to determine the most acceptable size "brick-style" container for butter. After these discussions are concluded, CCC will notify the industry on the recommended dimensions of the 25-kilogram butter container. The preferred closure on butter containers in the world market is tape. We encourage the butter manufacturers to use tape for closing containers.



Appendix III
Comments From the Department of
Agriculture

-2-

CCC will grant necessary time extensions to those butter and NDM manufacturers who have existing 68-pound butter and 50-pound NDM container inventories which cannot be used by the deadlines. Extensions will also be granted for butter packaging equipment modifications which cannot be completed by the deadline. Requests for extension must include existing non-complying packaging inventory and the time required for conversion. These requests must be received, at least one week prior to offer to CCC, by the Kansas City Commodity Office, Dairy Division, P.O. Box 419205, Kansas City, Missouri 64141-6205.

Effective January 1, 1994, the conversion to the metric system will be complete, at which time all offers, prices, weights, and documents issued under the Dairy Price Support Program will be given in metric units. Until January 1, 1994, dairy product support purchase prices, offers, grading certificate lot weights, notices to deliver, payment documents, and reports will be stated in pounds. To facilitate the domestic use of bulk dairy products, until January 1, 1994, containers must display both weights-- metric and English.

A new Announcement regarding implementation of the metric conversion (DAIRY-5 - Purchase of Bulk Dairy Products) and an accompanying Notice to the Industry will be issued in late September.

CCC appreciates all of the industry's responses which have assisted in making a final determination.

The following table is furnished for conversion to metric system:

	Weight	
	Kilograms	Pounds
Butter - Salted	25	55.115
Butter - Unsalted	25	55.115
NDM - Nonfortified	25	55.115
NDM - Fortified	25	55.115
Cheese - Block	18.144	40
Cheese - Barrel	226.799	500



Indulis Kancitis, Director
Dairy Division

The following are GAO's comments on the Department of Agriculture's (USDA) letter dated October 8, 1993.

GAO's Comments

1. The studies referred to on pages 3, 5, 26, 34, 39, and 46 are numerous studies and reports, most of which came from USDA, the National Dairy Promotion and Research Board, and the Universities of Wisconsin and Minnesota. Also, we have changed page 4 of the report to indicate that the study referred to is one prepared by the University of Wisconsin.
2. We believe that the meetings that USDA referred to are an important step in the right direction. However, these discussions need to continue on an ongoing basis, with the goal of developing a long-term strategy to change the mind-set of the industry toward developing and expanding markets for value-added products. Furthermore, congressional direction and buy-in is desirable.
3. We agree with USDA's comment and have modified figure 1.1 in consultation with USDA.
4. We agree with this comment and have added some clarifying language to the report.
5. We agree with the comment and have added a clarifying footnote.
6. We agree with this comment and have revised the paragraph in consultation with a USDA official.
7. The example referred to is not intended to address a metric versus English-measure type of packaging. Rather, it is an example of not producing what the foreign customers want. The example is directed at overall packaging sizes that are not consumer-ready. However, we have added a statement to the paragraph to indicate that converting to metric is a step in the right direction.
8. The left-hand column of the table is labeled "fiscal year." However, in response to USDA's comment, we have also added "fiscal year" to the title of the appendix.

Major Contributors to This Report

Resources,
Community, and
Economic
Development
Division, Washington,
D.C.

Luther L. Atkins, Jr., Assistant Director
Patrick J. Kalk, Assignment Manager

Kansas City Regional
Office

Dale A. Wolden, Evaluator-in-Charge
James J. Hoffman, Senior Evaluator (Deceased)
Sheldon H. Wood, Staff Evaluator
Thomas M. Cook, Staff Evaluator

Related GAO Products

High-Value Product Exports: Good Potential Exists for More Trade With Taiwan, Malaysia, and Indonesia (GAO/GGD-94-52, Nov. 19, 1993).

U.S. Department of Agriculture: Strategic Marketing Needed to Lead Agribusiness in International Trade (GAO/RCED-91-22, Jan. 22, 1991).

1990 Farm Bill: Opportunities for Change (GAO/RCED-90-142, Apr. 10, 1990).

Federal Dairy Programs: Insights Into Their Past Provide Perspectives on Their Future (GAO/RCED-90-88, Feb. 28, 1990).

International Trade: Foreign Market Development for High Value Agricultural Products (GAO/NSIAD-90-47, Jan. 17, 1990).

Dairy Termination Program: An Estimate of Its Impact and Cost-Effectiveness (GAO/RCED-89-96, July 6, 1988).

Milk Marketing Orders: Options for Change (GAO/RCED-88-9, Mar. 21, 1988).

Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

Orders by mail:

U.S. General Accounting Office
P.O. Box 6015
Gaithersburg, MD 20884-6015

or visit:

Room 1000
700 4th St. NW (corner of 4th and G Sts. NW)
U.S. General Accounting Office
Washington, DC

Orders may also be placed by calling (202) 512-6000
or by using fax number (301) 258-4066.

**United States
General Accounting Office
Washington, D.C. 20548**

**Official Business
Penalty for Private Use \$300**

**First-Class Mail
Postage & Fees Paid
GAO
Permit No. G100**
