Industry & Trade Summary

Dairy Produce

USITC Publication 2477 (AG-3)
January 1992

OFFICE OF INDUSTRIES
U.S. International Trade Commission
Washington, DC 20436

UNITED STATES INTERNATIONAL TRADE COMMISSION

COMMISSIONERS

Don E. Newquist, Chairman
Anne E. Brunsdale, Vice Chairman
David B. Rohr
Carol T. Crawford
Janet A. Nuzum
Peter S. Watson

Office of Operations
Charles W. Ervin, Director

Office of Industries
Robert A. Rogowsky, Director

This report was prepared principally by

J. Fred Warren

Animal and Forest Products Branch
Agriculture, Fisheries, and Forest Products Division

Address all communications to
Kenneth R. Mason, Secretary to the Commission
United States International Trade Commission
Washington, DC 20436

PREFACE

In 1991 the United States International Trade Commission initiated its current *Industry and Trade Summary* series of informational reports on the thousands of products imported into and exported from the United States. Each summary addresses a different commodity/industry area and contains information on product uses, U.S. and foreign producers, and customs treatment. Also included is an analysis of the basic factors affecting trends in consumption, production, and trade of the commodity, as well as those bearing on the competitiveness of U.S. industries in domestic and foreign markets.[1]

This report on dairy produce covers the period 1986 through 1990 and represents one of approximately 250 to 300 individual reports to be produced in this series during the first half of the 1990s. Listed below are the individual summary reports published to date on the agricultural, animal, and vegetable products sector.

USITC publication number	*Publication date*	*Title*
2459 (AG-1)	November 1991	Live Sheep and Meat of Sheep
2462 (AG-2)	November 1991	Cigarettes
2477 (AG-3)	January 1992	Dairy Produce
2478 (AG-4)	January 1992	Oilseeds

[1] The information and analysis provided in this report are for the purpose of this report only. Nothing in this report should be construed to indicate how the Commission would find in an investigation conducted under statutory authority covering the same or similar subject matter.

CONTENTS

CONTENTS—*Continued*

INTRODUCTION

The scope of this summary report covers all commonly known dairy products, such as milk and cream, whether or not fluid, concentrated, or dried; buttermilk and curdled, fermented, or acidified milk and cream (e.g., yogurt); whey, in all forms, and whey protein concentrate; and articles of milk and cream. Also included are butter and other fats and oils derived from milk; cheese and curd of all kinds; ice cream; and the principal proteins of milk, namely, casein, casein derivatives (caseinates), and lactalbumin. All of these dairy products are provided for in chapter 4 of the Harmonized Tariff Schedule of the United States (HTS), except ice cream (included in HTS chapter 21) and casein, caseinates, and lactalbumin (all included in HTS chapter 35). Information is presented in this report on the structure of the U.S. and foreign dairy industries, domestic and foreign tariff and nontariff measures, and the competitive conditions of the U.S. dairy industry in domestic and foreign markets. The analysis covers the period 1986-90.

U.S. shipments of dairy products amounted to $48 billion in 1990. Fluid milk accounted for about 43 percent of such shipments, cheese for 29 percent, concentrated and dried milk for 15 percent, ice cream for 10 percent, and butter for 3 percent. Milk is marketed in the United States under a complex system of Federal, State, and local laws and regulations. In order to protect the U.S. price-support program for milk from import interference, imports of most products made from cow's milk (except soft-ripened cow's milk cheese, whey protein concentrate, casein, caseinates, and lactalbumin) are subject to quotas imposed under section 22 of the Agricultural Adjustment Act, as amended. These quotas, provided for in subchapter IV of chapter 99 of the HTS, limit U.S. imports of dairy products to about 2 percent of U.S. shipments of such products. Cheese accounts for about 51 percent of the total imports of dairy products, and casein and caseinates (articles which are not produced from milk in the United States) account for about 43 percent.

Milk is the normal secretion of the mammary glands of mammals that have given birth. Cows supply the great bulk of the world's output of milk and nearly all of the milk produced in the United States. Cows specially bred for dairy purposes are kept and milked on dairy farms throughout the United States. The secretion of milk by the cow requires intense preparation by the dairy farmer at least twice daily during the lactation of the animal. Milk normally is transported from the dairy farms to nearby processing plants, where it usually is pasteurized and homogenized and either packaged for the fluid market (i.e. drinking purposes, for which use it sells at premium prices), or manufactured into products such as butter, concentrated and dried milks (including nonfat dry milk), cheese, ice cream, and yogurt.

Milk is the principal raw material from which dairy products are made. The processes used to manufacture milk into dairy products vary considerably from product to product. For example, the production of most types of cheese involves coagulation of the milk, heating and stirring the resulting curd and whey (the liquid portion that remains after cheese is made from milk), draining off the whey (and subsequently drying it to make the product known as dried whey), and collecting, salting, and pressing the curd into loaves or other forms. Cheese is usually ripened (i.e., aged and/or cured). Aging and curing the cheese is mainly a function of time in storage combined with controlled temperature and humidity that permits certain desired activities by bacteria or molds.

Cream (the fatty liquid in milk) is separated from whole milk mostly to produce butter. The cream is then churned, and this process separates the butterfat, or milkfat, from the liquid. The liquid portion (fluid skim milk) is then drained off and usually dried into the product known as nonfat dry milk. The butterfat is usually salted, pressed into blocks of butter or cut into sticks and packaged. Although the fluid skim milk generally is dried, there has been a growing trend toward using larger amounts of it for drinking purposes, for which use it sells at premium prices, and for making cottage cheese. In many countries, fluid skim milk is processed into casein as well as into nonfat dry milk.

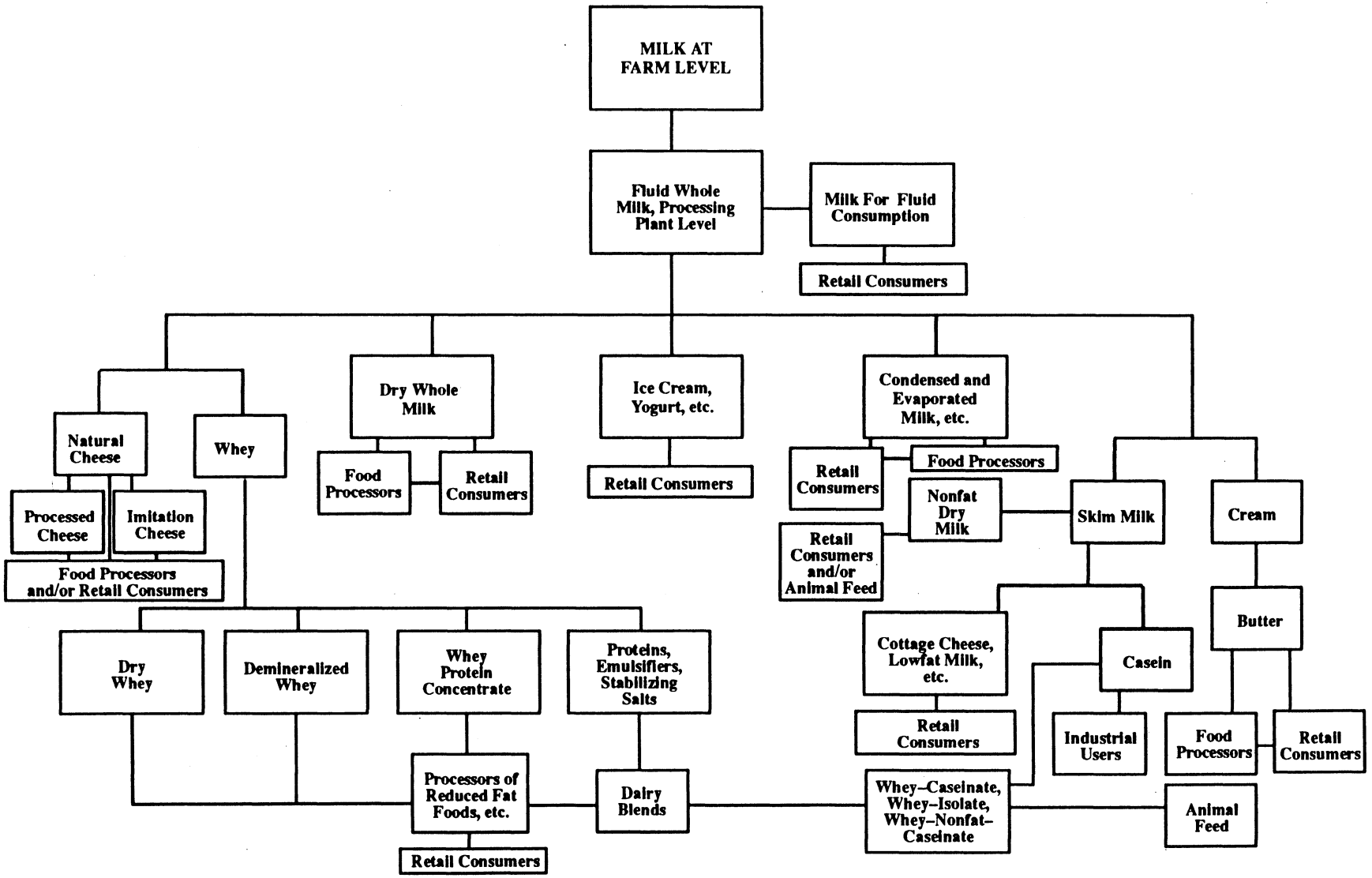
Whole milk is a bulky, perishable product that is generally processed for fluid consumption or manufactured into dairy products near the area of production. Dairy products such as concentrated and dried milk, butter, cheese, and casein can be more readily transported for longer distances than whole milk. Products such as concentrated and dried milk, whey, whey protein concentrate, caseinates, lactalbumin, and fats and oils derived from milk are used mostly as ingredients in other food products, including bakery, confectionery, ice cream mix, and in certain cheeses. Dried milk often is reconstituted and used for fluid consumption, or for the making of cottage cheese. Sometimes it is used for animal feeds. Products such as yogurt and ice cream generally are consumed in the form in which they are produced. Also, both butter and natural cheese (cheese first produced directly from milk) are used for consumption without further processing. However, significant quantities of butter are used by food processors in products such as bakery and confectionery, and natural cheese often is processed or used as an ingredient in foods such as pizza, crackers, and soups.

U.S. INDUSTRY PROFILE

Industry Structure

The structure of the U.S. dairy industry is illustrated in figure 1. The Standard Industrial Classification categories applicable to the industry are 2021, creamery butter; 2022, natural, processed, and

Figure 1
U.S. dairy industry: Principal raw materials, producer types, major products, and principal consumers



Compiled from *The Manufacturing Confectioner,* October 1981, p. 54, and from other information available to the U.S. International Trade Commission.

imitation cheese; 2023, dry, condensed, and evaporated dairy products; 2024, ice cream and frozen desserts; and 2026, fluid milk.

Number Of Firms, Concentration Among Firms, And Geographic Distribution

The number of U.S. dairy farms declined from about 249,000 in 1986 to 194,000 in 1990, and the number of dairy processing plants declined from about 2,000 to 1,700. The decline in the number of farms reflects, in part, the exit of some farms under the U.S. Government's Dairy Termination Program conducted in 1986-87. In addition, mergers, acquisitions, and/or the closing of obsolete plants have affected the number of dairy processing plants. Milk is produced in each of the States and relatively near the large population centers. As milk is a bulky and perishable product that is not conducive to long-distance shipment, milk for fluid consumption, as well as most other dairy products that are more transportable than milk, are processed near the areas of production. The dairy industry is not concentrated in any one region—dairy farms and processors are located throughout the United States. However, Wisconsin, California, New York, Minnesota, and Pennsylvania combined produce about 52 percent of the nation's milk supply and approximately the same percentage of its dairy products.

Employment

Employment in the U.S. dairy industry declined from about 900,000 persons in 1986 to 800,000 in 1990. The overall decline reflected a decline in employment at the farm level where about 80 percent of the industry's employment is concentrated. Indeed, employment in the processing segment rose slightly from 1986 to 1990, reflecting increased activity in the cheese and nonfat dry milk sectors of the industry. About 11 percent of the cost of the production of milk and 5 percent of the cost of production of processed dairy products are for labor. Hence, the dairy industry can be characterized as capital intensive.

Labor Skill Levels, Level Of Automation, And Productivity

The secretion of milk by the cow is a function that requires careful preparation and timing by the dairy farmer at least twice daily during the animal's lactation period. Milk and most dairy products are highly perishable articles, the production and handling of which require sanitary conditions and well-practiced procedures. Thus, relatively highly skilled labor is required in the production of milk and the processing of dairy products.

Both dairy farms and processing plants have become highly automated in recent years and technological advancements resulting from extensive applications of research and development continue to occur throughout the industry. These advancements have yielded greater productivity and efficiency at the farm level. For example, from 1986 to 1990 milk production per cow in the United States increased from 13,285 pounds to 14,646 pounds, or about 10 percent. During that period the average number of milk cows on U.S. farms declined from 10.8 million head to 10.1 million head, or 6 percent; however, total production of milk increased from about 143 billion pounds to 148 billion pounds, or 3 percent. In addition to vast improvements in breeding and genetics, the dairy farm sector has benefitted from the use of the modern milking parlor with such highly technical equipment as automatic take-off milking machines. Further, highly mechanized and computerized feeding and record keeping equipment and advances in collecting and hauling milk have contributed to dairy farm efficiencies. Also, a number of types of computerized and other highly automated and continuous processing equipment, including developments in automatic packaging, have increased productivity and efficiencies at the processing plant level. For example, a plant that operates 365 days per year and produces about 38 million pounds of cheese annually recently reported that its use of a new system of enclosed cheese vats, including an automated cheddaring system, had almost doubled output per man hour and resulted in a reduction in the frequency of plant accidents.

Degree Of Integration With Foreign Suppliers

Farms that produce milk and farmer-owned cooperatives generally are not integrated with foreign firms, although an Irish firm owns a large milk-producing operation in Georgia. Some processing plants and operations that market dairy products are owned by some of the world's largest multinationals, a few of which have been involved with joint ventures in dairy products in other countries. Normally, these multinationals limit their marketing of their foreign-produced dairy products to the countries, or areas, in which the products are produced so as to not jeopardize their domestic suppliers. Overall, however, the level of international investment in the U.S. dairy industry is minimal.

Nestlé S.A., headquarted in Switzerland, made major inroads into the world dairy market with the purchase of the Carnation Co., a major U.S. dairy products firm in 1985. Since that time, Nestlé S.A., the largest food conglomerate in the world, has continued to increase its share of the world dairy market through acquisitions and restructuring. Nestlé S.A., with 1991 sales projected at about $7 billion, is now the world's largest multinational firm that processes and markets dairy products. In late January 1991, Nestlé S.A. purchased Drumstick Co., based in Columbus, Ohio, from Alco Standard Corp. Through this acquisition, Nestlé S.A. reportedly more than doubled its frozen novelty business.

The world's second largest multinational firm that markets dairy products is U.S.-based Kraft General Foods Inc., with sales valued at about $5 billion in 1990. In late 1988, Kraft Inc. was acquired by Philip

Morris Companies Inc., and by mid-February of the following year was merged with General Foods to form Kraft General Foods. Philip Morris is restructuring Kraft General Foods, and plans to increase the operating profit of Kraft with productivity gains and volume increases.

U.S.-based Borden Inc., with 1990 sales valued at about $2 billion, is expanding its domestic and international operations through acquisitions, restructuring, and new product development in many foods and home products. However, as a result of a decline in earnings, Borden downsized its dairy operations in 1988. Dairy sales accounted for about 20 percent of Borden's total company sales in 1991, compared with 34 percent in 1987.

Vertical And Horizontal Integration

About 75 percent of U.S. production of milk is produced by farmers that ship the milk to their farmer-owned cooperatives. About half of the milk shipped to farmer-owned cooperatives is sold as raw milk to other independent plants for processing; however, the remaining half is processed by the cooperatives into milk for fluid consumption and/or an array of other dairy products. Thus, about 40 percent of the U.S. dairy industry can be characterized as being vertically integrated to some extent.

The remaining 25 percent of the U.S. production of milk is sold mostly to independent processing plants by the dairy farmers that do not belong to cooperatives. An unknown, but probably small, amount of this milk is processed by the farmers into milk for fluid consumption and/or into a number of other dairy foods, and marketed (often along with other farm-produced articles) through farmer-owned dairy stores. Many of the aforementioned independent processing plants that purchase milk from farmer-owned cooperatives and from farmers that do not belong to cooperatives are owned by some of the world's largest multinational food processors. These firms produce and/or market a wide variety of dairy products and other foods as well as a number of nonfood items.

Marketing Methods, Pricing Practices, And U.S. Government Programs

Farmer-owned dairy cooperatives and the independent processing plants market dairy products to grocery stores, producers of further processed foods (e.g., manufacturers of pizza), institutional users, and fast-food outlets. In addition, a small number of dairy farmers are completely vertically integrated and sell fluid milk, ice cream, and other dairy produce directly to retail consumers. In times of surplus, dairy cooperatives and plants also sell butter, Cheddar cheese, and nonfat dry milk to the Commodity Credit Corporation (CCC) of the U.S. Department of Agriculture (i.e., the Government purchases dairy products in order to support the price of milk as required by law). Annual purchases of butter, Cheddar cheese, and nonfat dry milk by the CCC during 1986-90 are shown in the following tabulation (in millions of pounds):

Calendar year	*Butter*	*Cheddar cheese*	*Nonfat dry milk*
1986	287.6	468.4	827.3
1987	187.3	282.0	559.4
1988	312.6	238.1	267.5
1989	413.4	37.4	0
1990	400.3	21.5	117.8

In recent years, the purchases of Cheddar cheese and nonfat dry milk have declined substantially while the purchases of butter have increased irregularly; the commercial demand for nonfat dry milk and cheese has been greater than that for butter.

The dairy products acquired by the Government under the U.S. price support programs, like the products purchased under dairy support programs in a number of other countries, are disposed of predominantly through domestic welfare outlets and sales or donations abroad. Domestic disposal has been to welfare recipients, the school lunch program, military and veterans' hospitals, and penal and correctional institutions. Disposal abroad has mostly been through government-to-government sales at world prices, sales to the U.S. army overseas in place of supplies from foreign sources, and donations mostly under the Agricultural Trade Development and Assistance Act of 1954. World prices are about 60 percent of the original CCC purchase prices, except for late 1988 and early 1989 when nonfat dry milk was exported at commercial prices. The following tabulation shows domestic and foreign donations and export sales of butter, cheese, and nonfat dry milk for marketing years 1986-90 (in millions of pounds):

Product	*1986*	*1987*	*1988*	*1989*	*1990*
Butter:					
Domestic donations ...	205	198	184	183	180
Foreign donations	272	279	236	400	221
Export sales	8	38	33	198	19
Cheese:					
Domestic donations ...	567	674	465	126	31
Foreign donations	637	748	504	126	31
Export sales	2	16	32	0	0
Nonfat dry milk:					
Domestic donations ...	127	149	131	19	11
Foreign donations	1,191	1,268	435	22	11
Export sales	387	520	95	3	0

Export sales of each of the products have been small compared with donations, largely reflecting the fact that sales of U.S.-produced dairy products cannot compete in export markets even at discounted prices. Donations of cheese and nonfat dry milk, as well as export sales, declined substantially in 1989 and 1990 as the U.S. commercial market, rather than the price-support program, absorbed larger quantities of domestic production.

Data are not available on the total expenditures by the dairy industry to encourage consumption of dairy products. However, the American Dairy Association, the National Dairy Promotion and Research Board, the California Milk Advisory Board, and the Wisconsin Milk Marketing Board combined spent about $58 million in advertising and promoting fluid milk alone in 1990.

Milk is marketed in the United States under a complex system of Federal, State and local laws and regulations.[1] The two major Federal programs affecting the marketing of milk and dairy products are the dairy price-support program, established under the Agricultural Act of 1949, as amended, and the Federal Milk Marketing Orders, provided for under the Agriculture Marketing Agreement Act of 1937, as amended. These two programs are the primary price-determination mechanisms in the dairy sector. The basic provisions of the Agriculture Act of 1949, as amended, required that the price of milk to producers (farmers) be supported at levels between 75 percent and 90 percent of parity[2] to ensure an adequate supply of milk, reflect changes in the costs of production, and ensure a level of farm income to maintain productive capacity sufficient to meet future needs. Since October 2, 1981, however, the support price has been established by the Congress at specific price levels, rather than at parity levels. The Food Security Act of 1985 amended the 1949 Act so as to support the price of milk according to projected price-support purchases of dairy products by the CCC. In addition, the 1985 Act contained a number of provisions, including a dairy-termination program,[3] for achieving a reduction in the U.S. production of milk and a reduced level of price-support expenditures by the CCC.

The Federal Milk Marketing Orders require "handlers" of milk (processors) to pay farmers certain minimum prices for Grade A milk based on its end use. Grade A milk for fluid consumption (beverage purposes) is designated as Class I milk; such milk, which has the first call on the nation's supply of milk, sells at a premium price. Grade A milk used for manufacturing semiperishable products such as ice cream, cottage cheese, and yogurt is designated as Class II milk and sells at a lower price than Class I milk, but higher than Class III milk (surplus Grade A milk). Class III milk is Grade A milk used for manufacturing storable products (butter, cheese, and nonfat dry milk). Class III milk is priced at levels near the price of Grade B milk in a two-state area in Minnesota and Wisconsin (commonly referred to as the area where the M-W price is established). Most of the milk produced in that area is used to manufacture butter, Cheddar cheese, and nonfat dry milk.[4] These three dairy products are purchased by the USDA in order to reflect the support price for milk to the farmer as required by law. Inasmuch as the USDA establishes purchase prices for these three products, changes in the support levels for milk and the accompanying changes in the purchase price for the three products, materially influence the price of milk in the area where the M-W price is set. As pointed out above, the M-W price is used as a base price for Class III Grade A milk. Changes in the price of Class II and Class I milk occur with changes in the price of Class III milk. Thus, the purchase prices for the three products established under the dairy price-support program of the USDA, in effect, undergird the price of all milk produced in the United States.

The Food, Agriculture, Conservation, and Trade Act of 1990 (the 1990 farm bill) ensures that the U.S. price-support for milk will remain at $10.10 per hundredweight (cwt) through 1995. Although the support price of milk is still to be adjusted according to projected price-support purchases of three dairy products by the CCC, the purchases are to be measured on a total milk solids basis (milkfat plus protein,

[1] The marketing of milk and dairy products in the United States also is subject to sanitary regulations of the Food and Drug Administration (FDA), U.S. Department of Health and Human Services, and the Animal and Plant Health Inspection Service of the U.S. Department of Agriculture. In addition, all states inspect milk production and processing of milk for fluid consumption and most of them inspect product processing. Some municipalities maintain health and sanitary regulations that are stricter than Federal or state requirements. Also, the marketing of milk and dairy products becomes involved with domestic and international food aid. Such programs include domestic donations to the needy and to schools and institutions and foreign donations under Title II of P.L. 480 of the Agricultural Trade Development Assistance Act of 1954, the CCC Charter Act, or barter under Section 303 of the 1954 Act. The inspection systems of the states and the FDA are normally accepted for exports.

[2] Parity prices, as defined in legislation adopted in the 1930s, are those prices that give farm products the same purchasing power with respect to articles farmers buy as they had in 1910-14.

[3] The U.S. General Accounting Office concluded that the dairy-termination program reduced CCC purchases of surplus dairy products by quantities that lead to an estimated net savings of $2.4 billion in Federal dairy price-support expenditures for fiscal years 1986 through 1990. The dairy termination program was designed to reduce milk production and federal purchases of surplus dairy products. Under the program the Department of Agriculture paid participating farmers to dispose of their entire herds either by slaughtering or exporting them between April 1, 1986 and September 30, 1987. Additionally, the participants agreed not to reenter dairying until the beginning of 1991. Data are not available to determine the number of participants that have gone back into the production of milk in 1991.

[4] Most dairy farmers in the area where the M-W price is established do not participate in the Federal Milk Marketing Orders program. Hence, the price of milk sold in that area is not regulated.

lactose, and mineral matter) instead of only a milkfat basis. The Secretary is required to: (1) increase the support price at least $0.25 per cwt if the estimate of CCC purchases in each of the calendar years 1991-95 does not exceed 3.5 billion pounds (milk equivalent, total solids basis); (2) not decrease the support price if such estimated respective purchases exceed 3.5 billion pounds, but not 5 billion pounds; and, (3) decrease the support price by $0.25 to $0.50 per cwt if such estimated respective purchases exceed 5 billion pounds. In estimating the level of CCC purchases, the Secretary of Agriculture is instructed to deduct from this estimate an amount equal to the difference between the most recent calendar year's dairy product imports and the average of such imports during 1986-90. Also, with enactment of the 1990 farm bill, annual CCC expenditures during 1992-95 will be limited to the equivalent of 7 billion pounds of milk equivalent, total-solids basis. Purchases that occur above the 7 billion pound level will be financed through producer assessments as provided for under the bill.

The Agricultural Reconciliation Act of 1990 prescribes spending cuts of some $13 billion for U.S. agriculture between fiscal years 1991 and 1995. The Act requires a $0.05 producer assessment per cwt for milk marketed during calendar year 1991 and during 1992-95, the assessment will increase to $0.1125 per cwt of milk marketed. However, producers who do not increase marketings from the previous year will be eligible for an annual refund of the assessment. Thus, although the 1990 farm bill ensures that the price-support for milk will remain at $10.10 through 1995, the producer assessments provisions of the bill, coupled with the provisions of the Agricultural Reconciliation Act, might encourage producers not to expand the production of milk.[5]

Research And Development Expenditures And High-tech Processes

Expenditures on research and development (R&D) in the dairy sector are estimated to amount to hundreds of millions of dollars annually. For example, the Monsanto Company is reported to have spent some $300 million in R&D alone on bST (a milk-producing stimulant to be injected into dairy cows) and the company reportedly continues to spend $50 million per year on R&D on that product.[6] The Food and Drug Administration has not approved the commercial use of bST in the United States. In March 1990, the Food and Drug Administration for the first time approved the use in the United States of a genetically engineered food ingredient (rennin) to be used by cheese makers to coagulate milk.[7] Thus, the degree to which the U.S. dairy industry incorporates high technology processes, as opposed to other U.S. food industries, is perhaps exemplified by the industry being the first to use a genetically engineered food ingredient in its food production process. Also, the dairy industry continues to research and develop new products such as ultra-heat treated milk,[8] lowfat yogurt, reduced-fat foods, various snack foods, and widely accepted ice cream novelties.

Special Considerations

The dairy industry is subject to various environmental regulations relating to waste disposal, ranging from manure and urine disposal from dairy herds to whey disposal from cheese-processing plants. Although data are not available on the expenditures by the dairy industry on environmental compliance, the totals are estimated to amount to hundreds of millions of dollars annually. Like other producers of food, dairy-product producers are subject to strict health and sanitary regulations and have to contend with product liability. In addition, when the price of milk rises rapidly, as it did from mid-1988 to mid-1989, processors spend additional hundreds of millions of dollars (some $900 million from 1988 to 1989) to compete for their raw material (milk), the product that accounts for half to three-fourths of their cost of production of processed dairy products.

Consumer Characteristics and Factors Affecting Demand

The principal U.S. consumers for dairy products include households, restaurants, and other institutions, producers of foods such as bakery products, pizzas, ready-to-eat microwavable packaged foods, and the U.S. Department of Agriculture (Government purchases of certain dairy products in order to support the price of milk). These consumers are located throughout the United States.

According to a USDA study published in March 1988, changes in consumer incomes and prices for dairy products relative to other foods are the principal factors influencing the demand for dairy products; advertising, promotion, concern about health and nutrition, changes in demographics, and government donations (e.g. the school lunch program and feeding the needy, both domestic and foreign) are of lesser importance than the effects of changes in relative prices and incomes.[9] However, in recent years, consumer

---

[5] On July 16, 1991, the House Agriculture Committee approved legislation which includes an increase in the support-price for milk to $12.60 per cwt for 1992 and 1993, dropping to $12.10 per cwt in 1994 and to $11.60 per cwt in 1995. Among other things, if estimated annual purchases of dairy products exceed 7 billion pounds, a two-tier price program would be implemented for the year. This program would, in effect, assign each farm a base for milk marketed. Each producer would incur a reduction in price for all milk marketed in excess of the farm's base.

[6] Unpublished USITC working paper on Biotechnology.

[7] Natural rennin is an active ingredient of rennet, traditionally extracted from the stomachs of new-born calves. The genetically engineered rennin is reported to be identical to the natural enzyme in make up, but is expected to be lower in price.

[8] Ultra-heat treated milk (U.H.T. milk) has undergone a method of sterilization. It is packaged in plastic-lined cardboard containers. Some U.H.T. milk has a storage life of about 6 months without refrigeration.

[9] USDA's Economic Research Service, *Consumer Demand for Dairy Products*, a summary analysis, (Agriculture Information Bulletin No. 537), March 1988.

demand for dairy products has been increasingly influenced by concerns about health and nutrition (such as an increasing demand for low-fat products like yogurt).

Mostly because of price and health concerns, dairy products have faced increasing competition from nondairy products in several uses. Notable shifts in U.S. demand for dairy products include the long-term substitution of margarine for butter; by 1989, per-capita consumption of margarine (10.1 pounds) had more than doubled that of butter (4.3 pounds). Vegetable oil-based coffee whiteners, and whipped toppings have increasingly replaced cream, while vegetable oil-based imitation milk has made only slight inroads into the fluid milk market. Imported casein has increasingly been substituted for domestic dairy products, particularly nonfat dry milk, in a number of human foods (most importantly imitation cheese), and in a number of feed formulations. The use of casein has been of particular concern to the dairy sector.[10] Casein has not been produced from milk in the United States since the early 1950s. After the USDA price-support program for milk was established, U.S. butter and powder producers realized greater returns from drying their skimmed milk into nonfat dry milk and selling it to the CCC, than from processing it into casein. Therefore, domestic supplies of casein have since been furnished from imports.

FOREIGN INDUSTRY PROFILE

In 1986 and 1990, the European Community (EC) and the Soviet Union each accounted for about one quarter of the world's production of milk; the United States produced about 15 percent; Eastern Europe, 10 percent; India, 5 percent; and New Zealand and Australia combined, 3 percent. During 1986-90, little change occurred in the growth of production of milk in these countries, or areas, relative to the change in the growth of production in the United States. Transportation costs (as well as an adequate supply of water and animal feed) largely confine the location of dairy farms to areas relatively near the large population centers, the markets for fluid milk consumption. Generally, the major areas in which dairy products are produced are the same as those in which milk is produced.

Only about 5 percent of the world production of dairy products enters the international export market, largely because most countries (including the United States) restrict their imports of such products and because most large producing countries also are large consuming countries. In addition, most countries cannot compete with the export subsidies bestowed by the EC on dairy products entering international trade. New Zealand is, by far, the lowest cost milk-producing country in the world, although Australia and, to a lesser degree, Ireland are at the lower end of the spectrum. New Zealand and Australia, with their favorable climates, enjoy long pasture-grazing periods; hence, their feed costs (the most significant cost of milk production in virtually all countries) are extremely low compared with areas such as the United States and the EC. Although New Zealand and Australia combined produce only 3 percent of the world's output of milk, some 90 percent and 45 percent, respectively, of their dairy produce is exported. In addition, since these countries benefit from low-cost production, they (particularly New Zealand) bestow substantially fewer subsidies on their dairy-product exports than any other country in the world.

U.S. TRADE MEASURES

Tariff Measures

Table 1 shows the column 1 rates of duty, as of January 1, 1991, for the articles included in this summary, (including both general and special pre-Uruguay Round rates of duty), and U.S. exports and imports for 1990. An explanation of tariff and trade agreement terms is shown in appendix A. The aggregate trade-weighted average rate of duty for all products covered in this summary, based on 1990 imports, was 4.4 percent ad valorem equivalent; the average trade-weighted rate of duty for the dutiable products was 8.0 percent ad valorem equivalent. About 55 percent of the imports included here, mostly casein, lactalbumin, and cheeses made from sheep's milk, are duty free.

Classification Criteria

The criteria used to classify the commodities under consideration in this summary are set forth in the General Rules of Interpretation of the HTS. In addition, note 1 to chapter 4 of the HTS states that the expression "milk" means full cream milk or partially or completely skimmed milk. Also, products obtained by the concentration of whey and with the addition of milk or milkfat are to be classified as cheeses in HTS heading 0406 provided that they (a) have a milkfat content, by weight of the dry matter, of 5 percent or more; (b) have a dry matter content, by weight, of at least 70 percent but not exceeding 85 percent; and (c) are molded or capable of being molded. Additionally, for purposes of HTS subheading 0404.90.10, the term "*milk protein concentrates*" means any complete milk protein (casein plus lactalbumin) concentrate that is 40 percent or more protein by weight; for subheading 3501.10.10, the term "*milk protein concentrate*" means any complete milk protein (casein plus lactalbumin) concentrate. In assessing the duty on cheese, no allowance in weight shall be made for inedible, not readily removable, protective coverings of the cheese.

[10] In a report to the President on investigation No. 22-24 under section 22 of the Agricultural Adjustment Act, *Casein, Mixtures in Chief Value of Casein and Lactalbumin*, the majority of the Commission determined that casein, mixtures in chief value of casein and lactalbumin were not being imported into the United States so as to interfere with the price-support program for milk within the meaning of section 22 (USITC publication 1217, January 1982).

Table 1
Dairy produce: Harmonized Tariff Schedule subheading; description; U.S. col. 1 rate of duty as of Jan. 1, 1991; U.S. exports, 1990; and U.S. imports, 1990

HTS subheading	Brief description	Col. 1 rate of duty as of Jan. 1, 1991		U.S. exports 1990	U.S. imports 1990
		General	Special[1]		
				Thousand dollars	
0401.10.00	Milk and cream, not concentrated nor sweetened, fat content, by weight, not exceeding 1 percent	0.4¢/liter	Free (E,IL) 0.2¢/liter (CA)	3,877	0
0401.20.20	Milk and cream, not concentrated nor sweetened, fat content, by weight, exceeding 1 percent, but not exceeding 6 percent, for not over 11,356,236 liters entered in any calendar year	0.5¢/liter	Free (E,IL) 0.3¢/liter (CA)	11,816	3,294
0401.20.40	Milk and cream, not concentrated nor sweetened, fat content, by weight, exceeding 1 percent, but not exceeding 6 percent, for over 11,356,236 liters entered in any calendar year	1.7¢/liter	Free (E,IL) 1.1¢/liter (CA)	0	0
0401.30.10	Milk and cream, not concentrated nor sweetened, fat content, by weight, exceeding 6 percent, but not exceeding 45 percent, entered within tariff-rate quota	3.2¢/liter	Free (E,IL) 2.2¢/liter (CA)	1,587	7,112
0401.30.30	Milk and cream, not concentrated nor sweetened, fat content, by weight, exceeding 6 percent, but not exceeding 4.5 percent, entered in excess of tariff-rate quota	15¢/liter	Free (E,IL) 10.5¢/liter (CA)	0	0
0401.30.40	Milk and cream, not concentrated nor sweetened, fat content, by weight, exceeding 45 percent	12.3¢/kg	Free (E,IL) 8.6¢/kg (CA)	0	271
0402.10.00	Milk and cream, concentrated or sweetened, in powder, granules, or solid forms, fat content, by weight, not exceeding 1.5 percent	3.3¢/kg	Free (E,IL) 2.3¢/kg (CA)	11,664	421
0402.21.20	Milk and cream, concentrated, not sweetened, in powder, granules, or solid forms, fat content, by weight, exceeding 1.5 percent, but not exceeding 3 percent	3.3¢/kg	Free (E,IL) 2.3¢/kg (CA)	0	0
0402.21.40	Milk and cream, concentrated, not sweetened, in powder, granules, or solid forms, fat content, by weight, exceeding 3 percent, but not exceeding 35 percent	6.8¢/kg	Free (E,IL) 4.7¢/kg (CA)	3,646	0
0402.21.60	Milk and cream, concentrated, not sweetened, in powder, granules, or solid forms, fat content, by weight, exceeding 35 percent	13.7¢/kg	Free (E,IL) 9.5¢/kg (CA)	0	2
0402.29.00	Milk and cream, concentrated or sweetened, in powder, granules, or solid forms, fat content, by weight, exceeding 1.5 percent	17.5%	Free (E,IL) 12.2% (CA)	8,232	0

See footnotes at end of table.

Table 1—Continued
Dairy produce: Harmonized Tariff Schedule subheading; description; U.S. col. 1 rate of duty as of Jan. 1, 1991; U.S. exports, 1990; and U.S. imports, 1990

HTS subheading	Brief description	Col. 1 rate of duty as of Jan. 1, 1991		U.S. exports 1990	U.S. imports 1990
		General	Special[1]		
				Thousand dollars	
0402.91.20	Milk and cream concentrated, in other than powder, granules, or solid form, not sweetened, in airtight containers	2.2¢/kg	Free (E,IL) 1.5¢/kg (CA)	1,500	470
0402.91.40	Milk and cream concentrated, in other than powder, granules, or solid forms, not sweetened other than in airtight containers	3.3¢/kg	Free (E,IL) 2.3¢/kg (CA)	0	0
0402.99.20	Condensed milk, in airtight containers	3.9¢/kg	Free (E,IL) 2.7¢/kg (CA)	2,065	2,542
0402.99.40	Condensed milk, other than in airtight containers	3.3¢/kg	Free (E,IL) 2.3¢/kg (CA)	0	0
0402.99.60	Milk and cream, concentrated or sweetened, n.e.s.i.	17.5%	Free (E,IL) 12.2% (CA)	0	0
0403.10.00	Yogurt	20%	Free (E,IL) 14% (CA)	6,934	284
0403.90.10	Fluid sour cream, containing not over 45 percent, by weight, of butterfat, entered within tariff–rate quota	3.2¢/liter	Free (E,IL) 2.2¢/liter (CA)	0	0
0403.90.15	Fluid sour cream, containing not over 45 percent, by weight, of butterfat entered in excess of tariff-rate quota	15¢/liter	Free (E,IL) 10.5¢/liter (CA)	0	0
0403.90.20	Fluid buttermilk	0.4¢/liter	Free (E,IL) 0.2¢/liter (CA)	0	0
0403.90.40	Dried sour cream and buttermilk containing not over 6 percent, by weight, of butterfat	3.3¢/kg	Free (E,IL) 2.3¢/kg (CA)	0	54
0403.90.50	Dried sour cream and buttermilk containing over 6 percent, but not over 35 percent, by weight, of butterfat	6.8¢/kg	Free (E,IL) 4.7¢/kg (CA)	3,655	0
0403.90.60	Dried sour cream and buttermilk containing over 35 percent, but not over 45 percent, by weight, of butterfat	13.7¢/kg	Free (E,IL) 9.5¢/kg (CA)	0	2
0403.90.70	Sour cream containing over 45 percent, by weight, of butterfat, entered within tariff-rate quota	12.3¢/kg	Free (E,IL) 8.6¢/kg (CA)	0	0
0403.90.75	Sour cream containing over 45 percent, by weight, of butterfat, entered in excess of tariff-rate quota	30.9¢/kg	Free (E,IL) 21.6¢/kg (CA)	0	0
0403.90.80	Kephir and other acidified milk and cream, whether or not concentrated, sweetened, flavored, or containing added fruit, nuts, or cocoa	20%	Free (E,IL) 14% (CA)	0	0
0404.10.20	Fluid whey, whether or not concentrated or sweetened	0.4¢/liter	Free (E,IL) 0.2¢/liter (CA)	34,044	4
0404.10.40	Dried whey, whether or not concentrated or sweetened	3.3¢/kg	Free (E,IL) 2.3¢/kg (CA)	3,931	1,142
0404.90.05	Whey protein concentrates	10%	Free (A,E,IL) 7% (CA)	0	0
0404.90.10	Milk protein concentrates	0.44¢/kg	Free (A,E,IL) 0.3¢/kg (CA)	0	0
0404.90.20	Articles of milk or cream	17.5%	Free (E,IL) 12.2% (CA)	0	2,115

See footnotes at end of table.

Table 1—Continued
Dairy produce: Harmonized Tariff Schedule subheading; description; U.S. col. 1 rate of duty as of Jan. 1, 1991; U.S. exports, 1990; and U.S. imports, 1990

HTS subheading	Brief description	Col. 1 rate of duty as of Jan. 1, 1991		U.S. exports 1990	U.S. imports 1990
		General	Special[1]		
				Thousand dollars	
0404.90.40	Products consisting of natural milk constituents, whether or not sweetened, n.e.s.i., containing over 5.5 percent, by weight of butterfat and not packaged for retail sale	16%	Free (E,IL) 11.2% (CA)	0	0
0404.90.60	Products consisting of natural milk constituents, whether or not sweetened, n.e.s.i., containing not over 5.5 percent, by weight of butterfat and not packaged for retail sale	10%	Free (E,IL) 7% (CA)	0	14
0405.00.70	Butter, entered within tariff-rate quota	12.3¢/kg	Free (E,IL) 8.6¢/kg (CA)	83,173	815
0405.00.75	Butter, entered in excess of tariff-rate quota	30.9¢/kg	Free (E,IL) 21.6¢/kg (CA)	0	17
0405.00.80	Fats and oils derived from milk, other than butter	10%	Free (E,IL) 7% (CA)	28,039	1,927
0406.10.00	Fresh cheese (including whey cheese), not fermented and curd	10%	Free (E,IL) 7% (CA)	1,167	414
0406.20.10	Roquefort cheese, grated or powdered	10%	Free (E,IL) 7% (CA)	0	0
0406.20.20	Blue-veined cheese, other than Roquefort, grated or powdered	20%	Free (E,IL) 14% (CA)	0	0
0406.20.30	Cheddar cheese, grated or powdered	16%	Free (E,IL) 11.2% (CA)	0	0
0406.20.35	Colby cheese, grated or powdered	20%	Free (E,IL) 14% (CA)	0	0
0406.20.40	Edam and Gouda cheeses, grated or powdered	15%	Free (E,IL) 10.5% (CA)	0	1,615
0406.20.50	Romano made from cow's milk, Reggiano, Parmesan, Provolone, Provoletti, Sbrinz, and Goya cheeses, grated or powdered	15%	Free (E,IL) 10.5% (CA)	9,521	873
0406.20.55	Cheeses made from sheep's milk, including mixtures, grated or powdered	15%	Free (E,IL) 10.5% (CA)	0	366
0406.20.60	Cheeses, n.e.s.i., including mixtures, grated or powdered	10%	Free (E,IL) 7% (CA)	0	2,360
0406.30.10	Processed (process) blue-veined cheeses, other than Roquefort, not grated or powdered	20%	Free (E,IL) 14% (CA)	0	0
0406.30.20	Processed (process) Cheddar cheese, not grated or powdered	16%	Free (E,IL) 11.2% (CA)	5,760	3
0406.30.30	Processed (process) Colby cheese, not grated or powdered	20%	Free (E,IL) 14% (CA)	0	0
0406.30.40	Processed (process) Edam and Gouda cheeses, not grated or powdered	15%	Free (E,IL) 10.5% (CA)	0	2,272
0406.30.50	Gruyere-processed (process) cheeses, not grated or powdered	6.4%	Free (E,IL) 4.4% (CA)	0	14,701
0406.30.55	Processed (process) cheeses made from sheep's milk, including mixtures, not grated or powdered	15%	Free (E,IL) 10.5% (CA)	0	359
0406.30.60	Processed (process) cheeses n.e.s.i., including mixtures, not grated or powdered	10%	Free (E,IL) 7% (CA)	0	1,559

See footnotes at end of table.

Table 1—Continued
Dairy produce: Harmonized Tariff Schedule subheading; description; U.S. col. 1 rate of duty as of Jan. 1, 1991; U.S. exports, 1990; and U.S. imports, 1990

HTS subheading	Brief description	Col. 1 rate of duty as of Jan. 1, 1991		U.S. exports 1990	U.S. imports 1990
		General	Special[1]		
				Thousand dollars	
0406.40.20	Roquefort cheeses, in original loaves, not fresh, not grated or powdered, not processed	6%	Free (E,IL) 4.2% (CA)	0	3,282
0406.40.40	Roquefort cheeses, not in original loaves, not fresh, not grated or powdered, not processed	10%	Free (E,IL) 7% (CA)	0	250
0406.40.60	Blue-veined cheese, other than Roquefort, in original loaves, not fresh, not grated or powdered, not processed	15%	Free (E,IL) 10.5% (CA)	60	8,747
0406.40.80	Blue-veined cheese, other than Roquefort, not in original loaves, not fresh, not grated or powdered, not processed	20%	Free (E,IL) 14% (CA)	0	654
0406.90.05	Bryndza cheese, not fresh, not grated or powdered, not processed	8.5%	Free (E,IL) 5.9% (CA)	0	236
0406.90.10	Cheddar cheese, not fresh, not grated or powdered, not processed	12%	Free (E,IL) 8.4% (CA)	7,142	15,612
0406.90.15	Edam and Gouda cheeses, not fresh, not grated or powdered, not processed	15%	Free (E,IL) 10.5% (CA)	0	12,075
0406.90.20	Gjetost cheese, not fresh, not grated or powdered, not processed, made from goat's milk whey, or from whey obtained from a mixture of goat milk and not more than 20 percent, by weight of cow's milk	6.5%	Free (E,IL) 4.5% (CA)	0	16
0406.90.25	Gjetost cheese, not fresh, not grated or powdered, not processed, made from goat's milk whey, or from whey obtained from a mixture of goat milk and more than 20 percent, by weight of cow's milk	10%	Free (E,IL) 7% (CA)	0	631
0406.90.30	Goya cheese, not fresh, not grated or powdered, not processed	25%	Free (E,IL) 17.5% (CA)	0	7,227
0406.90.35	Sbrinz cheese, not fresh, not grated or powdered, not processed	19%	Free (E,IL) 13.3% (CA)	0	0
0406.90.40	Romano made from cow's milk, Reggiano, Parmesan, Provolone, and Provoletti cheeses, not fresh, not grated or powdered, not processed	15%	Free (E,IL) 10.5% (CA)	3,006	32,405
0406.90.45	Swiss or Emmenthaler cheese with eye formation, Gammelost and Nokkelost cheeses, not fresh, not grated or powdered, not processed	6.4%	Free (E,IL) 4.4% (CA)	12,026	99,197

See footnotes at end of table.

Table 1—Continued
Dairy produce: Harmonized Tariff Schedule subheading; description; U.S. col. 1 rate of duty as of Jan. 1, 1991; U.S. exports, 1990; and U.S. imports, 1990

HTS subheading	Brief description	Col. 1 rate of duty as of Jan. 1, 1991		U.S. exports 1990	U.S. imports 1990
		General	Special[1]		
				Thousand dollars	
0406.90.50	Cheeses made from sheep's milk, in original loaves and suitable for grating, not fresh, not powdered or grated, not processed, and substitutes for such cheese, including mixtures	Free		0	58,710
0406.90.55	Pecorino, in original loaves, not suitable for grating, not fresh, not grated or powdered, not processed, and substitutes for such cheese, including mixtures	Free		0	20,466
0406.90.60	Cheeses made from sheep's milk, not in original loaves, not fresh, not powdered or grated, not processed, and substitutes for such cheese, including mixtures	15%	Free (E,IL) 10.5% (CA)	0	477
0406.90.65	Colby cheese, not fresh, not powdered or grated, not processed, and substitutes for such cheese, including mixtures	20%	Free (E,IL) 14% (CA)	0	0
0406.90.70	Other cheese, containing Romano, Reggiano, Parmesan, Provolone, Provoletti, Sbrinz, or Goya, all made from cow's milk and substitutes for cheese, including mixtures, not fresh, not grated or powdered, not processed	7.5%	Free (E,IL) 5.2% (CA)	0	0
0406.90.80	Other cheese, and substitutes for such cheese, including mixtures, not fresh, not grated or powdered, not processed	10%	Free (E,IL) 7% (CA)	0	154,078
2105.00.00	Ice cream and other edible ice, whether or not containing cocoa	20%	Free (E,IL) 14% (CA)	30,013	100
3501.10.10	Milk protein concentrate	0.44¢/kg	Free (A,E,IL) 0.1¢/kg (CA)	0	11,177
3501.10.50	Casein, other than milk protein concentrate	Free		2,701	294,367
3501.90.50	Caseinates and casein derivatives	0.44¢/kg	Free (A,E,IL) 0.1¢/kg (CA)	5,122	75,812
3502.90.10	Lactalbumin	Free		0	8,124

[1] Programs under which special tariff treatment may be provided, and the corresponding symbols for such programs as they are indicated in the "Special" subcolumn, are as follows: Generalized System of Preferences (A); Automotive Products Trade Act (B); Agreement of Trade in Civil Aircraft (C); United States-Canada Free-Trade Agreement (CA); Caribbean Basin Economic Recovery Act (E); and United States-Israel Free Trade Are (IL).

Source: U.S. exports and imports compiled from data of the U.S. Department of Commerce.

Special Classification Issues Under The TSUS/HTS Conversion[11]

Under the former Tariff Schedules of the United States (TSUS), the provision for ice cream (TSUS item 118.25) did not include ice cream novelty products that consist of ice cream plus more than a "de minimis" amount of other food products (e.g., chocolate coatings, wafers, cones, etc.). The next most specific provision for such novelty products was TSUS item 118.30, "articles of milk or cream, not specially provided for." Imports of articles classifiable in TSUS item 118.30 were restricted by a section 22 quota to not more than 6,000 pounds annually (TSUS item 950.11). If the ice cream novelty products were not in chief value of milk or cream, they would be classifiable as "edible preparations, not specially provided for" in TSUS items 182.91-183.05, and not subject to import quotas. In a recent classification ruling (CLA-2 CO:R:C:F 088914 JGH), the U.S. Customs Service determined that both ice cream and ice cream novelties are classifiable in HTS heading 2105, since the essential character of these products is ice cream. Ice cream that meets the traditional definition, including compliance with the identity standards (21CFR135), is classifiable in subheading HTS 2105.00.0010. Ice cream novelties, which contain, in addition to ice cream, other food ingredients to make products, such as chocolate-covered ice cream bars, ice cream sandwiches, ice cream cakes, such coated ice cream cones as "Drumsticks," and similar frozen confections are classifiable in HTS subheading 2105.00.0015. Thus, under the HTS, both the ice cream and the ice cream novelties included in the aforementioned Customs Service classification ruling are subject to quotas.

Nontariff Measures

Health And Sanitary Regulations

U.S. imports of fluid milk products are prohibited unless they are accompanied by a valid permit issued by the U.S. Secretary of Health and Human Services under the provisions of the Federal Import Milk Act of 1927. The only permit presently in effect is one issued to New Zealand to ship frozen fluid cream to the United States. Also, imports of certain dairy products, such as dried milk from countries or areas that have not been declared free of rinderpest and foot-and-mouth diseases by the U.S. Secretary of Agriculture, are subject to regulations of the Animal and Plant Health Inspection Services (APHIS) of the USDA. Imports from countries or areas not declared free of the diseases, as well as products made from such imports, are not to be used in animal feed in the United States, except under limited circumstances provided for in APHIS regulations. However, imports from such countries may be used in human foods in the United States because the virus is not injurious to human health. Such imports may also be used for industrial purposes.

Section 22 Quotas

Since mid-1953, quotas have been imposed under the provisions of section 22 of the Agricultural Adjustment Act, as amended, on virtually all imports of articles derived from cow's milk that normally enter international trade, except casein, caseinates, lactalbumin, and soft-ripened cows' milk cheese. The quotas have been imposed in order to protect the USDA price-support programs for milk and milk products from import interference, or threat of such interference. These quotas, provided for in subchapter IV of chapter 99 of the HTS, limit imports of quota products to a quantity equal to about 2 percent of the equivalent of U.S. production of milk. In recent years, the import quotas have been substantially filled. In terms of milk equivalent, the maximum quantity of dairy products that currently can be imported under the quotas is 2.2 billion pounds. During 1986-90, the equivalent of imports of all dairy products ranged from 1.9 percent of the production of milk in 1986 to 1.6 percent in 1988, and showed no discernible trend. Whereas the quantities of some individual dairy products permitted under the quotas are very small, compared with U.S. production, the quantities permitted for certain others are large. The quantities specified in the existing quotas for butter and dried milk products, for example, are infinitesimally small compared with the domestic production of these products; in contrast, the quota on blue-mold cheese is equivalent to about 16 percent of production, and the quota on Edam and Gouda cheeses is larger than domestic production.

Most of the section 22 quotas on dairy products are allocated on a country-by-country basis and are administered by the USDA through a system of import licenses. Imports of most dairy products under quota are subject to the licensing procedure. Imports of dairy products subject to quotas and licensed by the USDA may be entered only by, or for the account of, a licensed person or firm, and only in accordance with the terms of the license. Licenses usually authorize a particular domestic firm to enter designated quantities of a dairy product from a designated country and through a specified port of entry. The quotas for the products not subject to licensing procedures are administered by the Customs Service on a first-come, first-serve basis.

U.S. Government Trade-Related Investigations

On May 18, 1989, the Commission received a letter from the President stating that he had been advised by the Secretary of Agriculture and that he agreed with the Secretary "that there is reason to believe that the country allocations of the quota on ice cream and

[11] In July 1989, the Customs Corporation Council recommended certain amendments to the Harmonized Schedule that would change the classification of modified whey products currently in HTS 0404.60 by moving them to 0404.10. The ITC, pursuant to sec. 1205 of the Omnibus Trade and Competitiveness Act of 1988, has sent advice to the President on this matter.

mixtures classifiable as ice cream, wherever classified in the Harmonized Tariff Schedule of the United States, which were established under section 22 by Presidential Proclamation No. 4026, may need to be modified due to changes in the circumstances on which the country allocations were based." As directed by the President, the Commission instituted investigation No. 22-50 under section 22(d) of the Agricultural Adjustment Act (7 U.S.C. 624(d)) to determine whether the present country allocations of the quota on ice cream, provided for in HTS subheading 2105.00.00, should be modified to take into account circumstances that had changed since the quota was proclaimed. The quota of 431,300 gallons per year is allocated among five countries: Belgium, New Zealand, Denmark, the Netherlands, and Jamaica. The Commission submitted, in confidence, its report to the President on the investigation on August 28, 1989. No action has been taken on the report.

FOREIGN TRADE MEASURES

Tariff Measures

Mexico, Japan, and Canada are normally the major world markets for the small quantities of dairy products exported from the United States. (The exports to the Soviet Union in 1990, a deviation from the norm, consisted of government-to-government sales of butter by the CCC at prices equivalent to about 60 percent of the original purchase price.) The rates of duty on U.S. imports of dairy products into Mexico average about 20 percent ad valorem on cheese, butter, yogurt, and ice cream; 10 percent ad valorem on condensed, evaporated, and fluid milk; and free on nonfat dry milk. The rates of duty on U.S. imports into Japan average about 25 percent ad valorem on skim milk powder; 30 percent ad valorem on condensed milk; 35 percent ad valorem on butter, ice cream, and frozen yogurt; and 40 percent ad valorem on processed cheese. The rates of duty on U.S. imports into Canada average 12.2 percent ad valorem for milk and cream, not concentrated nor sweetened, and 4.6 cents per kilogram to 10.5 percent ad valorem, if concentrated or sweetened; 10.5 percent ad valorem for yogurt; 5.4 cents per kilogram to 12.2 percent ad valorem for whey; 18.5 cents per kilogram for butter, and 12.2 percent ad valorem for other fats and oils derived from milk; and, 4.6 cents per kilogram to 5.4 cents per kilogram for cheese.

The EC is not a major U.S. export market for dairy products. Most imports of dairy products into the EC are covered by import levies (explained below) rather than tariffs.

Nontariff Measures

In addition to tariffs, most countries of the world control imports of dairy products via a wide array of quotas, often coupled with licensing requirements, variable levies, and health and sanitary regulations; most countries bestow some form of subsidies on exports of dairy products.

Imports of dairy products into Mexico must be accompanied by import permits. Obtaining such permits involves complex regulations of several different agencies of the Mexican Government. In addition, the Mexican Government strongly enforces health and labeling regulations.

The Canadian Government has established import quotas on buttermilk powder, condensed milk, cheese, ice cream, and yogurt in order to prevent the Canadian national dairy policy from being undermined by imports. These quotas are administered under the provisions of the Canadian Export and Import Permits Act. Under the provisions of the act, dairy products other than those listed above are not permitted entry into Canada. Under the United States-Canada Free-Trade Agreement both Canada and the United States retained their domestic dairy programs and their existing controls on imports of dairy products. However, shortly after the agreement became effective, the Canadian Department of External Affairs announced that it was establishing, for the first time, global import quotas on ice cream, certain other products containing milk, and yogurt. A GATT panel has ruled that, in establishing these quotas, Canada was not in compliance with its international obligations under the GATT. Nonetheless, Canada continues to maintain the quotas.

Imports of most dairy products into Japan are subject to import quotas and restrictions in order to satisfy Japan's desire for self-sufficiency in food production. In recent years, Japan has been conducting negotiations with a number of countries in order to eliminate some of the restrictions. In April 1989, imports of processed cheese were removed from quotas, and, in April 1990, quotas on imports of ice cream, frozen yogurt, certain whipped cream, and pasta made primarily from milk were also removed. Imports of natural cheese are subject to a duty of 35 percent ad valorem unless they are blended with domestic (Japanese) cheese in a ratio of no more than 2 parts of imported cheese to 1 part of domestic cheese, in which case they are duty free. A similar arrangement applies to imports of chocolate crumb (a mixture of milk powder, sugar, and cocoa).

Virtually all dairy products imported into the EC are subject to an import levy. The only exceptions are yogurt and certain other acidified milk and cream products. These articles are subject to a rate of duty of 13 percent ad valorem, plus a "variable component," which, in effect, is an import tax assessed during periods when trade regulating authorities deem it necessary to restrict imports. The EC import levy is reported to be more flexible than an established duty rate in that it can be changed periodically to achieve the desired flow of imports. The amount of the levy is set by determining the lowest offer price of imports for each dairy product type. A threshold price is then established at a level that will allow domestic products to compete with duty-free imports. The lowest offer

price for imports is subtracted from the threshold price and the difference is the import levy. When EC supplies are low, imports are allowed to enter until import prices approach the threshold level. During periods of EC surpluses, the levy prevents imports from underselling domestic dairy products.

U.S. MARKET

Consumption

Trends And Import Penetration Levels

Apparent U.S. consumption of dairy products rose from $38 billion to $49 billion during 1986-90 (table 2), or about 28 percent. For all products, the import penetration level averaged about 1.7 percent over the period. The import penetration for some groups of products, such as milk and cream, not concentrated; milk and cream, concentrated; buttermilk, yogurt, and the rest; whey; butter, and the rest; and ice cream is infinitesimal. The import penetration for cheese is about 3 percent, although for a few varieties, particularly cheese made from sheep's milk, imports supply all, or virtually all, of consumption. Imports of casein and lactalbumin, as processed from milk, supply all of consumption.

Conditions Of Competition Between Foreign and U.S. Dairy Products

The cost of the production of milk is the most important factor affecting conditions of competition between foreign and U.S.-produced dairy products, as the cost of milk accounts for half to three-fourths of the cost of producing dairy products. Estimates of the 1986 costs of milk production in major milk-producing countries, as recently reported by the USDA, are shown in the following tabulation (in U.S. dollars per hundredweight):[12]

The USDA study reports that the item "subsidies less taxes" captures those costs of milk production levied against the taxpayers. As shown in the tabulation, these costs are fairly significant for all of the countries shown, except for New Zealand. Indeed, the data suggest that the single most significant cost of milk production in these countries is government support. Of the countries examined, feed costs are significantly lower in New Zealand and, to a lesser degree, in Ireland, reflecting long grazing periods induced by generally favorable grass-growing climates. Of note in the data shown, is the significantly higher "other" variable costs reported for virtually all countries compared with those reported for the United States. The costs of fertilizer, energy, interest, and repairs generally account for most of this difference. Overall, the cost per hundredweight of milk production is higher in Canada, West Germany, and France than in

[12] *Estimates of the Cost of Producing Milk in Seven Major Milk Producing Countries, 1986*, draft paper dated Oct. 16, 1989, Economic Research Service, USDA.

Items	*Canada*	*West Germany*	*France*	*Ireland*	*The Netherlands*	*New Zealand*	*United States*
Subsidies less taxes	11.42	8.43	6.71	3.95	7.87	0.57	7.47
Variable costs:							
Feed	4.27	5.66	4.40	1.03	3.92	.41	4.35
Labor	1.37	.68	1.53	.30	.27	.33	.89
Other	6.36	7.96	8.23	2.35	4.59	2.81	1.92
Total	12.00	14.30	14.16	3.68	8.78	3.55	7.16
Fixed costs	.73	1.68	1.13	1.43	.33	.34	2.02
Depreciation	2.71	3.12	2.15	2.11	.86	.45	1.09
Returns to capital	.63	.73	.50	.49	.20	.07	.25
Total costs	27.49	28.26	24.65	11.66	18.04	4.98	18.00

Table 2
Dairy produce: U.S. shipments, exports of domestic merchandise, imports for consumption, and apparent U.S. consumption, 1986-90

Year	*U.S. shipments*	*U.S. exports*	*U.S. imports*	*Apparent U.S. consumption*	*Ratio of imports to consumption*
	Million dollars				*Percent*
1986	37,990	329	619	38,280	1.6
1987	39,308	316	659	39,651	1.7
1988	41,289	402	683	41,570	1.6
1989	43,370	366	815	43,819	1.9
1990	48,471	282	853	49,042	1.7

Source: Compiled from official statistics of the U.S. Department of Commerce.

the United States. Conversely, the cost is significantly lower in New Zealand and, to a lesser degree, Ireland, than in the United States. Although Australian data were not reported on milk production costs in the study cited above, a USDA study of two decades ago showed that milk production costs were slightly higher in Australia than in New Zealand, but about 20 percent lower than in Ireland. Australia has favorable grass-growing climates similar to those in New Zealand.

Technology is believed to be sufficiently disseminated in dairy-product processing, so that it is not a significant factor in affecting competition in U.S. or world dairy markets, except in a few possible selective product areas such as specialty cheese. Further, responsiveness to orders and related services such as transportation are not significant competitive factors.

Cheese accounts for about 51 percent of the imports included in this summary. About three-fourths of the imports of cheese consist of "specialty-type" cheese. Many of the imported varieties consist of cheese types not produced in the United States, or produced only in limited quantities. This imported cheese is generally marketed in specialty cheese shops and often sold according to brand loyalty or preference. This cheese, often not in abundant supply, generally sells at substantial premiums over the most nearly comparable domestic cheese. About a fourth of the imports of cheese are used for further processing. Such cheese used for further processing, however, as well as other dairy products so used, are normally price competitive with their U.S.-produced counterparts or their most similar counterparts. Imported dairy products used for further processing invariably lose their original identity as an ingredient in the finished food. In a number of uses the imported products perform as well as the domestic products, and sometimes even better. For example, imported Cheddar cheese used for processing is reported to be desirable because it has a slightly higher butterfat content and, therefore, serves as an extender when mixed with domestic cheese in making processed cheese. For many such uses as functionality (buffering, emulsifying, stabilizing, etc.), or lactose intolerance, the performance of imported casein is preferred over that of domestic products, such as nonfat dry milk.

Production

The value of U.S. shipments of dairy products increased from $38 billion in 1986 to $48 billion in 1990. The quantity and value of the most important U.S.-produced products are shown in table 3. Growing demand in recent years for cheese and low-fat products (including low-fat fluid milk, nonfat dry milk, and yogurt) was the main factor affecting production levels. Of particular note has been the declining production of ice cream largely in response to increasing consumer demand for frozen yogurt.

Commercial and government-owned inventories (stocks) of dairy products from December 1, 1986 to December 1, 1990, on a milkfat basis (e.g. butter) and solids-not-fat basis (e.g. nonfat dry milk) are shown in the following tabulation:

Year	Milkfat basis	Solids-not-fat basis
	— (In millions of pounds) —	
1986	13,994	995
1987	8,147	345
1988	8,382	183
1989	9,447	143
1990	12,834	288

The principal factor influencing the inventory of milkfat was the purchase of surplus butter (butter that

Table 3
Certain dairy produce: U.S. production by product type, 1986–90

Year	Butter	Cheese[1]	Condensed and evaporated milk[2]	Ice cream	Fluid milk
	Million pounds[3]				
1986	1,202	6,179	2,457	924	52,635
1987	1,104	6,290	2,281	928	53,429
1988	1,208	6,510	2,236	882	54,411
1989	1,274	6,710	3,132	831	55,304
1990	1,286	6,891	3,185	786	55,370
	Million dollars				
1986	1,822	10,653	5,384	3,922	16,209
1987	1,610	10,733	5,814	4,189	17,018
1988	1,547	11,105	5,727	4,091	17,215
1989	1,522	12,608	6,061	4,229	18,193
1990	1,565	13,439	6,388	4,421	19,412

[1] Includes creamed and lowfat cottage cheese.
[2] Includes nonfat dry milk.
[3] Ice cream quantity in million gallons.
Source: Production data compiled from official statistics of the U.S. Department of Agriculture; value data compiled from official statistics of the U.S. Department of Commerce.

did not clear the commercial market at the prevailing level of prices) by the CCC in order to support the price of milk as required by law. Producers of cheese, another product purchased by the CCC, tended to hold their inventories so as to have working stocks from which to satisfy the growing demand for cheese. During 1986-90, the inventory of solids-not-fat showed a general decline. Most of the inventory in the latter part of the period was held by the commercial sector reflecting the fact that demand for the product, including that for export, strengthened significantly in late 1988 and early 1989. During that period, world supplies of milk diminished in response to the efforts of a number of countries, including the EC, Canada, and the United States, to reduce their production of milk. Concurrently, world production of nonfat dry milk dropped and the CCC, for the first time, sold nonfat dry milk on the world market at commercial prices. As this situation occurred, producers of nonfat dry milk tended to hold their inventories in commercial channels, rather than sell them to the CCC.

Imports

Products Imported

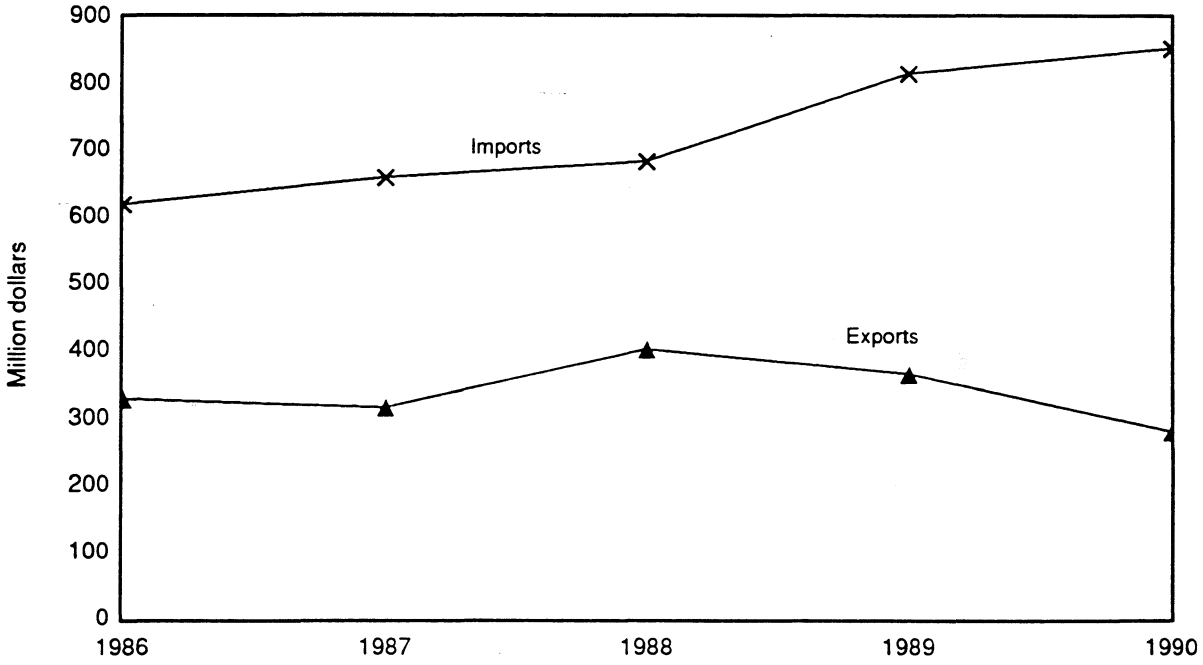
The value of U.S. imports of dairy products for 1986-90 is shown in figure 2 and table 4. About 51 percent of the imports consists of cheese; 43 percent consists of casein and caseinates; and the remaining 6 percent largely of frozen cream, condensed milk, butter, and/or butteroil and lactalbumin. Imports of cheese, by principal sources are shown in table 5, and imports of casein and caseinates are shown in table 6. Contrary to the composition of imports, about 43 percent of the domestic production of dairy products consists of milk for fluid consumption, 29 percent cheese, 15 percent concentrated and dried milk, 10 percent ice cream, and 3 percent butter. Because such products as fluid milk and ice cream are bulky and perishable, transportation costs, among other things, tend to limit their movement in international trade.

As quotas have been imposed on imports of dairy products since 1953 under the provisions of section 22 of the Agricultural Adjustment Act, larger quantities of the quotas were allotted to cheese than to other dairy products. Cheese accounted for a larger share of the dairy-product imports during the periods upon which the quotas were based. Imports of casein have not been subject to section 22 quotas.

Import Levels And Trends

During 1986-90, the value of U.S. imports of dairy products increased from $619 million to $853 million (table 4), or about 38 percent; most of the increase reflected higher unit values of cheese and casein. About 45 percent of the imports (mostly casein, lactalbumin, and sheep's milk cheese) are free of duty under the HTS. In addition, about 3 percent of the imports are free of duty under the Generalized System of Preferences. Duty-free imports under the Caribbean Basin Economic Recovery Act and the U.S.-Israel Free

Figure 2
Dairy produce: U.S. imports and exports



Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 4
Dairy produce: U.S. imports for consumption, by principal sources, 1986-90

Source	1986	1987	1988	1989	1990
	Value (million dollars)				
New Zealand	(1)	(1)	(1)	161	189
Ireland	(1)	(1)	(1)	140	130
Italy	(1)	(1)	(1)	68	84
France	(1)	(1)	(1)	69	79
Netherlands	(1)	(1)	(1)	64	63
Denmark	(1)	(1)	(1)	66	60
Norway	(1)	(1)	(1)	29	31
Finland	(1)	(1)	(1)	24	28
Switzerland	(1)	(1)	(1)	19	22
Austria	(1)	(1)	(1)	22	21
All other	(1)	(1)	(1)	155	145
Total	619	659	683	815	853

[1] Country level detail is provided only for years in which there are actual import data under the *Harmonized Tariff Schedule of the United States* (HTS).
Source: Compiled from official statistics of the U.S. Department of Commerce.

Trade Area Implementation Act of 1985 are negligible. About 2 percent of the imports are entered at reduced rates of duty under the United States-Canada Free-Trade Agreement.

Principal Import Suppliers And U.S. Importers

The EC is the largest broad-group supplier of dairy products to the United States, accounting for about half of the U.S. imports. In addition to being the largest supplier of casein and caseinates, the EC also is the largest supplier of cheese, most of which is consumed as natural cheese rather than as an ingredient in further processed foods (including processed cheese). New Zealand is the largest single country supplier of dairy products to the United States, accounting for about 20 percent of the total value of imports. Most of the imports from New Zealand consist of products used for further processing such as casein, caseinates, lactalbumin, frozen cream, and cheese. There are no new, rapidly growing import suppliers of dairy products largely because most of the section 22 quotas on dairy products are allocated by the U.S. Department of Agriculture to importers and supplying countries based on patterns of historical trade; the provisions for changing these allocations are limited. Because most countries cannot compete in the U.S. market with the subsidies provided by the EC on exports of dairy products, no new, rapidly growing suppliers of products not subject to quotas appear to exist.

The principal types of U.S. importers of dairy products are general or wholesale importers, although a few of the importers are large processors of dairy products and/or other foods. The general importers usually have long and well-established ties with foreign suppliers and with U.S. food distributors. The processors of dairy products and/or other foods that import dairy products invariably use the imported products as ingredients in their product mix.

FOREIGN MARKETS

Foreign Market Profile

The major foreign market, by far, for dairy products is the EC, followed by the Soviet Union, India, and Eastern Europe. These four countries, or areas, accounted for about 63 percent of the world's consumption of milk for fluid use in 1986 and 1990, 81 percent of the consumption of butter, 55 percent of the consumption of cheese, and from about 55 percent to 67 percent of the consumption of nonfat dry milk. Japan is a small, but somewhat growing, market for dairy products; such products comprise a relatively insignificant part of the Japanese diet. From 1986 to 1990, consumption of cheese in Japan increased about 33 percent, while consumption of fluid milk increased 14 percent, and consumption of nonfat dry milk increased 6 percent.

The principal factors affecting the demand for U.S.-produced dairy products in foreign markets are the government programs and policies that restrict imports of U.S. origin and/or result in such imports being unable to compete in price. For example, the ability of the U.S. products to compete with the subsidies bestowed on exports of dairy products by the EC is limited.[13] Also, the U.S. products cannot compete in world markets with dairy products

[13] In the Uruguay Round of the multilateral trade negotiations, agricultural concerns, such as production and export subsidization, as well as market restrictions, are being seriously addressed in hopes of producing a comprehensive and balanced approach to liberalizing trade in agriculture. See *World Agriculture*, Factors Influencing Trends in World Agricultural Production and Trade, U.S. General Accounting Office, Report to the Committee on Agriculture, House of Representatives, January 1989.

Table 5
Cheese: U.S. imports for consumption, by principal sources, 1986-90

Source	1986	1987	1988	1989	1990
			Quantity (1,000 pounds)		
Italy	(1)	(1)	(1)	41,347	45,188
France	(1)	(1)	(1)	19,237	20,097
Denmark	(1)	(1)	(1)	22,374	29,189
New Zealand	(1)	(1)	(1)	39,418	33,735
Netherlands	(1)	(1)	(1)	22,875	26,914
Finland	(1)	(1)	(1)	16,958	19,846
Norway	(1)	(1)	(1)	15,842	16,129
Switzerland	(1)	(1)	(1)	9,427	12,659
Austria	(1)	(1)	(1)	16,629	15,776
United Kingdom	(1)	(1)	(1)	6,078	17,912
All other	(1)	(1)	(1)	68,914	64,776
Total	290,718	264,904	252,594	279,105	302,220
			Value (1,000 dollars)		
Italy	(1)	(1)	(1)	67,585	84,118
France	(1)	(1)	(1)	41,569	48,498
Denmark	(1)	(1)	(1)	32,552	42,441
New Zealand	(1)	(1)	(1)	37,780	34,461
Netherlands	(1)	(1)	(1)	27,348	30,999
Finland	(1)	(1)	(1)	23,615	27,916
Norway	(1)	(1)	(1)	23,704	25,653
Switzerland	(1)	(1)	(1)	18,466	22,302
Austria	(1)	(1)	(1)	21,591	21,150
United Kingdom	(1)	(1)	(1)	8,692	19,599
All other	(1)	(1)	(1)	78,067	82,119
Total	388,804	389,869	360,869	380,970	439,256
			Unit Value (dollars per pound)		
Italy	(1)	(1)	(1)	1.63	1.86
France	(1)	(1)	(1)	2.16	2.41
Denmark	(1)	(1)	(1)	1.45	1.45
New Zealand	(1)	(1)	(1)	0.96	1.02
Netherlands	(1)	(1)	(1)	1.20	1.15
Finland	(1)	(1)	(1)	1.39	1.41
Norway	(1)	(1)	(1)	1.50	1.59
Switzerland	(1)	(1)	(1)	1.96	1.76
Austria	(1)	(1)	(1)	1.30	1.34
United Kingdom	(1)	(1)	(1)	1.43	1.09
All other	(1)	(1)	(1)	1.13	1.27
Average	1.34	1.47	1.43	1.36	1.45

[1] Country level detail is provided only for years in which there are actual import data under the *Harmonized Tariff Schedule of the United States* (HTS).
Source: Compiled from official statistics of the U.S. Department of Commerce.

produced in New Zealand, Australia, and, to a lesser degree, Ireland largely because these countries are more efficient than the United States in the production of milk. Because production and international trade in milk and dairy products have been regulated and controlled for so many years, the potential for U.S. exports to foreign markets under free market conditions is difficult to estimate.

Major events under way in foreign markets, such as EC 92 and the opening of Eastern Europe, are not likely to have a significant effect on dairy trade unless substantial progress is made to dismantle the aforementioned governmental programs and policies that restrict such trade. Indeed, as previously noted, in the recently concluded United States-Canada Free-Trade Agreement, not only did each country involved leave its dairy policy intact, but Canada imposed additional restrictions on imports of ice cream and yogurt from the United States.

U.S. Exports

Products Exported

Most of the U.S. exports of dairy products have consisted of nonfat dry milk, small quantities of cheese, and, more recently, butter. Domestic production, on the other hand, consists mostly of milk for fluid consumption, cheese, and condensed and

Table 6
Casein and caseinates: U.S. imports for consumption, by principal sources, 1986-90

Source	1986	1987	1988	1989	1990
			Quantity (1,000 pounds)		
New Zealand	(1)	(1)	(1)	60,902	84,756
Ireland	(1)	(1)	(1)	61,773	58,400
France	(1)	(1)	(1)	15,412	18,984
Netherlands	(1)	(1)	(1)	29,943	26,535
Denmark	(1)	(1)	(1)	25,170	17,040
Poland	(1)	(1)	(1)	5,974	11,254
Australia	(1)	(1)	(1)	8,300	5,923
Norway	(1)	(1)	(1)	2,452	2,846
West Germany	(1)	(1)	(1)	11,045	3,649
Hungary	(1)	(1)	(1)	115	1,089
All other	(1)	(1)	(1)	3,907	3,211
Total	228,930	238,394	186,344	224,993	233,687
			Value (1,000 dollars)		
New Zealand	(1)	(1)	(1)	105,973	133,127
Ireland	(1)	(1)	(1)	135,094	126,075
France	(1)	(1)	(1)	27,332	30,063
Netherlands	(1)	(1)	(1)	32,277	28,896
Denmark	(1)	(1)	(1)	32,146	17,018
Poland	(1)	(1)	(1)	10,605	11,640
Australia	(1)	(1)	(1)	16,774	10,522
Norway	(1)	(1)	(1)	5,033	5,564
West Germany	(1)	(1)	(1)	25,521	5,311
Hungary	(1)	(1)	(1)	80	460
All other	(1)	(1)	(1)	2,702	1,503
Total	204,844	241,674	291,751	393,537	370,179
			Unit Value (dollars per pound)		
New Zealand	(1)	(1)	(1)	1.74	1.57
Ireland	(1)	(1)	(1)	2.19	2.16
France	(1)	(1)	(1)	1.77	1.58
Netherlands	(1)	(1)	(1)	1.08	1.09
Denmark	(1)	(1)	(1)	1.28	1.00
Poland	(1)	(1)	(1)	1.78	1.03
Australia	(1)	(1)	(1)	2.02	1.78
Norway	(1)	(1)	(1)	2.05	1.96
West Germany	(1)	(1)	(1)	2.31	1.46
Hungary	(1)	(1)	(1)	0.70	0.42
All other	(1)	(1)	(1)	0.69	0.47
Average	0.89	1.01	1.57	1.75	1.58

[1] Country level detail is provided only for years in which there are actual import data under the *Harmonized Tariff Schedule of the United States (HTS).*
Source: Compiled from official statistics of the U.S. Department of Commerce.

evaporated milk (including nonfat dry milk). Exports absorb less than 1 percent of the U.S. annual production of dairy products. Hence, they are of limited importance to U.S. producers. Most U.S. exports of dairy products have involved government-to-government sales, except for a short period during late 1988 and early 1989, when world production of nonfat dry milk dropped and prices rose rapidly. During that time, the United States, for the first time, exported nonfat dry milk at commercial prices. By 1990, however, world production of nonfat dry milk had resumed, prices had dropped, and U.S. commercial exports of nonfat dry milk had ceased.

Export Levels, Trends, And U.S. Exporters

During 1986-90, U.S. exports of dairy produce ranged from $402 million (1988) to $282 million (1990) and showed no discernible trend (figure 2 and table 7). The principal U.S. export markets have been Mexico, the Soviet Union (government-to-government sales of butter in 1990), Japan, Canada, and Iraq. There are no rapidly growing commercial export markets for U.S. exports of dairy products; exports of such products generally involve some form of government aid or assistance. Although export transactions for U.S.-produced dairy products usually are handled

Table 7
Dairy produce: U.S. exports of domestic merchandise, by principal markets, 1986-90

Market	*1986*	*1987*	*1988*	*1989*	*1990*
			Value (1,000 dollars)		
Soviet Union	(1)	(1)	(1)	32	68,101
Mexico	(1)	(1)	(1)	199,888	56,455
Japan	(1)	(1)	(1)	22,761	29,518
Canada	(1)	(1)	(1)	12,294	19,392
Iraq	(1)	(1)	(1)	15,576	14,509
Romania	(1)	(1)	(1)	0	10,822
Algeria	(1)	(1)	(1)	726	8,850
Hong Kong	(1)	(1)	(1)	8,205	5,896
United Kingdom	(1)	(1)	(1)	1,990	5,731
France	(1)	(1)	(1)	2,016	4,759
All other	(1)	(1)	(1)	102,774	60,631
Total	329,502	316,062	402,112	366,262	281,663

[1] Country level detail is provided only for years in which there are actual export data under the new Schedule B, which is based on the *Harmonized Tariff Schedule of the United States (HTS).*
Source: Compiled from official statistics of the U.S. Department of Commerce.

through commercial exporters, the exporters invariably are reimbursed the difference between the selling price of the products exported to foreign markets and the cost of the products purchased in the U.S. market by the U.S. Department of Agriculture through the CCC.

U.S. Trade Balance

During 1986-90, the U.S. trade deficit in dairy products widened irregularly from $290 million to $571 million (table 8). The United States has been a net importer of dairy products for many years largely because it cannot compete with New Zealand, Australia, and, to a lesser degree, Ireland in the production of milk, nor in the production of dairy products exported by these countries to the United States. Also, the United States permits (without the imposition of countervailing duties) the importation of cheeses subject to quotas that have benefited from foreign government subsidies, so long as the duty-paid wholesale price of the imported cheese does not undercut the domestic wholesale market price of similar articles produced in the United States (secs. 701 and 702 of the Trade Agreements Act of 1979 (19 U.S.C. 1202 note)).[14] In foreign markets, the United States cannot compete with the subsidies bestowed on exports of dairy products by the EC, or with the production of milk and dairy products in countries like New Zealand, Australia, and Ireland. Hence, U.S. exports of dairy products have been limited.

[14] Secs. 701 and 702 of the Trade Agreements Act of 1979 should not be confused with the U.S. countervailing duty law set forth at sec. 701 of the Tariff Act of 1930 (19 U.S.C. 1671 et seq.), as added by sec. 101 of the Trade Agreements Act of 1979.

Table 8
Dairy produce: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected country and country group, 1986-90[1]

Item	1986	1987	1988	1989	1990
			Million dollars		
U.S. exports of domestic Merchandise:					
New Zealand	(2)	(2)	(2)	0	0
Ireland	(2)	(2)	(2)	0	0
Italy	(2)	(2)	(2)	0	0
France	(2)	(2)	(2)	2	5
Soviet Union	(2)	(2)	(2)	32	68
Netherlands	(2)	(2)	(2)	0	0
Denmark	(2)	(2)	(2)	0	0
Mexico	(2)	(2)	(2)	200	56
Norway	(2)	(2)	(2)	0	0
Finland	(2)	(2)	(2)	0	0
All other	(2)	(2)	(2)	103	61
Total	329	316	402	366	282
EC–12	3	4	19	14	17
U.S. imports for consumption:					
New Zealand	(2)	(2)	(2)	161	189
Ireland	(2)	(2)	(2)	140	130
Italy	(2)	(2)	(2)	68	84
France	(2)	(2)	(2)	69	79
Soviet Union	(2)	(2)	(2)	0	0
Netherlands	(2)	(2)	(2)	64	63
Denmark	(2)	(2)	(2)	66	60
Mexico	(2)	(2)	(2)	0	0
Norway	(2)	(2)	(2)	29	31
Finland	(2)	(2)	(2)	24	28
All other	(2)	(2)	(2)	155	145
Total	619	659	683	815	853
EC–12	305	373	328	462	467
U.S. merchandise trade balance:					
New Zealand	(2)	(2)	(2)	–161	–189
Ireland	(2)	(2)	(2)	–140	–130
Italy	(2)	(2)	(2)	–68	–84
France	(2)	(2)	(2)	–67	–74
Soviet Union	(2)	(2)	(2)	32	68
Netherlands	(2)	(2)	(2)	–64	–63
Denmark	(2)	(2)	(2)	–66	–60
Mexico	(2)	(2)	(2)	200	56
Norway	(2)	(2)	(2)	–29	–31
Finland	(2)	(2)	(2)	–24	28
All other	(2)	(2)	(2)	–52	–84
Total	–290	–343	–281	–449	–571
EC–12	–302	–369	–309	–448	–450

[1] Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.
[2] Country level detail is provided only for years in which there are actual trade data under the *Harmonized Tariff Schedule of the United States* (HTS) and the new Schedule B, which is based on the HTS.
Source: Compiled from official statistics of the U.S. Department of Commerce.

APPENDIX A
EXPLANATION OF TARIFF AND TRADE AGREEMENT TERMS

TARIFF AND TRADE AGREEMENT TERMS

The ***Harmonized Tariff Schedule of the United States*** (HTS) replaced the ***Tariff Schedules of the United States*** (TSUS) effective January 1, 1989. Chapters 1 through 97 are based on the internationally adopted Harmonized Commodity Description and Coding System through the 6-digit level of product description, with additional U.S. product subdivisions at the 8-digit level. Chapters 98 and 99 contain special U.S. classification provisions and temporary rate provisions, respectively.

Rates of duty in the ***general*** subcolumn of HTS column 1 are most-favored-nation (MFN) rates. For the most part, they represent the final concession rate from the Tokyo Round of Multilateral Trade Negotiations. Column 1-general duty rates are applicable to imported goods from all countries except those enumerated in general note 3(b) to the HTS, whose products are dutied at the rates set forth in ***column 2***. Goods from the People's Republic of China, Czechoslovakia, Hungary, Poland, and Yugoslavia are among those eligible for MFN treatment. Among articles dutiable at column 1-general rates, particular products of enumerated countries may be eligible for reduced rates of duty or for duty-free entry under one or more preferential tariff programs. Such tariff treatment is set forth in the ***special*** subcolumn of HTS column 1.

The ***Generalized System of Preferences*** (GSP) affords nonreciprocal tariff preferences to developing countries to aid their economic development and to diversify and expand their production and exports. The U.S. GSP, enacted in title V of the Trade Act of 1974 and renewed in the Trade and Tariff Act of 1984, applies to merchandise imported on or after January 1, 1976, and before July 4, 1993. Indicated by the symbol "A" or "A*" in the special subcolumn of column 1, the GSP provides duty-free entry to eligible articles the product of and imported directly from designated-beneficiary developing countries, as set forth in general note 3(c)(ii) to the HTS.

The ***Caribbean Basin Economic Recovery Act*** (CBERA) affords nonreciprocal tariff preferences to developing countries in the Caribbean Basin area to aid their economic development and to diversify and expand their production and exports. The CBERA, enacted in title II of Public Law 98-67, implemented by Presidential Proclamation 5133 of November 30, 1983, and amended by the Customs and Trade Act of 1990, applies to merchandise entered, or withdrawn from warehouse for consumption, on or after January 1, 1984; this tariff preference program has no expiration date. Indicated by the symbol "E" or "E*" in the special subcolumn of column 1, the CBERA provides duty-free entry to eligible articles the product of and imported directly from designated countries, as set forth in general note 3(c)(v) to the HTS.

Preferential rates of duty in the special subcolumn of column 1 followed by the symbol "IL" are applicable to products of Israel under the ***United States-Israel Free-Trade Area Implementation Act*** of 1985, as provided in general note 3(c)(vi) of the HTS. When no rate of duty is provided for products of Israel in the special subcolumn for a particular provision, the rate of duty in the general subcolumn of column 1 applies.

Preferential rates of duty in the special duty rates subcolumn of column 1 followed by the symbol "CA" are applicable to eligible goods originating in the territory of Canada under the ***United States-Canada Free-Trade Agreement***, as provided in general note 3(c)(vii) to the HTS.

Other special tariff treatment applies to particular ***products of insular possessions*** (general note 3(a)(iv)), goods covered by the ***Automotive Products Trade Act*** (general note 3(c)(iii)) and the ***Agreement on Trade in Civil Aircraft*** (general note 3(c)(iv)), and ***articles imported from freely associated states*** (general note 3(c)(viii)).

The ***General Agreement on Tariffs and Trade*** (GATT) (61 Stat. (pt. 5) A58; 8 UST (pt. 2) 1786) is the multilateral agreement setting forth basic principles governing international trade among its more than 90 signatories. The GATT's main obligations relate to most-favored-nation treatment, the maintenance of scheduled concession rates of duty, and national (nondiscriminatory) treatment for imported products. The GATT also provides the legal framework for customs-valuation standards, "escape clause" (emergency) actions, antidumping and countervailing duties, and other measures. Results of GATT-sponsored multilateral tariff negotiations are set forth by way of separate schedules of concessions for each participat-

ing contracting party, with the U.S. schedule designated as schedule XX.

Officially known as "The Arrangement Regarding International Trade in Textiles," the ***Multifiber Arrangement*** (MFA) provides a framework for the negotiation of bilateral agreements between importing and producing countries, or for unilateral action by importing countries in the absence of an agreement. These bilateral agreements establish quantitative limits on imports of textiles and apparel, of cotton and other vegetable fibers, wool, manmade fibers, and silk blends, in order to prevent market disruption in the importing countries—restrictions that would otherwise be a departure from GATT provisions. The United States has bilateral agreements with more than 30 supplying countries, including the four largest suppliers: China, Hong Kong, the Republic of Korea, and Taiwan.