Industry & Trade Summary

Malt Beverages

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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 malt beverages covers the period 1989-93 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 agriculture and forest products sectors.

USITC publication number	*Publication date*	*Title*
2459	November 1991	Live Sheep and Meat of Sheep
2462	November 1991	Cigarettes
2477	January 1992	Dairy Produce
2478	January 1992	Oilseeds
2511	March 1992	Live Swine and Fresh, Chilled, or Frozen Pork
2520	June 1992	Poultry
2544	August 1992	Fresh or Frozen Fish
2545	November 1992	Natural Sweeteners
2551	November 1992	Newsprint
2612	March 1993	Wood Pulp and Waste Paper
2615	March 1993	Citrus Fruit
2625	April 1993	Live Cattle and Fresh, Chilled or Frozen Beef and Veal
2631	May 1993	Animal and Vegetable Fats and Oils
2635	May 1993	Cocoa, Chocolate, and Confectionery
2636	May 1993	Olives
2639	June 1993	Wine and Certain Fermented Beverages
2693	November 1993	Printing and Writing Paper
2726	January 1994	Furskins
2737	March 1994	Cut Flowers
2749	March 1994	Paper Boxes and Bags
2762	April 1994	Coffee and Tea
2865	April 1995	Malt Beverages

[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.

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INTRODUCTION

This summary covers alcoholic malt beverages, generally referred to as beer. "Beer" is defined as any alcoholic beverage obtained by the fermentation of malted grain and cereals in water, and flavored with hops. Beer includes standard ales and lagers, which have an alcohol content of approximately 3 to 5 percent by volume, and malt liquor, which has an alcoholic content of over 5 percent.[1] Beer accounts for almost the entire output under Standard Industrial Classification (SIC) code 2082, Malt Beverages.[2] Both imports and exports of beer are recorded under heading 2203 of the *Harmonized Tariff Schedule of the United States* (*HTS*).

This summary provides information on the products and structure of the U.S. industry and certain foreign industries, on domestic and foreign tariff and nontariff measures, and on the competitiveness of U.S. producers in both domestic and foreign markets. The report examines the beer industry between 1989 and 1993, providing earlier historical data, when necessary, to show longer term trends. Appendix A contains an explanation of tariff and trade agreement terms. Appendix B contains a chronology of the ongoing United States-Canada beer dispute.

The United States is the world's largest beer producer, brewing 23.7 billion liters—or one-fifth of the world's production—in 1992. Although the volume of U.S. beer production has remained relatively stable during the past 5 years, beer prices have increased significantly, causing the value of U.S. beer shipments to grow by 23 percent, to $17.7 billion in 1993. Nearly half of all beer produced in the United States in 1993 was produced in Texas, California, Colorado, Wisconsin, and New York. U.S. beer production accounted for approximately 85 percent of the volume of total alcoholic beverage manufacturing in the United States in 1993. On account of its relatively high cost of transportation per unit value, however, U.S. beer trade represented less than one-third of the volume of total U.S. alcoholic beverage trade.

In 1993, the United States imported 1,071 million liters of beer, valued at $929 million, and equivalent to about 4.4 percent of the volume of U.S. beer consumption. Exports in 1993 were only 330 million liters, valued at $202 million, and equivalent to about 1.4 percent of the volume of U.S. beer production. The difference in trade levels has resulted in a $727 million trade deficit, which has fluctuated mostly in correlation with the changing import levels. The small level of steadily growing exports has had little effect on the trade deficit.

Beer is primarily brewed from malted barley and water, flavored with hops, and fermented by yeast. The malting, brewing, and packaging processes are highly capital intensive. Beer generally passes through a three-level channel of distribution that includes the brewery, distributor, and retailer (figure 1). Beer's principal end use is recreational consumption, although it is also used in the production of malt beverage coolers.

THE PRODUCTION PROCESS AND PRODUCTS

Production Process[3]

The first step in the production of beer is malting the barley (figure 2).[4] During the malting process, the barley is sent through a sieve to eliminate the inferior grains, softened in water, then held in germinating containers until the grain is sprouted and the enzyme amylase has been produced. Amylase is essential to the brewing process as this enzyme converts the grain's starch to fermentable starch. The sprouted grain is known as "green malt."

The green malt is then dried and roasted in a kiln. The remaining moisture of the malt, kiln temperature, and length of roasting time determines the color and sweetness of the malt. From this process either light, dark, or black malt is produced. The malt is then screened to eliminate the dried sprouts, and ground into a meal or "grist."

The grist is sent through a hopper into the "mash tun," which is a large cylindrical copper or stainless steel vessel with a mixer unit and heating device. In a separate vessel, other raw cereals (for example, corn, wheat, or rice) may be mixed with water and cooked to obtain the maximum extraction of soluble materials, and the desired level of fermentable starch. This cooked mash is then added to the main mash in the mash tun and heated to around 150 degrees fahrenheit until much of the starch is converted to fermentable sugars.[5] Then the total mash is pumped to a "lauter tun," which is similar to a mash tun except it has slots

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[1] Beer does not include Japanese rice wine, known as "sake." Beer also does not include malt beverages that have an alcoholic strength by volume of less than 0.5 percent (often referred to as "near beer" or "non-alcoholic beer").

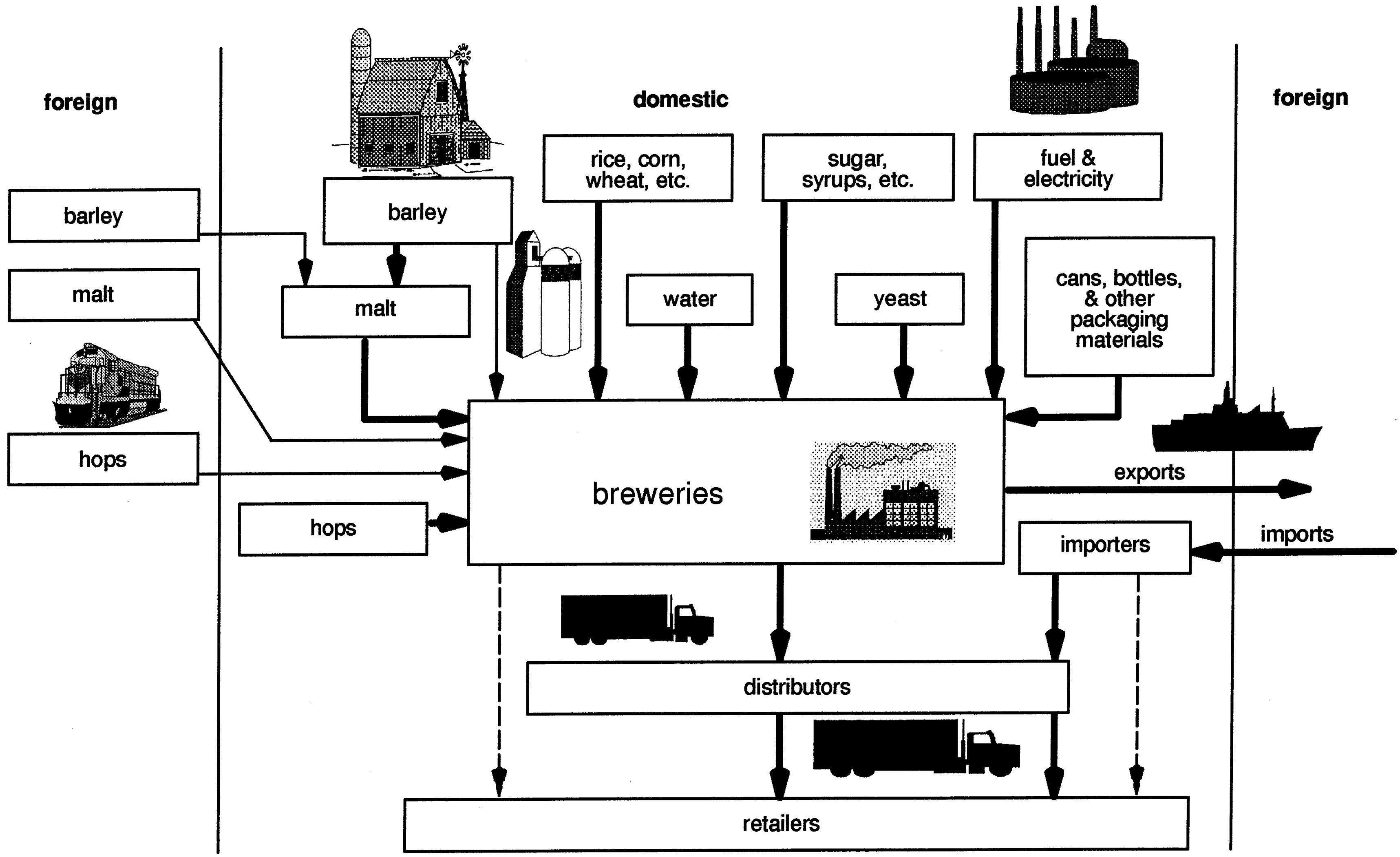
[2] Less than 2 percent of the output under SIC code 2082 consists of brewers' spent grains and other brewing byproducts.

[3] The discussion of the production process of beer is derived mostly from the following two articles: "Retail Guide to Beer," *Beverage Dynamics*, July/August 1992, pp. 48-51, and "Stages in the Preparation of Beer," *Tribune Business News*, June 11, 1994.

[4] Barley is the chief ingredient in beer because it is one of the grains most suitable for malting.

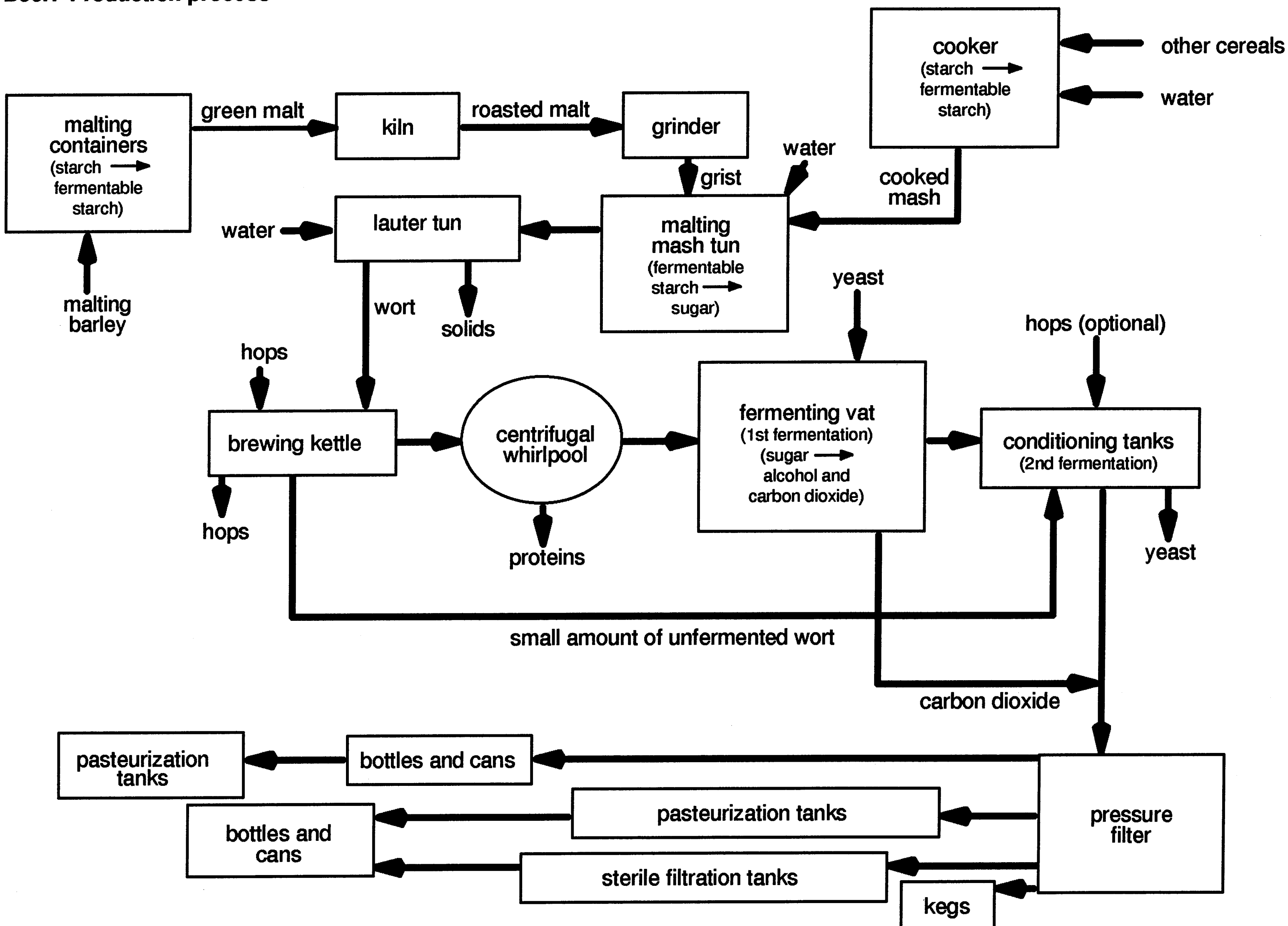
[5] "Dry" beer is kept in the mash tun longer than regular beer so that more of the malt and grain is converted to sugar.

Figure 1
Beer: Flowchart of the U.S. industry



Source: Constructed by the U.S. International Trade Commission staff.

Figure 2
Beer: Production process



Source: Constructed by the U.S. International Trade Commission staff.

and a series of movable rakes on the bottom. The mash is stirred and then allowed to settle so that the solids sink to form a filter bed on the bottom of the tun. When the bottom slots are opened, the resultant sweet liquid at the top, called the "wort," flows through the natural filter on the bottom into a brewing kettle. The filter is then rinsed, or "sparged," with water and the resultant rinse water is added to the wort. Hops are also added in the form of hop flowers, compact hop pellets, or hop extract. The wort is then boiled in the kettle for over 2 hours in order to sterilize the wort, boil off excess water and other unwanted materials, dissolve substances (mainly hop oils) in the wort, and darken the color of the wort.

After the hops are strained from the wort, the wort is spun in a centrifugal whirlpool to remove unwanted proteins, then cooled and poured into a fermenting vat. During the first stage of fermentation, yeast[6] (releasing the enzyme "zymase") is added to break down the sugars and convert them to alcohol and carbon dioxide. The carbon dioxide released during this primary fermentation is gathered and stored for later use. After several days, the young beer can then be poured into conditioning tanks where it begins secondary fermentation. Conditioning tanks for lagers are kept at near freezing[7] to encourage the precipitation of suspended yeast and other materials, whereas ales condition at warmer temperatures. More hops may be added to the beer at this point in a process known as "dry-hopping." The beer may also be "krausened" at this time.[8] The beer is then stored in the conditioning tanks for 1 to 3 months. Finally it is carbonated (with the carbon dioxide released during primary fermentation), passed through a pressure filter, then through closed pipelines to the packaging area. Almost all U.S. breweries package their own beer.

Beer destined for bottles or cans is often pasteurized (either before or after the packaging process) in order to sterilize and preserve the product[9] and to kill any active yeast that could result in the formation of additional carbon dioxide which could burst the bottle or can. However, in order to avoid the negative effects that some industry sources claim pasteurization has on beer flavor, many brewers, instead, sterile-filter their beer through microporous materials that remove yeast cells.[10] Bottled and canned beer processed in this way can still be called draught. Beer kegs, on the other hand, are made almost exclusively of aluminum or stainless steel, which can withstand great pressure. Beer in kegs is also less likely to remain in the container for long time periods. Therefore, kegged beer rarely requires pasteurization or sterile-filtration. Less than 12 percent of all beer is sold in kegs, while the rest is packaged in bottles or cans.[11]

Products

There are two basic types of beer, classified by fermentation method: ales, which are fermented with "top-fermenting" yeasts; and lagers, which use "bottom-fermenting" yeasts. Before the early 1800s when bottom-fermenting yeasts were discovered, all beers were ales. Today ales are most commonly produced in the United Kingdom. Ales are full-bodied, aromatic beers, usually relatively dark and often bitter. The primary fermentation of ales occurs at about 59°-77° F and takes only a few days. Ales are often aged in bottles. Lagers are bright, clear, light-bodied beers fermented at 40°-55° F for up to 2 weeks then placed in cold storage for several months. Lagers became popular during the mid-1800s as the development of refrigeration made year-round brewing possible. Today lagers are most commonly brewed in the United States and Latin America.

There are many different styles of ales and lagers, differentiated according to one or more of the following:

- the region in which the recipe or brewing method originated,
- the type of malt and the degree to which the malt is dried or roasted,
- the amount of hops, unmalted grain, fruit, sugar, or other flavorings added,
- the degree to which brewing yeasts are allowed to breed with wild airborne yeasts,
- the fermentation process,
- the carbonation process, or
- the filtration process.

[6] Top-fermenting yeast is used for making ales, and bottom-fermenting yeast is used for lagers.

[7] "Ice" beer is conditioned and then filtered at subfreezing temperatures that allow ice crystals to form. The crystals facilitate the removal of proteins and polyphenols. The crystals are then removed from the beer (from "U.S. Beer Marketers Have Entered Into a Cold War," *The Los Angeles Times*, Oct. 4, 1993).

[8] "Krausening" is a process in which a portion of unfermented wort is added to the newly fermented beer, giving the remaining yeast more sugar to consume, resulting in additional carbonation.

[9] Peak quality of pasteurized packaged beer is 4 months in cans and 6 months in bottles. Nonpasteurized beer has a much shorter life span, and its quality can become compromised after approximately 30 days.

[10] Enzymes called "proteases" may also be added during this process to clarify the beer.

[11] The Beer Institute, *Brewers Almanac, 1993*, p. 14.

Some of the more popular ale styles are Altbier, Bitter, Brown, Cream, Lambic, Mild, Pale, Porter, Scotch, Stout, Trappist, and Weisse. Some popular lager styles are Bock, Dortmunder, Dry, Ice, Marzen, Munchener, Pilsner, Steam, Vienna, and Malt Liquor.[12]

Most of the beers produced in the United States are light-colored lagers modeled after the Pilsner style, which originated in Pilsen, Czechoslovakia. Pilsner beers are produced primarily by the large-volume breweries, and are marketed as "popular," "premium," or "light" beers.[13] Most of the beers imported into the United States, as well as the dark lagers produced in the United States, are modeled after the Munchener style and marketed as "premium" or "superpremium" beers. In addition to the Pilsner and Munchener styles, however, a growing number of small-volume U.S. breweries are supplying the U.S. market with an ever-increasing number of "specialty" beers available in a wide variety of styles.

U.S. INDUSTRY PROFILE

In 1993, as presented in table 1, U.S. beer manufacturing (SIC code 2082) was a $17.7 billion enterprise employing 38,900 people, about 58 percent of whom were production workers. Approximately 40 percent of the value of beer shipments can be attributed to material costs, while the other 60 percent represents value-added. Payroll costs, which grew to nearly $2 billion in 1993, represented about 17 percent of value-added (table 1). The industry spent more than half a billion dollars annually on capital expenditures during 1989-93.

The U.S. beer industry consists of approximately 435 brewing companies which, collectively, own 465 breweries (table 1).[14] These breweries are differentiated into three tiers according to the volume of their annual production. The high-volume, first tier breweries brew over 90 percent of the industry's shipments, while the remaining 10 percent is brewed by the second and third tier breweries—primarily regional breweries, microbreweries, and brewpubs.[15]

[12] In the United States, malt beverages having a high alcohol content (more than 5 percent alcohol by volume) are usually called "malt liquors," although they are not liquors in any sense. "Malt liquors" produced in the United States are usually lagers brewed in a variety of styles, but all having in common a prolonged fermentation process in which a greater percentage of sugar is converted to alcohol.

[13] "Light" beer is produced with the addition of an enzyme called "amyloglucosidase," which reduces the carbohydrate content of beer.

[14] A "brewery" is an establishment that is licensed to brew beer, while a "brewing company" is a business entity owning one or more breweries.

[15] "Brewpubs" are breweries that sell their beer for on-premise consumption. Few brewpubs bottle or can any of their beer for off-premise consumption. Some brewpubs supplement their own production with beer purchased from another brewery.

The U.S. beer industry, especially the first tier, has become highly globalized. It is also increasingly capital intensive, and its labor force is highly productive. Beer is marketed through a wide range of media and distributed through a three-level system that ensures the presence of distributors. Consumption is largely a function of price, demographics, marketing, and health concerns about alcohol. U.S. beer production, advertising, distribution, trade, and consumption are heavily regulated at the Federal, State, and sometimes local levels.

The Breweries

During the 1950s, 1960s, and 1970s, the U.S. beer industry experienced a continuous consolidation as the large breweries grew larger, and numerous smaller, local breweries went out of business. Then, during the late 1970s and early 1980s, competition among the leading brewing companies caused intense price competition among the major popular brands, paving the way for a new generation of products—light, "dry", premium and, later, "ice" beers—priced higher and designed to reclaim revenue lost during the "price wars."

Starting in the mid-1980s, however, a growing number of small breweries reappeared to claim small market niches for themselves with the introduction of specialty premium beers. Throughout the late 1980s and especially during the past 5 years, this trend of small brewery expansion (decentralization) has gained tremendous momentum. The number of breweries operating in the United States has grown dramatically from 92 in 1983 to an estimated 465 in 1993 (figure 3).[16] Owing to their limited production capacity, however, these new enterprises have not made significant contributions to industry shipments. The new enterprises have, however, had a significant impact on the variety of beer styles available to the American public. The microbrewery phenomenon has also prompted industry analysts to divide the beer industry into 3 basic tiers: the first, second, and third.[17]

[16] All but approximately 10 of the estimated 465 breweries now operating in the United States are American owned. Canadian brewing companies own four U.S. breweries, while two are owned by Japanese companies, two by German companies, and two more are owned by Bond Corp. Holdings Ltd. of Australia. Jeffrey S. Arpan and David A. Ricks, *Directory of Foreign Manufacturers in the United States, 1993*, 5th ed. (Atlanta: Georgia State University Business Press, 1993).

[17] The discussion of the three brewery tiers is derived from "Craft Brewing in America," *Modern Brewery Age*, May 16, 1994, pp. 10-14, with much input from Commission staff.

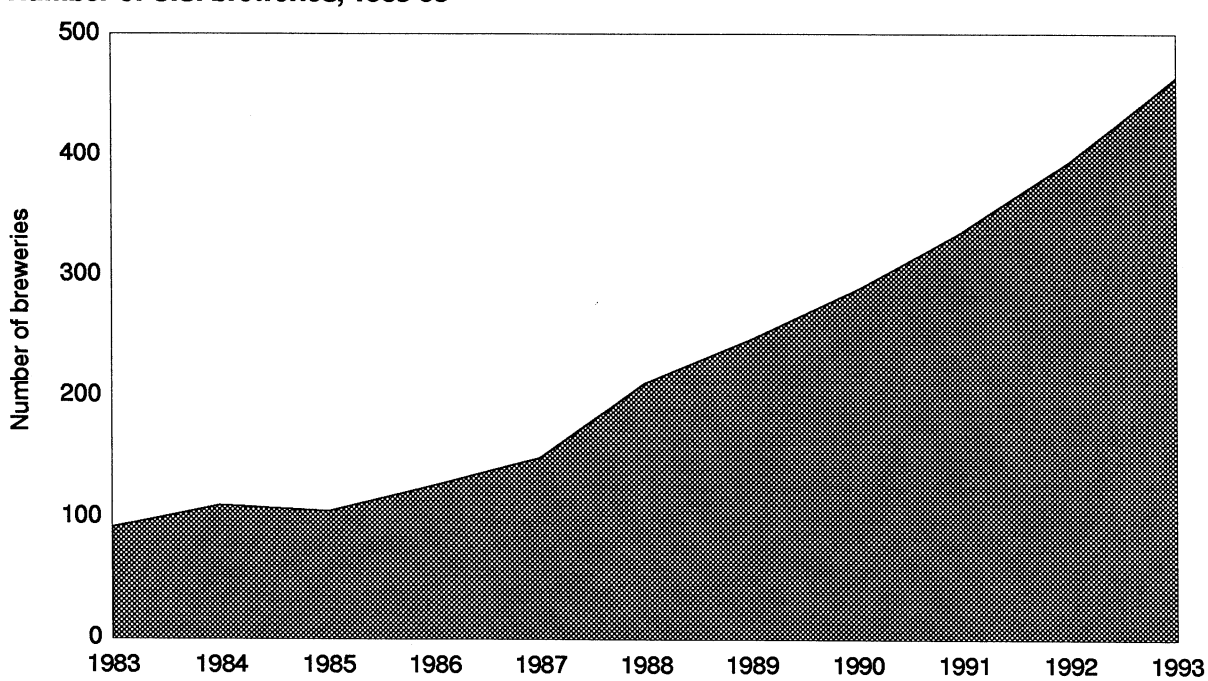
Table 1
Beer: U.S. industry structure, 1972, 1982, 1989-93

Item	1972	1982	1989	1990	1991	1992	1993
Brewing companies	108	67	[1]219	[1]261	[1]309	[1]365	[1]435
Breweries[2]	140	98	247	288	337	394	465
				Quantity *(1,000)*			
Employees[3]	60.8	50.8	40.8	39.7	40.2	39.5	38.9
Production workers[3]	37.0	32.3	24.7	23.6	23.8	23.6	22.7
				Value *(million dollars)*			
Capital expenditures	156	665	602	543	649	565	[1]620
Industry shipments[4]	4,054	11,064	14,374	15,170	15,902	17,291	[1]17,658
Value-added	1,994	4,535	7,783	8,193	9,037	10,601	[1]11,300
Payroll	653	1,308	1,365	1,425	1,446	[5]1,900	[1]1,950
Material cost	2,067	6,670	6,555	6,989	6,886	6,756	[1]6,800

[1] Data estimated by the Commission staff.
[2] Data for 1972-92 from The Beer Institute, *Brewers Almanac: 1993*. The figure for 1993 was estimated by the Commission staff with guidance from The Institute for Brewing Studies.
[3] Data for 1982-92 from the U.S. Bureau of Labor Statistics (BLS), *Employment, Hours, and Earnings: United States, 1981-93*. The data for 1972 were estimated by the Commission staff. The data for 1993 were estimated by the Commission staff from February 1993 BLS data.
[4] Industry shipment data for 1982-93 were adjusted for stock changes.
[5] Figure from the BLS, *Employment and Wages, Annual Averages, 1992*.

Source: Compiled from official statistics of the U.S. Bureau of the Census, unless otherwise noted.

Figure 3
Number of U.S. breweries, 1983-93



Source: The 1983-92 figures are derived from The Beer Institute, *Brewers Almanac: 1993*; and the 1993 figure is estimated by the U.S. International Trade Commission staff, with guidance from The Institute for Brewing Studies.

First Tier Breweries

"First tier" breweries are those with annual shipments of over 1 million barrels[18] (or 117.5 million liters). Only about 8 percent, or 39, of all U.S. breweries are first tier breweries (figure 4). All U.S. breweries in the first tier are owned and operated by the nine largest brewing companies in the United States: Anheuser-Busch Inc. (AB), Miller Brewing Co. (Miller), Adolph Coors Co. (Coors), Stroh Brewery Co. (Stroh), G. Heileman Brewing Co. (Heileman), Pabst Brewing Co. (Pabst), Genesee Brewing Co. (Genesee), Latrobe Brewing Co., and Falstaff, Pearl & General. These top nine U.S. brewing companies, most of which are publicly held, accounted for about 91 percent of total U.S. beer shipments in 1993 (figure 4). Most of the first tier breweries are located in Texas, Colorado, Wisconsin, and New York State.

Several of the largest U.S. brewing companies are either vertically integrated themselves or constitute divisions of large diversified corporations that are vertically integrated. For instance, AB's parent company—Anheuser-Busch Companies, Inc.—also owns Busch Agricultural Resources, Inc., which owns 12 barley elevators, 2 hop farms, 3 malt plants, 2 rice mills, 4 seed facilities, etc. Coors, Miller, Genesee, and Stroh also own malting plants.

Second Tier Breweries

"Second tier" breweries are those with annual shipments less than or equal to 1 million barrels (or 117.5 million liters), but greater than or equal to 15,000 barrels (or 1.8 million liters). About 18 percent, or 84, of all U.S. breweries are in the second tier (figure 4). Although most second tier breweries are privately held by single establishment brewing companies, several second tier breweries brew the brands of one or more brewing companies on a contract basis. In the past, second tier breweries have been referred to as regional breweries, which serve primarily the surrounding vicinity. Now, however, the majority of second tier breweries are the former microbreweries that have doubled or tripled in size during the past few years (for example, the Sierra Nevada Brewing Co. and the Redhook Ale Brewery). Many of them have expanded by marketing their products nationwide and, in some cases, overseas. In addition, a few of the second tier breweries are brewpubs. Second tier breweries accounted for about 6 percent of total U.S. beer shipments in 1993 (figure 4). Most second tier breweries are concentrated in Pennsylvania, Oregon, Wisconsin, and California.

[18] A standard beer barrel holds 31 gallons. Some industry sources claim that first tier breweries brew over 5 million barrels annually.

Third Tier Breweries

"Third tier" breweries, also called "microbreweries," have annual shipments of less than 15,000 barrels (or 1.8 million liters). About 74 percent, or 342, of all U.S. breweries are microbreweries (figure 4), and nearly half of these microbreweries are brewpubs. Although a few microbreweries are owned by one of the nine largest brewing companies, the majority are privately held by single establishment brewing companies, and they rarely have the capacity to perform contract work for other brewing companies. Although numerous, microbreweries accounted for only about 3 percent of total U.S. beer shipments in 1993 (figure 4). Most of the microbreweries are located in California, Colorado, Washington, Oregon, Wisconsin, Illinois, Pennsylvania, Massachusetts, and Vermont. Relatively few microbreweries are located in the South and southeastern United States, below what those in the industry call the "beer latitudes."

Globalization

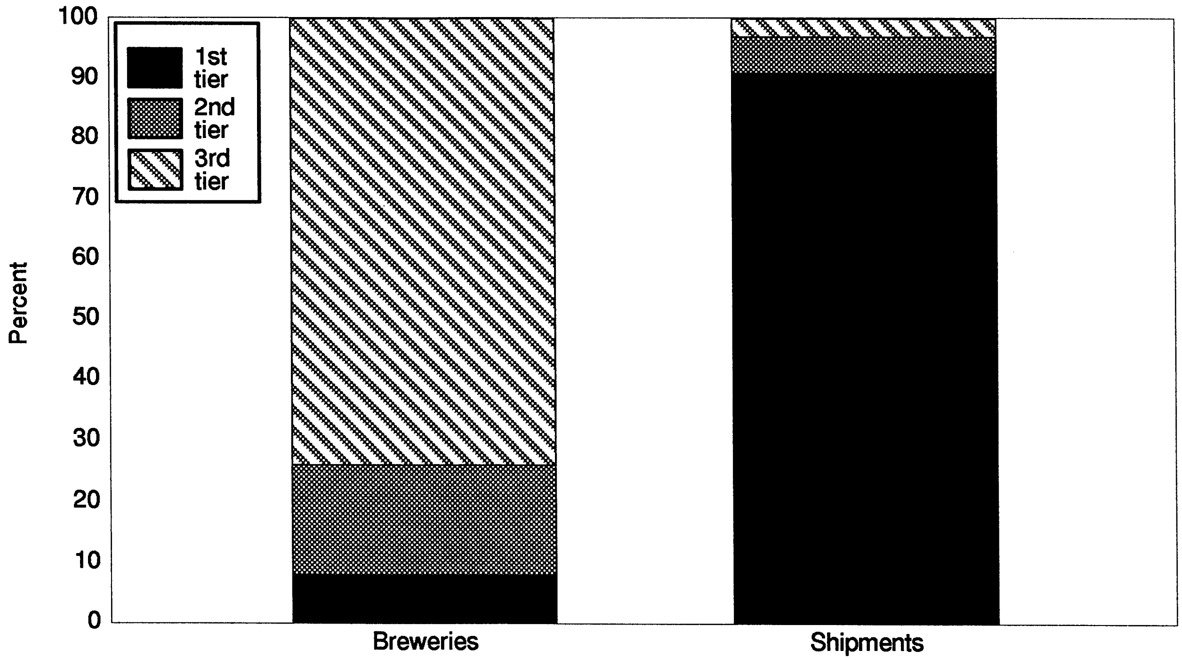
Although very few U.S. brewing companies are involved in exporting or international business operations, the three largest brewing companies—AB, Miller, and Coors—have become highly globalized. Difficulties associated with the international transport and distribution of beer were the initial motivating forces behind their globalization. Beer, on account of its volume, weight, and limited shelf life, is inherently costly to ship long distances.[19] As a result, the large brewing companies often brew and market their brands abroad through licensed-brewing agreements (LBAs), joint-ventures (JVs), and brewery acquisitions.[20]

During the 1980s, AB established LBAs with Guinness PLC in Ireland, Oriental Brewing Co. in South Korea, Labatt Brewing Co. (Labatt) in Canada, and Grand Metropolitan Brewing Co. (later Courage Ltd.) in the United Kingdom. Coors entered LBAs with Asahi Breweries Ltd. in Japan and Molson Breweries (Molson) in Canada. Miller also entered an LBA with Molson. During the early 1990s, Coors entered JVs with Jinro Limited of South Korea and with Scottish & Newcastle Breweries of Scotland. Both JVs established brewing and marketing arrangements for Coors brands in these regions. Later, in early 1994, Coors purchased a brewery in Spain from El Aguila. In 1993, AB

[19] Efforts have been made to ship concentrated beer which is reconstituted upon reaching its destination. This practice has been relatively unsuccessful, however, because beer consumers have been reluctant to drink "reconstituted beer." Most countries require that the brewer state on the label whether the beer is reconstituted.

[20] Much of the information on globalization among the top 3 brewing companies is from the 1993 Annual Reports of Anheuser-Busch Companies, Inc., Adolph Coors Company, and Philip Morris Companies Inc.

Figure 4
Percent of breweries and shipments represented by various brewery tiers, 1993



Source: Estimated by the U.S. International Trade Commission.

entered a JV with the Kirin Brewing Co. (Kirin) of Japan to sell Budweiser in Japan.

The large brewing companies also established export distribution agreements (EDAs) and trading companies abroad in order to facilitate the marketing, distribution, and sale of their exported brands. AB has EDAs with Grupo Modelo (Modelo) in Mexico, and Birra Peroni SpA in Italy. Miller has an EDA with Sapporo Breweries (Sapporo) in Japan. AB formed Anheuser-Busch European Trade Ltd. in 1990 to facilitate the marketing of its brands in Europe.

Recently, the large brewing companies have also begun purchasing equity shares in foreign breweries in order to obtain market presence and influence in markets otherwise difficult to penetrate. Most recently, AB purchased a 17.7-percent stake in Modelo and a 5.0-percent stake in Tsingtao Brewery Co. (Tsingtao) of China. Miller purchased a 7.9-percent stake in Fomento Económico Mexicano (FEMSA) of Mexico and a 20.0-percent stake in Molson.

Inputs and Production Costs

Material expenses are the highest costs associated with the production of beer. While labor represents less than 6 percent of the retail price,[21] the cost of the metal cans and/or glass bottles in which the beer is packaged represents about 13 percent (figure 5). Other types of packaging materials represent another 3 percent of the retail price. The high cost of packaging materials has prompted several companies to practice recycling and integrate vertically with packaging material companies. For instance, Anheuser-Busch Companies, Inc. owns the Metal Container Corp., the Anheuser-Busch Recycling Corp., and the International Label Co.[22]

Grain and other commodity inputs are another significant cost of production, representing about 4 percent of the manufacturer's price. In 1993, the amounts of the principal agricultural commodities[23] used to make an average barrel (or 117.49 liters) of beer are shown in the tabulation at the top of the next page.

About half of all commodity costs can be attributed to malt (primarily made from malting barley). In 1993, the U.S. beer industry used 2.2 billion kilograms of malt, 99 percent of which was produced domestically (primarily in Wisconsin and Minnesota) and 1 percent of which was imported from Canada.[24] Over the past

[21] See "Employment" section for discussion of labor costs.

[22] Anheuser-Busch Companies, Inc., *Annual Report, 1993.*

[23] Small quantities of unmalted barley, wheat, sorghum, and various liquid adjuncts were also used.

[24] D. Demcey Johnson and William W. Wilson, *North American Barley Trade and Competition* (Fargo, ND: North Dakota State University, Feb. 1994), pp. 31-2.

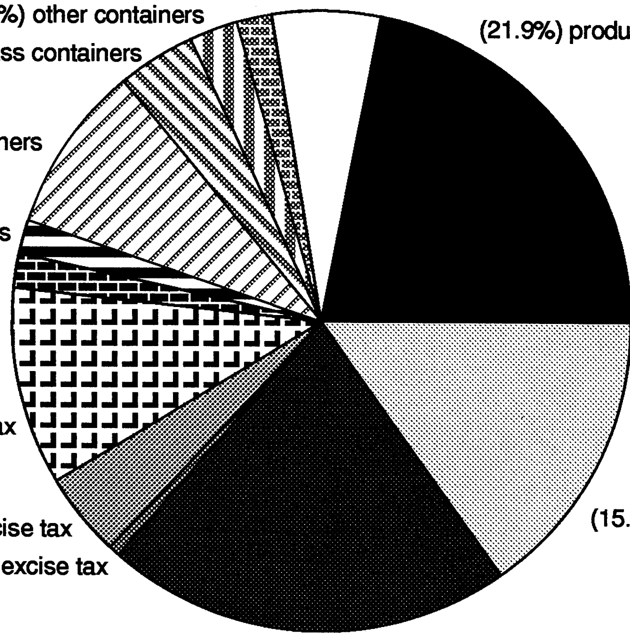
	Quantity used[1]	Average price[2]	Value used
	(kgs./barrel)	(dollars/kg.)	(dollars/barrel)
Malt	10.81	.28	3.03
Corn	2.50	.26	.65
Rice	2.40	.14	.34
Sugar & syrups	1.13	.40	.45
Dry hops	.07	6.06	.43
Hop extracts	.03	15.35	.39

[1] Derived from *Monthly Statistical Report - Beer*, Bureau of Alcohol, Tobacco and Firearms (BATF), Sept. 1993 and Dec. 1993.

[2] The prices of malt and hop extracts are derived from the unit value of U.S. exports of these products in 1993; the price of sugar/syrups is from *Feed: Situation and Outlook*, Economic Research Service (ERS), U.S. Department of Agriculture (USDA), May 1994; the prices of corn and rice are from *Rice: Situation and Outlook*, ERS, USDA, April 1994; and the price of dry hops is from *Hop Market News*, Agricultural Marketing Service (AMS), USDA, Oct. 7, 1994.

Note.—Calculations based on unrounded numbers.

Figure 5
Beer: Costs of production, distribution, and retailing



Note.—Percentages may not sum to 100 percent because of rounding.

Source: Estimated by the U.S. International Trade Commission staff from data collected by the U.S. Bureau of the Census and the U.S. Bureau of Alcohol, Tobacco and Firearms.

5 years, more than 90 percent of the malting barley used to produce malt in the United States has been grown domestically (primarily in North Dakota and Minnesota), while the remainder has been imported from Canada.[25] During the first 8 months of 1994, however, the quantity of U.S. imports of malting barley from Canada were about 650 percent higher than during the same period in 1993 largely because of lowered U.S. production of malting barley in 1993 due to poor weather.[26]

[25] Estimated on the basis of production and export figures from USDA, Commodity Economics Division, *North American Barley Trade and Competition*, and *Feed: Situation and Outlook*, May 1994; and import figures from the U.S. Department of Commerce.

[26] U.S. Department of Commerce, and *Feed: Situation and Outlook*, May 1994.

Hops represent another significant commodity cost to the brewing industry. In 1993, the U.S. beer industry used a combination of dry hops and hop extracts equivalent to 35.0 million kilograms of dry hops.[27] About 77 percent of these hops were grown in the United States (primarily in Washington and Oregon), whereas 23 percent were imported.[28] Most U.S. hop imports originate in Germany, the Czech Republic, and France.

In addition, the U.S. beer industry used 505.5 million kilograms of corn, 486.6 million kilograms of rice, and 229.1 million kilograms of sugar and syrups, in 1993,[29] almost all of which were produced domestically.

Employment

In 1993, the beer industry's annual payroll was estimated at just under $2 billion. The number of employees in the beer industry has fallen at an average annual rate of about 2 percent during the past 2 decades to about 38,900 employees in 1993 (table 1), as the mechanization and computerization of brewing and bottling operations, especially during the early 1980s, displaced many traditional production workers.[30] Between 1972 and 1992, the capital intensity of the brewing industry (as measured by the ratio of annual capital expenditures per production worker hour) grew by nearly 400 percent, and was twice as high as that of the other beverage industries. Much of these capital expenditures have been for the purpose of setting up integrated computer systems to perform such tasks as market research, raw material monitoring, production, product tasting, packaging, labeling, warehousing, inventory, and loading. The industry's growing capital intensity has resulted in steadily increasing labor productivity over the past two decades (table 2). According to an analysis on labor productivity in the brewing industry, conducted by McKinsey & Co. management consultants, U.S. brewery employees were more than twice as productive as those in Germany, and almost 50 percent more productive than those in Japan in 1990.[31]

In 1992, about 77 percent of all employees in the beer industry were men, and approximately 60 percent were production workers.[32] Most production workers are packaging machinery operators since bottling/canning is the most labor-intensive process involved in beer manufacturing. Production workers earned an average of $20.60 per hour in 1993, up from $18.00 per hour in 1989, and $13.16 per hour in 1982.[33] Wage rates have grown in correlation with the shift to higher skill levels required for operating the advanced production machinery and equipment. The other 40 percent of all employees in the beer industry are supervisors, sales and delivery persons, advertisers, clerical and personnel workers, executives, purchasers, and those involved in the legal, financial, and technical aspects of the trade.

Distribution

Upon its ratification in 1933, the 21st Amendment repealed Prohibition and granted U.S. State governments greater authority than during the pre-Prohibition era to regulate the production, importation, distribution, sale, and consumption of alcoholic beverages, including beer, within their borders.[34] The extent of States' authority, however, was soon challenged, and after a series of interpretive decisions with respect to the 21st Amendment, the Supreme Court observed that:

> there is no bright line between federal and state powers over liquor. The Twenty-first Amendment grants the states virtually complete control over whether to permit importation or sale of liquor and how to structure the liquor distribution system. Although states retain substantial discretion to establish other liquor regulations, those controls may be subject to the federal commerce power in appropriate situations. The competing state and federal interests can be reconciled only after careful scrutiny of those concerns in a 'concrete case.'[35]

As a result of the 21st Amendment, the States enacted numerous provisions to regulate the distribution and sale of beer, including various types of ownership, franchise, exclusive territory, primary source, "at rest," and price posting provisions (see "Government Regulations Affecting the U.S. Beer Industry" section). The State distribution laws effectively created a three-level system of distribution: 1) brewers and importers, 2) distributors, and 3) retailers.[36] The initial purpose of this three-level

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[27] Monthly Statistical Report - Beer, BATF.

[28] AMS, USDA, *Hop Market News*.

[29] Monthly Statistical Report - Beer, BATF.

[30] The beer distribution industry employs an additional 95,000; however, many beer distributorships also handle a variety of beverage and processed food accounts.

[31] "Beer Industry Case Study Summary," *Manufacturing Productivity* (Washington, DC: McKinsey & Co., Inc., Oct. 1993).

[32] U.S. Bureau of Labor Statistics, *Employment, Hours, and Earnings: United States, 1981-93*, Aug. 1993.

[33] Ibid. The 1993 figure was estimated by the Commission staff from February 1993 data.

[34] Congressional Research Service, Library of Congress, *The Constitution of the United States of America, Analysis and Interpretation* (Washington, DC: U.S. Government Printing Office, 1987), pp. 1863-69.

[35] California Retail Liquor Dealers Assn. v. Midcal Aluminum, 445 U.S. 97, 110 (1980).

[36] Steve L. Barsby & Associates, Inc., *The Regulatory and Economic Basis of Franchised Wholesaling in the Alcohol Beverage Industry*, a study prepared for the Wine and Spirits Wholesalers of America, Inc., May 1983, pp. 1-2.

Table 2
Productivity analysis of the U.S. beer industry, 1972, 1977, 1982, 1987, 1989-93

Year	Value added by manufacture	Production worker hours	Value added per production worker hour
	Million dollars	*Millions*	*Dollars*
1972	1,993.6	66.9	29.8
1977	2,602.3	61.1	42.6
1982	4,534.8	57.5	78.9
1987	7,284.8	44.7	163.0
1989	7,783.3	43.8	177.7
1990	8,192.8	44.3	184.9
1991	9,036.7	43.1	209.7
1992	10,600.7	51.0	207.9
1993[1]	11,300.0	54.0	209.3

[1] Estimated by the Commission staff.

Source: Compiled from official statistics of the U.S. Bureau of the Census, except as noted.

system, which is still in effect today, was to facilitate tax collection and ensure that brewing companies could not gain control over the sale of beer to the public.[37] Under this system, brewers and importers generally transport their products to distribution warehouses where they are temporarily stored, and then are reloaded onto distribution trucks and delivered via a routing system to individual retailers.

In 1993, beer distribution in the United States was a $25 billion business, involving over 3,000 distributorships, most of which were independent companies operating in a single location and employing about 30 people each.[38] Although most beer distributorships handle beer exclusively, a growing portion distribute food products and other beverages—primarily soft drinks, iced teas, and bottled waters—in conjunction with beer.[39] About two-thirds of the 465 breweries in 1993 utilized distributors; the other third were brewpubs, which retail their own beer on-premise.

Distributors may also be responsible for setting up marketing promotions; retrieving and recycling empty bottles and cans; tracking data on retail sales, inventories, and other market information; and fulfilling State, Federal, and sometimes local tax reporting requirements. Some distributors perform record-keeping functions with the aid of complex computer software and hardware designed specifically for this purpose.

[37] Steve L. Barsby & Associates, Inc., *Beer Wholesalers: Their Role and Economic Performance*, a study prepared for the National Beer Wholesalers Association, Sept. 1992, pp. i, 1-14.
[38] Ibid., p. i.
[39] "Beer Brouhaha: Existing Distributors Are Being Squeezed By Brewers, Retailers," *Wall Street Journal*, Nov. 22, 1993, pp. A1, A7.

Beer distributors and the three-level system that mandate their existence have recently been challenged by the development of large beverage retail chains, which purchase beer in great volume and sell it at a discount.[40] While most distributors in the United States ship various volumes of beer to many different types of retail outlets, such as grocery and convenience stores, bars, and restaurants, the large retail chains prefer to purchase their beer from distributors that specialize in large volume shipments to just a few customers. The larger brewing companies, in seeking to cut costs and compete for shelf space in the successful retail chains, have attempted to bypass their regular distributors for the large volume distributors.[41]

The regular distributors are concerned that this recent trend could disrupt their relationships with the large breweries, which are their most important clients. The smaller retailers that they serve also feel threatened for two reasons: (1) if the regular distributors are squeezed out of the system, they would have a harder time getting their beer delivered, and (2) even if they could get their beer delivered, they would have a difficult time competing with the lower prices offered by the big retail chains which are paying lower distribution costs. The regular distributors have responded to the competition from large volume distributors by concentrating on the more specialized marketing and informational services mentioned above.[42]

[40] In California, six retail chains accounted for 40 percent of retail beer sales in 1993. "Beer Brouhaha," *Wall Street Journal*.
[41] A major U.S. brewing company was recently sued by 24 of its distributors for allegedly breaking geographic exclusivity contracts for this purpose ("G. Heileman Brewing Co. Settles Dispute with California Distributors," *Knight-Ridder/Tribune Business News*, June 29, 1994, and "Heileman Reaches Accord With Most Wholesalers," *Modern Brewery Age*, July 4, 1994).
[42] "Beer Brouhaha," *Wall Street Journal*.

Marketing

Approximately three-quarters of the volume of beer marketed in the United States is for off-premise consumption, whereas only a quarter is consumed on-premise. The beer sold for on-premise consumption, however, contributes nearly half of all retail dollar sales. Most on-premise sales take place in bars, restaurants, ball parks/stadiums, and on airplanes; while most off-premise sales occur in liquor stores, large beverage retail chains, grocery stores, convenient/drug stores, and gas stations.

In 1992, U.S. brewing companies spent $735.5 million (or $3.53 per case of beer) on advertising,[43] 43 percent of which can be attributed to AB, 31 percent to Miller, and 16 percent to Coors. Advertising for the Budweiser, Miller Lite, Miller Genuine Draft, Bud Light, and Coors Light brands accounted for more than half of total advertising expenditures.

Beer is advertised on television, radio, and billboards; in the written media; through promotional merchandise; at point of sale; and through brewing company sponsorship of sports teams, television and radio programs, and numerous sports, recreational, cultural, and community events. The large brewing companies often contract with several advertising agencies at once, each responsible for a particular brand. The accounts are generally awarded to individual agencies on a competitive basis.

Although most of the industry's advertising focuses on brand introduction and promotion, recent advertising campaigns designed to improve or change consumers' image of beer and its intended use are also important. In an effort to address the negative publicity that beer consumption has encountered because of the issue of alcohol abuse, the industry has invested substantial advertising resources in the promotion of responsible beer drinking and serving; for instance, AB's "Know When To Say When" and "designated driver" campaigns.

During the past 5 years, point-of-sale beer advertising has been accompanied by substantial price cutting of popular brands, a practice which has been intensified as a result of the expansion of large retail beverage chains which sell strictly on the basis of price. In 1993, 90 percent of popularly priced beer was being sold at a discount in some markets.[44] In response, many large brewing companies have concentrated on the introduction of new styles and brands which they are able to sell at higher prices, thus, balancing out the price promotions on their older products.

[43] Advertising expenditures for distilled spirits and wine were only 30 percent and 11 percent, respectively, of those spent on beer. *Jobson's 1993 Beer Handbook* (New York: Jobson Publishing Corp., 1993), pp. 110-11.

[44] "Beer Brouhaha," *Wall Street Journal.*

Government Regulations Affecting the U.S. Beer Industry

The brewing industry is subject to extensive government regulations at both the Federal and State levels, and sometimes at the local level as well. Nearly all Federal regulations involving the beer industry are issued by the BATF, and are contained in volume 27 of the Code of Federal Regulations (CFR). State beer regulations are issued, for the most part, by State alcohol control agencies; a compilation of most such regulations is published in the Liquor Control Law Reporter, published by the Commerce Clearing House in Chicago.

Federal Regulations

Federal beer regulations can be categorized into seven groups, relating to: basic permits, breweries and beer production, labeling and advertising, beer removals/excise taxes, distribution, the supplier/retailer relationship, and trade.

Basic permits

Under the Federal Alcohol Administration Act (FAA Act),[45] Congress established a permit system, to be administered by the Secretary of the Treasury, to regulate interstate and foreign commerce in alcoholic beverages, to enforce the 21st Amendment, to protect the revenue, and for other reasons.[46] The FAA Act made it illegal, except pursuant to a permit issued by the Secretary of the Treasury, to import into the United States or purchase for resale alcoholic beverages, including beer.[47]

Breweries and beer production

BATF has issued regulations on the production and removal of beer which include restrictions on the location, use, construction, and equipment of breweries, as well as laws pertaining to the qualification of breweries, and their issuance of bonds and consents of surety.[48] BATF has also issued regulations governing the use of pilot brewing plants for research purposes and the maintenance of records and reports.[49] BATF brewing process regulations include mandatory approval of the formula and process

[45] Federal Alcohol Administration Act, Statutes at Large, vol. XLIX, Part 1, pp. 977-90 (1935). The FAA Act established the Federal Alcohol Administration (which in 1972 came to be known as the BATF) to administer the FAA Act.

[46] Ibid., pp. 978-81.

[47] 27 U.S.C. 203; see also BATF regulations at 27 CFR Part 1.

[48] 27 CFR 25.21-105.

[49] 27 CFR 25.271-301.

for domestic flavored beers, such as lambics, and requirements for the measurement of beer.[50] In addition, Federal law imposes a special occupational tax (SOT) on all brewers. Since January 1, 1988, if a brewer's gross receipts are less than $500,000, the SOT is only $500 per year; if gross receipts are equal to or more than $500,000, the SOT is $1,000 per year.[51]

Labeling and advertising

BATF has issued regulations on labeling and advertising[52] which include mandatory information requirements, as well as prohibited statements[53] and comparative advertising restrictions. Depending on the type of packaging and whether the beer is domestic or imported, the following information may be required on the label: brand name; class/type; whether or not the beer is reconstituted; name and address of brewer, bottler/packer, distributor, and/or importer; net contents; and ingredients. In addition, all beer must be packaged in containers bearing health-warning statements.[54]

Beer removals/excise taxes

The current Federal excise tax on beer, in effect since January 1, 1991, is $18.00 per barrel of 31 gallons (or about 15.3 cents/liter),[55] up from $9.00 per barrel during November 1, 1951, through December 31, 1990.[56] However, a reduced tax rate applies to the first 60,000 barrels (or about 7.0 million liters) of beer removed for consumption or sale by brewing companies that do not produce more than 2,000,000 barrels (or about 234.7 million liters) of beer per calendar year.[57] The Federal excise tax regulations also include rules for removals without tax payment, interbrewery purchases, and others.[58] The Federal excise tax represents over 10 percent of the retail price of beer (figure 5).

In 1992, the Federal Government collected $3.4 billion in Federal excise taxes from the beer industry, compared with an aggregate $4.5 billion collected from the distilled spirits and wine industries. In 1992, the States in which the largest Federal tax revenues were collected on beer were California, Texas, and Florida.[59]

Distribution

All beer distributors are required to pay a $500 special occupational tax (SOT), and beer retailers pay a $250 SOT annually.[60] Other distribution regulations make consignment sales illegal.[61]

Supplier/retailer relationship

Regulations relating to the supplier/retailer relationship make it unlawful for a brewer, importer, or distributor to induce a retailer to purchase its products to the exclusion of others' products: 1) by holding interest in the retailer's license ("tied-house"), 2) by coercion or voluntary purchase agreements (exclusive outlets), or 3) by providing bonuses or other things of value (commercial bribery).[62]

Trade

Regulations relating to the exportation of beer focus on export documents, removal of beer without payment of tax, drawback benefits, port proceedings, and loss of beer in transit[63] (see "U.S. Trade Measures" section for regulations relating to the importation of beer).

State Regulations

After Prohibition, State governments were given considerable authority over the production, importation, distribution, sale, and consumption of beer within their borders. Today State beer regulations vary widely throughout the nation. In general, there are four different types of State beer regulations: production, taxation, distribution, and retailing.

Production

Most States regulate production by requiring brewing licenses. Some States, for instance, Alabama, Arkansas, Missouri, and Utah, also prohibit homebrewing.[64]

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[50] 27 CFR 25.41-42.
[51] 26 U.S.C. 5091(b), and 27 CFR 25.111.
[52] 27 CFR Part 7, 27 CFR 25.141-145, and 27 CFR 25.261-264.
[53] In August 1993, a Federal appeals court in Colorado ruled that the Federal law preventing the display of alcohol content on beer labels (except when required by State law) was an unconstitutional restraint on commercial speech (*Adolph Coors Co. v. Bentsen*, 2 F.3d 355, (10th Cir. 1993)). Pending a Supreme Court decision on this case, statements of alcohol content on beer labels are optional, unless required by State law (58 F.R. 73, pp. 21233-4). On Nov. 30, 1994, the U.S. Supreme Court heard arguments on the case (Certiorari granted by *Bentsen v. Adolph Coors Co.*, 114 S.Ct. 2671, 129 L.Ed.2d 807 (United States, 1994)).
[54] 27 CFR 16.20-22.
[55] 26 U.S.C. 5051.
[56] Brewers Almanac, 1993, p. 76.
[57] 26 U.S.C. 5051(a)(2), and 27 CFR 25.152.
[58] 27 CFR 25.155-301.
[59] Brewers Almanac, 1993, pp. 77 and 87.
[60] 26 U.S.C. 5111 and 5121, and 27 CFR Part 194.
[61] 27 CFR Part 11.
[62] 27 CFR Part 6, 27 CFR Part 8, and 27 CFR Part 10.
[63] 27 CFR Part 252.
[64] "Want a Better Beer? Brew It Yourself," *Business Week*, Nov. 1, 1993, p. 158.

Taxation

Every State imposes an excise tax on beer. On July 1, 1993, State excise taxes ranged from $0.02 per gallon (about 0.5 cents per liter) in Wyoming to $1.053 per gallon (about 27.8 cents per liter) in Alabama.[65] In some States, for example, Arkansas, Idaho, Minnesota, Oklahoma, and Texas, excise taxes vary according to the alcohol content of the beer. In other States, such as, Florida, Georgia, Hawaii, North Carolina, and Virginia, excise taxes vary according to the container in which the beer is sold. The average State excise tax has grown at an average annual rate of approximately 4.5 percent during the past decade to $7.67/barrel (or 6.5 cents per liter) in 1992.[66] The average State excise tax represents over 4 percent of the retail price of beer (figure 5).

Some States (including Kansas, Massachusetts, Maine, and Vermont) have imposed an added tax on beer sold on premise. Several others have imposed environmental/recycling taxes (such as California, Rhode Island, and Washington) and wholesale sales taxes (such as, Kentucky and Tennessee). Many States also impose licensing fees on breweries, distributors, and retailers. In 1992, $1.8 billion was collected in State excise and other tax revenues on beer, nearly a third of which was collected in Florida, California, and Georgia.[67]

Distribution[68]

There are six types of State beer distribution regulations: ownership, franchise, exclusive territory, primary source, "at rest," and price posting. Ownership regulations prohibit retailers from owning distributors in all but two States—Massachusetts and Wisconsin. Furthermore, in more than half of all States, brewing companies are prohibited from owning distributors; and, in most States, brewing companies are prohibited from owning retailers.

Franchise laws govern the contractual relationships between brewing companies and distributors, so as to protect distributors from arbitrary termination by brewing companies. All but 11 States have franchise laws.

Exclusive territory laws either permit or require brewing companies to assign individual distributors as their exclusive distributor within a defined geographic territory. Exclusive territories provide distributors incentive to make promotional investments in their territories without the threat of "free riding" by other distributors. Every State except Indiana has exclusive territory laws.

Primary source laws require distributors to purchase their beer from the original producer or from an importer within the State. Similarly, wholesale purchase laws require retailers to buy beer from authorized distributors within the State. These laws are designed to simplify tax collection, prevent distributor to distributor purchases, and ensure the freshness of the beer. About 30 States have primary source laws.

"At rest" laws require that beer actually be unloaded at distributors' warehouses before delivery to retailers. These laws are designed to facilitate tax collection, ensure the presence of the wholesale level, and discourage brewing companies from marketing directly to retailers. About 35 States have "at rest" laws.

Price posting laws vary from State to State. Some require brewing companies and/or distributors to publish their prices. Others require brewing companies to give distributors advance notice of price changes or to hold prices for a minimum period of time. Still others prohibit or limit volume discounting. Price posting laws are complex and change frequently. Although there is a gradual trend toward reducing price controls, about 21 States still have some sort of price posting law.

Retailing

State governments can regulate the sale and consumption of beer in many ways. Some States control the number and type of beer retailers by issuing retail licenses and by determining to which retailers credit can be extended. Some also determine permissible locations for the sale of beer: on-premise, in restaurants and bars; and off-premise, in grocery stores, gas stations, liquor stores, and drug stores. If sold on premise, the State can regulate whether the beer can be sold in packages, by the drink, or "to go." The State may also determine the maximum alcohol content and pricing method of beer sold at retail. In addition, the State can determine permissible days and/or hours for the sale of beer. States can also regulate to whom beer is sold by enacting laws that establish minimum drinking ages and laws that make servers of beer liable for subsequent problems associated with its misuse.

Local Regulations

Many States permit local jurisdictions to regulate and separately tax beer sales, and even to prohibit the sale of beer, within their jurisdiction. Jurisdictions in which the sale of alcoholic beverages is prohibited are called "dry." More than half of all States have "dry" cities or counties, and about 4.3 percent of the U.S.

[65] Brewers Almanac, 1993, p. 86.
[66] Ibid., p. 83.
[67] Ibid., p. 88.
[68] Most of the information in the following discussion is derived from *Beer Wholesalers: Their Role and Economic Performance*, pp. 6-13.

population lives in "dry" counties.[69] Many cities and counties that are not "dry" regulate retail operations and/or impose taxes on the sale of beer. Georgia, Illinois, Louisiana, Maryland, New York, and Ohio have cities or counties that impose local beer taxes.[70]

Consumer Characteristics and Factors Affecting Demand

Beer is widely consumed throughout the United States and was considered the preferred alcoholic beverage by 47 percent of Americans surveyed by The Gallup Poll in 1992.[71] In 1993, an organization called Beer Drinkers of America claimed that there were 80 million beer drinkers in the United States. In 1992, about 61 percent of all beer drinkers were male, 88 percent were white, 29 percent were between the ages of 25 and 34, and about 39 percent graduated from high school, but did not attend college.[72] Beer drinkers were not readily identifiable with any particular field of employment. The regions of the greatest per capita beer consumption in the United States in 1992 were the western, south, central, and mountain States.[73]

Research by Robert Weinburg, a noted beer industry analyst, on the U.S. beer market between 1948 and 1990 found that—

> changes in malt beverage demand in the United States could be statistically 'explained' almost perfectly (i.e. over 99.1 percent of the variation in adult per capita demand) by the changes in four measurable factors: (1) the level of constant dollar per capita disposable personal income, (2) the price of malt beverages relative to the consumer price index, (3) the age composition of the adult population and (4) the public's general attitudes regarding health and alcohol and the increased availability and acceptance of alternative non-alcoholic beverages.[74]

[69] Ibid., p. 4. The States with the largest populations living in dry counties include, Alabama, Arkansas, Kentucky, Mississippi, North Carolina, Ohio, Pennsylvania, and Texas. More than 700,000 people in each of these States live in dry counties.

[70] Brewers Almanac, 1993, p. 86.

[71] Results of The Gallup Poll in *Jobson's 1993 Beer Handbook*, pp. 122-3.

[72] Simmons Market Research Bureau, "1992 Study of Media and Markets," *Jobson's 1993 Beer Handbook*, pp. 123-4.

[73] Brewers Almanac, 1993, p. 39.

[74] "The 6th Beer War: The Challenge Continues," *Beer Wholesaler*, Sept. 1991, pp. 14-15.

The tremendous marketing campaigns/promotions launched by the six largest brewing companies might also be included as factors influencing the demand for beer. On an annual basis, most beer is purchased during the hot weather months of June, July, and August; however, beer sales temporarily increase in December on account of the holidays.

FOREIGN INDUSTRY PROFILE

In 1992, world beer production was 116.5 billion liters, up by 5 percent from 1989 and by 20 percent from 1983 (table 3). Nearly every country in the world produces beer. In 1992, approximately half of world beer production was concentrated in Western Europe and in the United States (figure 6). South America, the Far East (mainly China and Japan), and Eastern Europe were also large beer-producing regions. The structure and productivity of beer industries throughout the world vary widely because international trade, hence international competition, in beer is limited by the difficulties associated with transporting it. Nevertheless, the largest brewing companies in the world are highly globalized in the form of complex licensed-brewing and export distribution agreements, joint-ventures, and equity investments.

Germany

During the past 10 years, Germany has been the world's second largest beer producer after the United States. During this time, however, German production has not grown, but has remained constant at approximately 12 billion liters. Although there are over a thousand breweries in Germany—more than twice the number of breweries in the United States—most are second and third tier breweries (by U.S. standards) which distribute their products strictly within the local community.[75] On balance, German beer production is about half that in the United States.

The large number of breweries in Germany have endured as a result of German beer drinkers' loyalty to local beers, a tendency which has resulted in the creation of many local monopolies among which there is limited competition. This lack of competition, combined with infrequent national beer advertising, has in most cases prevented the type of consolidation that has occurred in the United States. There are, however, some exceptions to this general trend. For instance, Brauerei Beck & Co. has grown disproportionately to other German breweries, and distributes its beer nationally, while Brau and Brunnen Brewery has acquired over 30 smaller German breweries.

[75] Manufacturing Productivity, Oct. 1993, pp. i and 4. A typical German brewery produces approximately 11 million liters of beer annually, which is about the size of the Anchor Brewing Co. in San Francisco, CA.

Table 3
World beer production, by largest producers, 1983, 1987, 1989-93

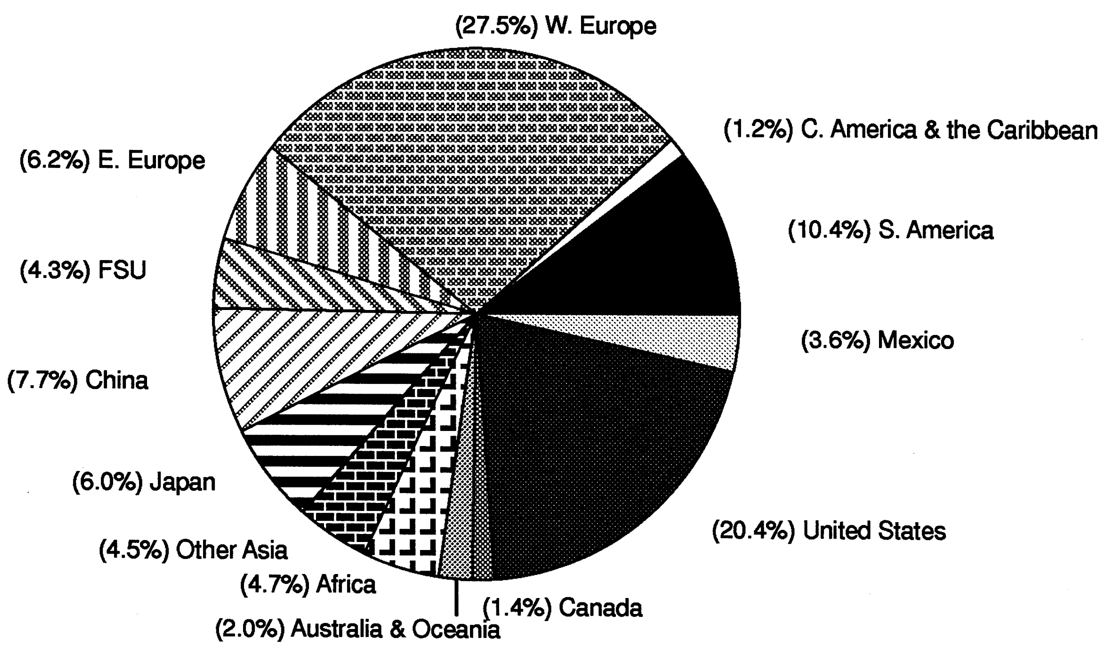
(Billion liters)

Source	1983	1987	1989	1990	1991	1992	1993
United States[1]	22.9	23.0	23.5	23.9	23.8	23.8	23.8
Germany	12.1	11.8	11.8	12.0	11.8	12.0	n.a.
China	1.7	5.0	6.0	7.0	8.0	9.0	[2]11.0
Japan	4.9	5.4	6.1	6.6	6.8	7.0	n.a.
Brazil	2.9	4.8	5.5	5.8	6.5	5.7	n.a.
United Kingdom	6.2	6.0	6.0	6.0	6.1	5.6	n.a.
Former Soviet Union	6.8	5.0	5.6	5.0	5.0	5.0	n.a.
Mexico	2.4	3.2	3.9	4.0	4.1	4.2	n.a.
Other	37.4	40.4	42.2	44.0	44.6	44.2	n.a.
Total	97.3	104.5	110.6	114.3	116.7	116.5	n.a.

[1] From BATF, *Statistical Release: Beer*, 1983-1994.
[2] Based on figure—12 billion tons—in "Brewers Thirst for Big Share," *Hong Kong Trader*, Aug. 1994, p. 6. For purposes of conversion, beer is estimated to weigh approximately 2.288 pounds per liter.

Source: *Brewer's Digest*, Sept. 1988, pp. 20-1, and Dec. 1993, pp. 34-5, unless otherwise noted.

Figure 6
World beer production, by regions, 1992



Note.—Percentages may not sum to 100 percent because of rounding.

Source: *Brewers Digest*, Dec. 1993, pp. 34-5.

The vast quantity of local breweries in Germany and their proximity to restaurants and other retail outlets has encouraged direct brewer-to-retailer sales and hindered the success of independent beer distributors. Approximately one-fifth of all employees of German breweries are delivery persons, compared with just one-tenth for U.S. breweries. Independent beer distributors in Germany are more inclined to serve as exporters. In 1992, Germany exported about 5 percent of its production, or roughly 616 million liters, mainly to the United Kingdom, Italy, and the United States.[76]

[76] German exports and markets are derived from the United Nations Trade Data System (UNTDS). The United Nations presents beer export figures in thousands of metric tons. For purposes of conversion, beer is estimated to weigh approximately 2.288 pounds per liter.

The German beer industry has been unable to achieve the economies of scale and high productivity levels found in the U.S. beer industry largely because of its fragmented production. Most German breweries do not produce enough beer to make efficient use of the high capacity technologies employed in the United States. This forgone technological efficiency is even more critical for German breweries because the cost of labor in Germany is significantly higher than in other large brewing countries. German manufacturing wages are 33 percent higher than those in Japan, 52 percent higher than those in the United States, and twice as high as those in the United Kingdom.[77] The competitiveness of the German beer industry is, instead, largely dependent on the quality of its beers, most of which are darker premium lagers, and all of which are brewed according to the German purity law which requires that beer be made of only 4 ingredients: water, yeast, malt, and hops. Almost all German beers are packaged in bottles, as opposed to cans. Recently, German breweries have attempted to achieve greater levels of efficiency by jointly investing in central bottling plants.

China

During the past 10 years, Chinese beer production grew nearly fivefold, causing China to emerge as the third largest beer-producing country in the world, brewing about 11 billion liters in 1993. China has more than 860 breweries, most of which are regional, state-owned operations that supply beer only to the local area. China's largest brewing company, Tsingtao, produced over 250 million liters of beer in 1993, 17 percent of which was exported to over 20 foreign countries.[78] During the late-1980s, the Chinese Government decided to favor beer production over hard liquor production in an effort to cut the amount of grain consumed for alcoholic beverage production and to conserve China's limited grain supplies for basic food needs.[79] Chinese brewers have also been working toward improving the quality of their beer, as well as increasing quantity. Chinese beer currently costs about one-third of the world average price of beer.[80] In addition to the low price and improving quality of Chinese beer, the availability of Chinese barley and the abundance of Chinese hops have aided the competitiveness of the Chinese beer industry. In 1992, most of China's beer exports were destined for Hong Kong, the United States, and the Russian Republic.[81]

Japan

During the past 10 years, Japan's beer production has grown steadily at an average annual rate of about 4 percent, to almost 7 billion liters in 1992. Much of this increase can be attributed to increased Japanese demand for beer at the expense of higher alcohol content beverages. In 1992, Japan exported less than 1 percent, or 28 million liters, of its production mainly to the United States.[82]

Although Japan's beer industry had been a State monopoly until the early 1940s, in 1993 there were approximately 40 breweries owned by five brewing companies, Kirin being the largest. The Japanese Ministry of Finance (MOF) still maintains strict control over the allocation and operation of breweries since they are an important source of revenue for local administrative regions in Japan. Almost all Japanese breweries are first and second tier breweries (by U.S. standards) because, prior to April 1994, the Japanese MOF allowed only companies capable of producing at least 2 million liters annually to brew beer. In April 1994, however, as part of a larger Government deregulation package, the MOF changed the law to permit microbreweries capable of producing at least 60,000 liters annually.[83]

The competitiveness of the Japanese beer industry depends largely on the industry's research and development capabilities and its ability to employ advanced brewing and bottling technologies.[84] Asahi was the first to develop "dry beer" during the late 1980s, and Sapporo was the first to use ceramic filtration systems which, along with "total microorganism control," enabled the brewing company to produce a bottled draught beer back in 1977. During the late 1980s, the Japanese beer industry made substantial capital investments and, in 1993, was nearly as capital intensive as the U.S. industry. As in the United States, many brewing companies in Japan increasingly employ computers for such tasks as market research, monitoring the condition of raw materials, production, packaging, labeling, warehousing, inventory, and loading. Sapporo's Chiba Brewery is the world's first fully computerized brewery.[85]

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[77] U.S. Bureau of Labor Statistics, *International Comparisons of Hourly Compensation Costs for Production Workers in Manufacturing, 1993*, June 1994.

[78] "Brewers Thirst for Big Share," *Hong Kong Trader*, Aug. 1994, p. 6.

[79] Nie Lisheng, "Liquor Demand Taxes Grain Supplies," interview with Qin Hanzhang, Chinese Ministry of Light Industry, *China Daily*, Mar. 18, 1988.

[80] "Top International Business Summary," *Comtex Scientific Corp.*, Nov. 16, 1994.

[81] Reliable data representing the percentage of total Chinese beer production that is exported are not available.

[82] UNTDS.

[83] "Japan Opens Door a Crack for Small Brewers," *Modern Brewery Age*, Vol. 45, No. 20, May 16, 1994, pp. 1-2.

[84] "Computerized Hops: The Sapporo Chiba Brewery," *Age of Tomorrow*, Hitachi Ltd.

[85] Ibid.

The productivity of Japan's brewing industry still lags behind that of the United States, however, largely because Japanese breweries produce a wider variety of products than first tier U.S. breweries.[86] The Japanese MOF fixes the price of beer in Japan in an effort to protect the weakest breweries.[87] As a result, Japanese brewing companies tend not to compete in the Japanese market on the basis of price and instead seek to expand sales by introducing new products in order to reach new niche markets. For instance, although the annual production of Coors and Kirin are nearly equal, Kirin produces 17 brands of beer, whereas Coors produces only 10 brands. The production of more brands necessarily requires a greater number of shorter brewing, bottling, and labeling runs, which impede productivity.[88] Japan's lifetime employment policy reportedly has also hindered productivity. Although Japanese brewing companies have invested in labor-saving technology, they reportedly have not been able to lay off redundant production workers on account of their lifetime employment tradition, but have instead created new jobs for excess workers.

Just as in the United States, most beer in Japan is distributed from brewer to retailer through a contracted distributor. Unlike in the United States, however, in Japan beer can be sold almost anywhere, including vending machines, department stores, and convenience stores. There is no minimum age requirement for purchasing beer in Japan.

Brazil

Between 1983 and 1991, Brazil's beer production grew at an average annual rate of about 11 percent, but fell by about 12 percent to 5.7 billion liters between 1991 and 1992. The decline in production occurred largely as a result of economic downturn in Brazil during the early 1990s and intense competition between Brazil's two largest brewing companies, Brahma[89] and Antarctica Paulista (Antarctica), which led to plant closures and layoffs. In 1992, notwithstanding the decline in production, Brahma and Antarctica were ranked the 13th and 14th most profitable firms in Brazil, respectively.[90] More recently, both companies have expressed plans to expand their operations in the State of Rio.[91] In 1992, Brazil exported about 1 percent, or 51 million liters, of its production, mainly to Paraguay and Argentina.

United Kingdom

Throughout the past decade, annual beer production in the United Kingdom has remained relatively stable at around 6 billion liters. Between 1991 and 1992, however, production fell by about 8 percent to 5.6 billion liters due to the country's economic recession and the effect of the "beer orders" on the British pub sector. In 1992, the United Kingdom exported about 4 percent of its beer production, or 220 million liters, mainly to the United States and Ireland.

In 1989, there were approximately 141 brewing companies in the United Kingdom, 135 of which were independent regional brewing companies primarily producing ale, and 6 of which were large international brewing corporations that mass-produced mostly lager.[92] In that same year, these 141 brewing companies sold their beer to 83,000 pubs. About a third these pubs were either owned by one of the 6 large brewing corporations or had contracts with them to sell their beer exclusively.

The encroachment of the mass-produced lagers upon sales of traditional ales precipitated the United Kingdom's Campaign for Real Ale (CAMRA), a consumer organization which gained strength during the late 1980s, and now has about 25,000 members. The influence of CAMRA's lobbying efforts prompted the British Monopolies & Mergers Commission to issue a report on the subject in March 1989. This report led to legislation passed soon after by the government of Prime Minister Thatcher, and became known as the "beer orders." The beer orders required any brewing company owning over 2,000 pubs to sell half its number of pubs over 2,000. It also required that pubs under contract with one of the top six companies be allowed to sell at least one "cask conditioned" ale. On account of a complex chain of reactions among the six largest brewing companies, the beer orders resulted in unintended consequences. The market share of the top three brewing companies increased, several regional brewing companies went out of business, pub operating chains developed, and the number of pubs fell substantially, from 83,000 in 1989 to 53,000 in 1993.

U.S. TRADE MEASURES

Tariff Measures

In 1993, only about 2 percent (or $17.1 million) of total U.S. beer imports entered duty free, and nearly all

[86] Manufacturing Productivity, Oct. 1993, pp. 5-6.

[87] Ibid., pp. i and 9.

[88] The application of computer systems to these types of operations, however, is helping Japan's beer industry to produce this wider range of products more efficiently.

[89] Brahma is Brazil's largest brewery, supplying 52 percent of the Brazilian beer market.

[90] U.S. Department of State, "Brazil's Top 20 Companies," telegram, message reference No. 03824, from American Consulate in Sao Paulo, Sept. 23, 1993. Both companies produce soft drinks and tobacco products as well.

[91] U.S. Department of State, "The Economic Future of Rio: Seeking to Regain Momentum," telegram, message reference No. 05329, from American Embassy in Brasilia, July 7, 1994.

[92] Information in this paragraph from "Britain's Brewing Pub War," *The Washington Post*, Aug. 5, 1990, pp. F1, F4, and from "Bitter Battles in the Beer Business," *Accountancy*, May 1993, pp. 32-5.

of these duty-free imports entered under the Generalized System of Preferences (GSP) or the Caribbean Basin Economic Recovery Act (CBERA) (see appendix A). Duty-free imports under the United States-Israel Free-Trade Area and the Andean Trade Preference Act were negligible throughout 1989-93. In 1993, 98 percent of U.S. beer imports were dutiable.

U.S. tariffs on beer range from 0.4 cent per liter to 1.4 cents per liter (table 4).[93] The average trade-weighted, ad valorem equivalent (AVE) rate of duty on U.S. beer imports was 1.6 percent in 1993, down slightly from 1.9 percent in 1989. The small decline in AVE can be attributed to the staged phaseout of U.S. tariffs on beer from Canada under the United States-Canada Free-Trade Agreement (CFTA).[94] On January 1, 1994, the North American Free-Trade Agreement (NAFTA) replaced the CFTA.[95] Under NAFTA, the U.S. tariff on beer from Canada will continue its staged phaseout, becoming free in 1998. The U.S. tariff on beer from Mexico will be phased out in stages by 2001.

Under the recently concluded Uruguay Round trade agreement under the General Agreement on Tariffs and Trade (GATT) (see appendix A), the United States agreed to phase out its 1.6 cents per liter 1994 column 1 tariff on beer by 2002 (table 4). Congress passed legislation to implement the GATT Uruguay Round, which the President signed on December 8, 1994. The legislation went into effect on January 1, 1995.

Nontariff Measures

As noted previously, under the Federal Alcohol Administration Act, importers (as well as distributors and others who purchase beer for resale) are required to obtain a permit in order to import beer into the United States.[96] To obtain an import permit, an importer must have a staffed office in the United States and be able to demonstrate financial viability.[97] Importers must also pay a special occupational tax, which is collected annually by the U.S. Bureau of Alcohol, Tobacco and Firearms (BATF).[98] In addition, the Federal excise tax must be paid (see "Government Regulations Affecting the U.S. Beer Industry" section). Imported beer must also satisfy marking and labeling requirements established by the U.S. Customs Service—beer samples are exempted from these requirements. In addition, importers must keep records and reports of their merchandise and transactions.

On February 7, 1992, a GATT dispute settlement panel requested by Canada (Beer II)[99] ruled that the U.S. Federal practice of providing tax preferences to certain breweries was inconsistent with the GATT. The Beer II panel also ruled that certain State taxation, distribution, listing, and pricing practices were inconsistent with the GATT (see appendix B for more detailed information on the Beer II report).

U.S. Government Trade-Related Investigations

During the past few decades, the U.S. Government has conducted one trade-related investigation involving the beer industry. In response to a petition filed in May 1990 by Heileman, on June 29, 1990, the Office of the United States Trade Representative (USTR) initiated an investigation under section 302 of the Trade Act of 1974,[100] regarding Canadian practices affecting imports of beer (see appendix B for detailed chronology of events under this investigation). The Canadian practices of greatest concern were Provincial listing requirements, allegedly discriminatory markups, and restrictions on the distribution of beer (especially in the Province of Ontario). Several months later Stroh filed a similar petition, and USTR determined to investigate the matters raised in the Stroh petition in the course of the same section 302 investigation.

Pursuant to this section 302 investigation, the United States requested a GATT dispute settlement panel (Beer I) to examine these Canadian practices. In February 1991, the Beer I panel was established, and in September 1991, the panel ruled that, in most Canadian Provinces, restrictions on private delivery, restrictions on the number of points of sale, and differential markups were inconsistent with the GATT.[101] The Beer I panel also ruled that minimum beer prices in some Provinces, and listing/delisting practices and

[93] The column 2 rate of duty on U.S. beer imports is 13.2 cents per liter. Imports of beer from countries receiving the column 2 rate of duty were negligible during 1989-93.

[94] On July 24, 1992, the Office of the U.S. Trade Representative (USTR) imposed an additional 50 percent ad valorem duty on imports of beer brewed or bottled in the Province of Ontario, Canada (57 F.R. 147, pp. 33747-8). On Aug. 5, 1993, however, USTR terminated this 50-percent duty increase after signing a "memorandum of understanding" with Canada (58 F.R. 157, pp. 43674-5). See "U.S. Government Trade-Related Investigations" section.

[95] NAFTA was implemented by the North American Free-Trade Agreement Implementation Act (Public Law 103-182, approved Dec. 8, 1993).

[96] 27 CFR 251.55.

[97] Industry officials, the Alcohol Import-Export Branch of the BATF, interviewed by the Commission staff.

[98] 27 CFR 251.30 and 27 CFR 194.2-3.

[99] GATT, "United States - Measures Affecting Alcoholic and Malt Beverages: Report of the Panel," USTR docket No. 301-80, Feb. 7, 1992.

[100] USTR Docket No. 301-80.

[101] GATT, "Canada - Import, Distribution and Sale of Certain Alcoholic Drinks by Provincial Marketing Agencies: Report of the Panel," DS17/R, USTR docket No. 301-80, Oct. 16, 1991.

Table 4
Beer: Harmonized Tariff Schedule subheading; description; U.S. col. 1 rate of duty as of Jan. 1, 1995; U.S. exports, 1993; and U.S. imports, 1993

HTS subheading	Description	Col. 1 rate of duty as of Jan. 1, 1995: General	Col. 1 rate of duty as of Jan. 1, 1995: Special[1]	Uruguay Round bound rate of duty	U.S. exports, 1993	U.S. imports, 1993
					Million dollars	
2203.00.00	Beer made from malt	1.4¢/liter[2]	Free (A,E,IL,J) 0.4¢/liter (CA) 1.2¢/liter (MX)	Free	202	929

[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); Caribbean Basin Economic Recovery Act (E); United States-Israel Free-Trade Area (IL); Andean Trade Preference Act (J); North American Free-Trade Agreement (NAFTA), goods of Canada (CA); NAFTA, goods of Mexico (MX) (see appendix A).

[2] Under the Uruguay Round of the General Agreement on Tariffs and Trade (GATT), U.S. beer imports will become duty free on January 1, 2002 (Office of the United States Trade Representative, *Draft Uruguay Round Tariff Schedules of the United States, Vol. 1, Agriculture)*.

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

container size requirements in Ontario were inconsistent with the GATT.

On July 24, 1992, nearly a year after the Beer I ruling, USTR imposed an increased duty of 50 percent ad valorem on imports of beer brewed and bottled in Ontario. The four practices USTR cited as prompting this action were Ontario's warehousing requirements, minimum beer prices, in-store cost of service charge, and nonrefillable beer can tax.[102] Ontario immediately retaliated against this action by imposing a 50-percent duty increase on imports of beer produced by Heileman and Stroh. After signing a "memorandum of understanding" on August 5, 1993,[103] however, both the United States and Canada terminated these 50-percent duties.

FOREIGN TRADE MEASURES

Tariff Measures

In general, foreign tariffs on beer are significantly higher than U.S. beer tariffs (table 5). Furthermore, most foreign tariffs are applied to the customs value of imports plus insurance and freight (CIF value), while U.S. tariffs are applied only to the customs value. In addition, the application of various foreign consumption taxes tends to magnify the effective tariff rates in many countries. For instance, the following consumption taxes are applied to the CIF value of beer plus the tariff: Japan's 3 percent value-added tax (VAT); Russia's 0.3 ECU per liter excise tax and 23 percent VAT; the Dominican Republic's 8 percent Industrialized Goods and Services Tax; and Brazil's 3 percent port tax and 80 percent Industrial Products Tax. When applied to domestic beer, these consumption taxes are assessed only on the beer's price at the factory gate.

Under the GATT Uruguay Round, Japan and the EU agreed to phase out their Most Favored Nation (MFN) tariffs on beer by 2002, while Australia agreed to phase out its tariff[104] by 1999. Under NAFTA, Mexico has agreed to phase out its tariffs on U.S. beer by January 1, 2001.

[102] Julius Katz, "Increased Import Duties on Beer from Ontario, Canada," transcript of news conference at the Office of the United States Trade Representative, Washington, DC, July 24, 1992, Transcript ID No. 851380, and 57 F.R. 147, pp. 33747-8.

[103] "United States — Canada Memorandum of Understanding on Provincial Beer Marketing Practices," signed by U.S. Trade Representative, Michael Kantor, and Canadian Trade Minister, Tom Hockin, in Washington, DC on Aug. 5, 1993, USTR docket No. 301-80.

[104] The Australian tariff on beer of an alcoholic strength by volume exceeding 1.15 percent is AU$14.53 per liter, calculated only on the portion of alcohol exceeding 1.15 percent.

Nontariff Measures

U.S. beer exports are subject to a variety of nontariff measures in foreign markets, including customs surcharges, standards-related measures, monopoly practices, and discriminatory provincial regulations.[105] Panama charges a customs liquidation fee, and Brazil charges the following: warehouse, port, and Merchant Marine Renewal taxes; handling, syndicate, and brokerage fees; and administrative commissions.[106]

Standards-related measures that require product registration, or involve laboratory analysis and/or content declaration of the product are also common in some regions of the world (e.g., in Mexico, Japan, Brazil, South Korea, Panama, and Germany). South Korea also imposes a maximum 6-month shelf life for beer; a requirement which is reportedly more difficult for imported beer to meet.[107] Packaging and labeling requirements are also found throughout the world. In most countries importers must be licensed to import beer. Depending on the country, these permits can be expensive and/or difficult to attain.

Monopoly practices in several countries also serve as nontariff measures affecting U.S. beer exports. For instance, in Taiwan, application for the right to import beer is limited to the Taiwan Tobacco and Wine Monopoly Bureau, unless approval from the said Bureau is granted. Since January 1, 1987, Taiwan has imposed a "monopoly tax" of approximately 161 percent AVE on beer imports from the United States.[108] In its bid for GATT accession, Taiwan is currently considering ways in which it might dismantle this monopoly system.

As noted in the "U.S. Government Trade-Related Investigations" section, the Beer I panel report ruled

[105] Under the GATT Uruguay Round, the tariffication of certain nontariff measures, agreements on dispute settlement, and sanitary and phytosanitary measures may help to reduce the number of foreign nontariff measures affecting U.S. beer exports. For a discussion of the potential impact on nontariff beer measures of the GATT Uruguay Round see U.S. International Trade Commission (USITC), *Potential Impact on the U.S. Economy and Industries of the GATT Uruguay Round Agreements*, USITC publication 2790, June 1994, ch. 12.

[106] U.S. Department of Commerce, "Special Topic Report, Barriers and Regulations Faced by U.S. Beer Exports [to] Panama, May, 1994," telegram, message reference No. 020399, from U.S. Embassy in Panama, May 23, 1994; and U.S. International Trade Administration, Office of Latin America, facsimile transmitted by Renard Aron, Brazil Desk, Oct. 14, 1994.

[107] U.S. Department of State, "IMI: Beer Market Study for U.S. Beer," telegram, message reference No. 018017, from U.S. Embassy in Seoul, Sept. 7, 1994.

[108] Agreement Between the American Institute in Taiwan and the Coordination Council for North American Affairs Concerning Beer, Wine and Cigarettes, Dec. 12, 1986. AVE calculated by the Commission staff from an actual rate of 30 New Taiwan dollars per liter.

Table 5
Current tariff rates[1] applying to U.S. beer exports to top export markets

(Percent ad valorem)

Countries	Tariff rates
EU[2]	24
Japan[3]	6.5
Hong Kong[4]	0
Mexico[5]	16
Canada[6]	0
Russia[7]	127
Taiwan[8]	0
Panama[9]	90
Dominican Republic[10]	30
Brazil[11]	20
Argentina[12]	10

[1] Most foreign tariffs are applied to the CIF value of imports.
[2] *Official Journal of the European Communities*, Sept. 27, 1993.
[3] AVE calculated by the Commission staff from actual tariff of 6.4¥ per liter (*Customs Tariff Schedule of Japan*, 1994).
[4] American Consulate General in Hong Kong, Apr. 20, 1994.
[5] Under NAFTA, the Mexican tariff on beer from the United States was reduced to 16 percent ad valorem on Jan. 1, 1994.
[6] As part of the August 5, 1993, "memorandum of understanding" between the United States and Canada, the Canadian tariff on beer from the United States was eliminated. During June 1991 to Dec. 2, 1994, however, Canada charged antidumping duties on beer brewed by Heileman, Stroh, and Pabst and imported into British Columbia (see appendix B).
[7] AVE calculated by the Commission staff from actual tariff of 0.6 ECU per liter ("Decree #196 of the Russian Government on the Confirmation of the Rates of Customs Duties on Imports," Mar. 10, 1994).
[8] Taiwan's 50-percent ad valorem tariff (*Customs Import Tariffs and Classification of Import & Export Commodities of the Republic of China*, Jan. 1992) does not apply to Taiwan's beer imports from the United States. Since Jan. 1, 1987, however, Taiwan has imposed a "monopoly tax" of approximately 161-percent AVE on beer imports from the United States (see foreign "Nontariff Measures" section).
[9] U.S. Embassy in Panama, May 23, 1994.
[10] U.S. Embassy in Santo Domingo, Aug. 11, 1994.
[11] *Bulletin International des Douanes (Douanes): Brazil, 1993/94*, Sept. 1993.
[12] *Douanes: Argentina, 1992/93*, Nov. 1992. The tariff presented in this table is for beer in containers of 2 liters or less. Other beer is charged a 5-percent ad valorem duty.

Sources: Individual sources of tariff information are noted.

that many of Canada's Provincial beer importation, distribution, and sales practices were inconsistent with the GATT. Since that report was issued, numerous Canadian Provinces have eliminated many of their GATT-inconsistent practices. For instance, Ontario has eliminated its restrictions on points of sale by providing U.S. brewing companies access to its 450 Brewers Retail stores.[109] Other Provincial nontariff measures affecting Canadian imports of U.S. beer still remain. One of these is Ontario's environmental tax on nonrefillable beer containers (primarily aluminum beer cans) which was raised to 10 cents per can in May 1992. Since most Canadian beer is bottled and most U.S. beer is canned, the U.S. industry regards this tax as a nontariff measure restricting Canadian imports of U.S. beer. The U.S. beer industry also considers minimum price requirements for beer, e.g., those in British Columbia and Quebec, as nontariff measures that affect U.S. beer exports to Canada.

[109] 58 F.R. 157, pp. 43674-5.

U.S. MARKET

Production

U.S. beer shipments[110] remained relatively stable at about 23.8 billion liters annually during 1989-93, while their price at the manufacturer's level grew at an average annual rate of about 5 percent to an estimated 74 cents per liter in 1993 (table 6). Therefore, the value of shipments over the past 5 years grew by about 5 percent per year to an estimated 17.7 billion dollars in 1993. Although price wars have ensued among the leading popularly priced beer brands, the introduction of premium and specialty beers by all three tiers of breweries during the past 5 years more than offset deflation in the popular beer segment. In fact, the producer price index for malt beverages grew from 112 percent in 1987 to about 122 percent in 1993.[111]

[110] Adjusted for stock changes.
[111] U.S. Bureau of Labor Statistics. Furthermore, the consumer price index grew from about 117 percent in 1987 to over 150 percent in 1992; however, much of this inflation can be attributed to increased Federal, State, and local excise taxes.

Table 6
Beer: U.S. producers' shipments, exports of domestic merchandise, imports for consumption, and apparent consumption, 1989-93

Year	Shipments[1]	Exports	Imports	Apparent consumption	Ratio (percent) of imports to consumption
			Quantity *(million liters)*		
1989	23,756	182	1,009	24,583	4.1
1990	23,945	233	1,022	24,734	4.1
1991	23,790	278	918	24,430	3.8
1992	23,766	307	967	24,426	4.0
1993	[2]23,724	330	1,071	24,465	4.4
			Value *(million dollars)*		
1989	14,374	107	839	15,106	5.6
1990	15,170	139	907	15,938	5.7
1991	15,902	169	813	16,546	4.9
1992	17,291	194	854	17,951	4.8
1993	[3]17,658	202	929	[3]18,385	[3]5.1
			Unit value *(per liter)*		
1989	$0.61	$0 .59	$0.83	$0.61	-
1990	.63	.60	.89	.64	-
1991	.67	.61	.88	.68	-
1992	.73	.63	.88	.73	-
1993	[3].74	.61	.87	[3].75	-

1 Shipments data are adjusted for stock changes.
2 Unrevised data.
3 Estimated by the Commission staff.

Source: Shipments data, in value terms, and all trade data are from the U.S. Bureau of the Census; shipments data, in quantity terms, are from BATF.

From 1989 until 1992, shipments exceeded actual beer production by a small margin because beer companies were reducing their inventories from 1,750 million liters in December 1988 to 1,470 million liters in December 1992. In 1993, however, inventories rose again to 1,515 million liters, and production exceeded shipments. Because the United States exports only about 1 percent of what it produces (figure 7), U.S. beer production is driven primarily by consumption in the United States.

Consumption

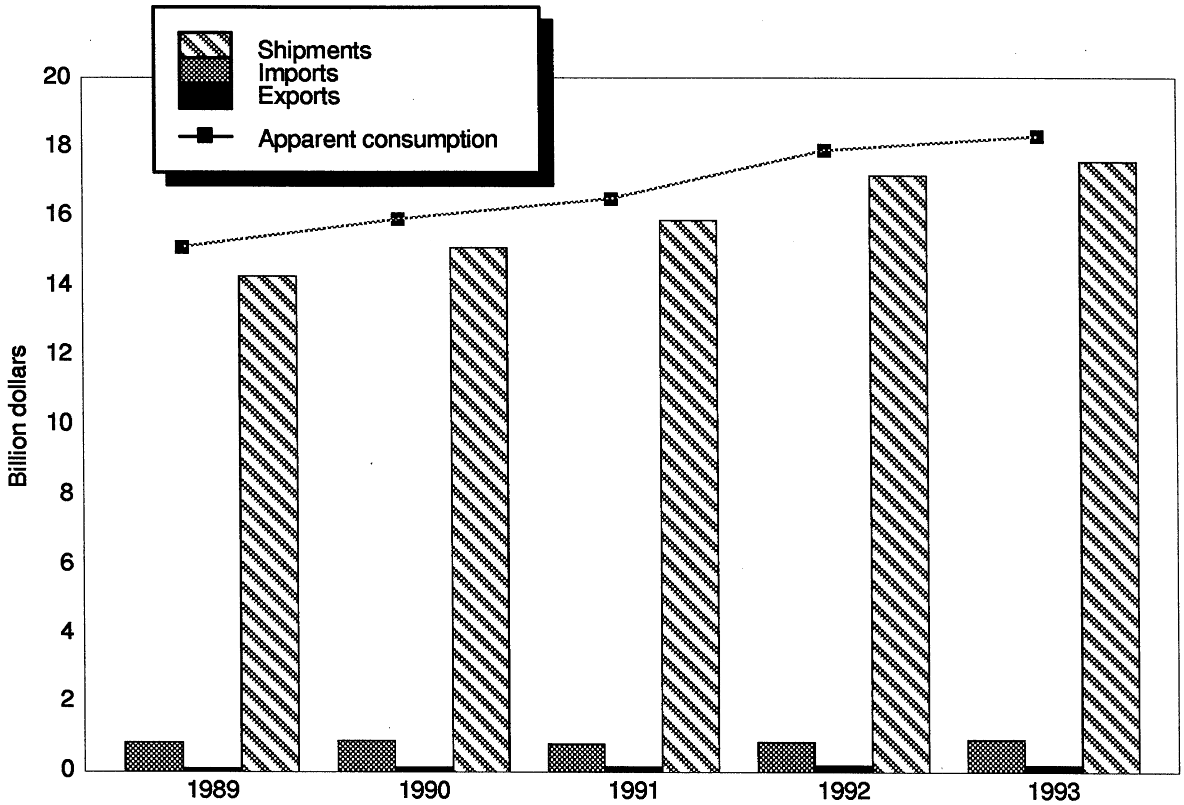
During the past 5 years the quantity of beer consumed in the United States remained constant at about 24.5 billion liters, while the value of beer consumption at the manufacturers level rose by about 22 percent, to an estimated $18.4 billion in 1993 (figure 7). As is the case with production, the difference between quantity and value trends is due to increased consumption of higher priced beers, specifically light and dry beers. Between 1989 and 1993, consumption of popularly priced beer fell from 23 to 19 percent; however, consumption of light and dry beers rose from 27 to 37 percent. Whereas consumption of light beer grew because of consumer concern over the calorie content of beer, consumption of dry beer and, more recently, other specialty beer styles grew as a result of consumer concern over the alcohol content of beer which led many consumers to drink less, but higher-quality, higher-priced beer.

In 1992, per capita beer consumption was 22.8 gallons, compared with 3.2 gallons per capita of wine and distilled spirits combined.[112] On account of wholesale and retail price markups, as well as of taxes, the retail price of beer is approximately twice as high as the manufacturer's price.

Approximately 95 percent of all beer consumed in the United States in 1993 was produced domestically, while the other 5 percent was imported (table 6). Imported beer tends to be darker in color and heavier in texture than domestic beer, which is usually light, Pilsner style beer. In addition, most imported beer is sold in bottles, while domestic beer is more often sold in cans. About 70 percent of all beer consumed in the United States during the past 10 years was canned.[113]

112 Brewers Almanac, 1993, pp. 41, 43, 45, and 66.
113 Ibid., p. 23.

Figure 7
Beer: Shipments, exports, imports, and apparent consumption, 1989-93



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

Imports

After climbing continuously during the early- and mid-1980s, the quantity of U.S. beer imports peaked in 1987-88, at nearly 1.10 billion liters, and then fell to 0.92 billion liters in 1991. The decline in 1991 occurred primarily because of the deleterious affects of the recession on the U.S. restaurant industry, and the fact that sales of imported beer are heavily dependent on on-premise consumption. Since 1991, imports have rebounded significantly to 1.07 billion liters, valued at $929.5 million, in 1993 (table 7).[114] Furthermore, during January through October 1994, the quantity of U.S. beer imports was 16 percent higher than during that same period in 1993. Most importers attribute at least part of this increase to the growing sales of microbrewed specialty beers, which have helped to educate the American public about various different beer styles, some of which are traditionally produced off-shore.[115]

[114] For a discussion of the potential impact on U.S. beer imports of the GATT Uruguay Round, see USITC publication 2790, ch. 12.

[115] "Import Overview," *Modern Brewery Age*, July 11, 1994, p. 10.

The price of U.S. beer imports has grown from about 70 cents per liter during the mid-1980s to almost 90 cents per liter during the early 1990s. Because the price of imported beer was about 28 percent higher than domestic beer during 1989-93,[116] imported beer tended to compete in the premium and superpremium segments of the U.S. beer market.

In 1993, about 91 percent, or 971 million liters, of U.S. beer imports were shipped in retail packages, whereas 9 percent were shipped in kegs for draught sales. Most of the kegs originated in Canada and the United Kingdom. The leading suppliers of retail packaged imports were the Netherlands, Canada, and Mexico. Of the 971 million retail packaged liters in 1993, 89 percent were bottled and only 11 percent were canned. During 1989-93, there has been a gradual trend toward canned and keg beer imports and away from bottles, which are more costly to ship.

Most foreign beer brands are imported by the top seven importers in the United States: Van Munching &

[116] According to statistics from the U.S. Department of Commerce and BATF, the average unit value of imported beer during 1989-93 was 87 cents per liter, while that of domestically produced beer was 68 cents.

Table 7
Beer: U.S. imports for consumption, by principal sources, 1989-93

Source	1989	1990	1991	1992	1993
			Quantity *(1,000 liters)*		
Netherlands	298,008	309,726	262,943	284,669	312,374
Mexico	198,942	187,537	158,185	179,380	198,146
Canada	252,857	244,152	240,543	247,203	296,544
Germany[1]	120,902	126,607	100,104	103,659	103,370
United Kingdom	33,498	36,699	38,046	42,477	48,778
Ireland	25,111	27,868	29,890	34,167	38,134
Japan	17,553	16,876	18,732	19,746	16,260
China	6,734	8,042	8,555	7,750	8,897
New Zealand	4,833	5,911	5,901	7,097	8,320
Denmark	6,637	6,071	5,724	6,438	6,832
All other	43,930	52,364	49,630	34,088	33,796
Total	1,009,007	1,021,850	918,252	966,674	1,071,451
			Value *(1,000 dollars)*		
Netherlands	298,311	351,085	305,159	322,431	354,984
Mexico	144,423	152,828	129,890	147,431	163,030
Canada	174,008	156,871	144,340	141,390	155,995
Germany[1]	108,389	117,173	94,719	101,650	101,088
United Kingdom	27,764	31,015	33,878	38,548	45,229
Ireland	18,278	21,148	27,115	33,294	39,142
Japan	16,550	16,936	18,932	19,577	17,804
China	5,241	6,150	6,588	5,908	6,680
New Zealand	3,538	4,672	4,588	5,504	6,294
Denmark	4,950	5,061	4,670	5,988	6,093
All other	37,142	43,797	42,774	32,048	33,135
Total	838,595	906,736	812,651	853,768	929,474
			Unit value *(per liter)*		
Netherlands	$1.00	$1.13	$1.16	$1.13	$1.14
Mexico	.73	.81	.82	.82	.82
Canada	.69	.64	.60	.57	.53
Germany[1]	.90	.93	.95	.98	.98
United Kingdom	.83	.85	.89	.91	.93
Ireland	.73	.76	.91	.97	1.03
Japan	.94	1.00	1.01	.99	1.09
China	.78	.76	.77	.76	.75
New Zealand	.73	.79	.78	.78	.76
Denmark	.75	.83	.82	.93	.89
All other	.85	.84	.86	.94	.98
Average	.83	.89	.88	.88	.87

[1] Includes former East Germany.

Note.—Quantities and values may not sum to totals because of rounding.

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

Co., Barton Beers, Molson Breweries USA (Molson USA), the Guinness Import Co., the Gambrinus Import Co., Dribeck Importers, and Labatt Importers. In addition, U.S. brewing companies serve as agents or licensees for several foreign brands.[117] Foreign brewing companies' export distribution agreements in the United States are often complex and result from the complicated equity positions numerous large international brewing companies hold in each other. For instance, Asahi owns 17 percent of Foster's Brewing Group Ltd. (Foster's), and Foster's owns 40 percent of Molson. So through its equity position in Foster's, Asahi has arranged to ship its beer from Japan to Molson USA for distribution in the United States. Kirin is produced by Molson in Canada and distributed by Molson USA in the United States, but is marketed in the United States by Kirin in Japan.

[117] AB is the U.S. agent for Carlsberg and Elephant malt liquor, brands owned by Carlsberg Brewery Ltd. of the United Kingdom; Miller is a U.S. agent for Molson and Foster's, owned by Molson of Canada and Foster's Brewing Group Ltd. of Australia, respectively; Coors is the U.S. agent for Moussy, owned by Sibra Holding SA of Switzerland; and Heileman is the U.S. agent for Hacker-Pschor, owned by Peter Mielzynski Agencies Ltd. of Canada.

During 1989-93, about 90 percent of total U.S. beer imports were supplied by the Netherlands, Canada, Mexico, Germany, and the United Kingdom. In recent years, the only significant new supplier to the U.S. market has been the Czech Republic which exported more than three times as much beer to the United States in 1993 as the former Czechoslovakia exported to the United States in 1992.[118]

Netherlands

Imports from the Netherlands grew by 5 percent, to 312 million liters, during 1989-93, and represented 29 percent of the total quantity of U.S. imports in 1993.[119] The imports were valued at $355 million in 1993, and their unit value was in the high-range—about $1.14 per liter. The two brands dominating imports from the Netherlands were Heineken and Amstel Light, both imported by Van Munching & Co. About 93 percent of all beer imported from the Netherlands was bottled, while 4 percent was canned and only 3 percent was bulk (in barrels or larger containers).

Canada

During 1989-91, the quantity of U.S. beer imports from Canada fell gradually (by about 5 percent). Between 1991 and 1993, however, imports from Canada grew by 23 percent to 297 million liters, representing 28 percent of the total quantity of U.S. imports in 1993.[120] One of the primary reasons for this increase was Miller's agreement in 1993 to purchase Molson USA, and distribute Molson brands in the United States. The import growth occurred despite the 50 percent ad valorem duty on beer brewed and bottled in Ontario, which was imposed by the United States from July 1992 until August 1993 (see appendix B).

In 1993, U.S. imports from Canada were valued at $156 million, and their unit value was in the low-range—about 53 cents per liter partly on account of the growing portion of canned and bulk imports. About 16 percent of all beer imported from Canada was canned, while 14 percent was bulk and 70 percent was bottled. The unit value of bulk imports from Canada was very low—19 cents per liter. The four brands dominating imports from Canada were Molson Golden and Foster's Lager, imported by Molson USA; Labatt's Blue and Labatt Ice, imported by Labatt Importers; and Moosehead, imported by the Guinness Import Co. A substantial portion of Canada's beer production is exported to the United States.

Mexico

During the mid-1980s, U.S. beer imports from Mexico grew rapidly, largely because of the undervaluation of the Mexican peso relative to the U.S. dollar.[121] As trade adjusted to the exchange rate, U.S. beer imports from Mexico fell by about 20 percent during 1989-91, to 158 million liters in 1991. During 1991-93, however, as Miller and AB purchased stakes in Fomento and Modelo, respectively, imports from Mexico grew by 25 percent to 198 million liters, representing 18 percent of the total quantity of U.S. imports in 1993.[122] The imports were valued at $163 million in 1993, and their unit value was in the mid-range—about 82 cents per liter. The three brands dominating imports from Mexico were Corona Extra, Tecate, and Dos Equis, imported by Barton Beers, the Wisdom Import Co., and the Guinness Import Co., respectively. About 84 percent of all beer imported from Mexico was bottled, while 16 percent was canned and a negligible portion was bulk.

Germany

Imports from Germany fell by 14 percent to 103 million liters, during 1989-93, and represented 10 percent of the total quantity of U.S. imports in 1993.[123] The imports were valued at $101 million in 1993, and their unit value was in the high-range—about 98 cents per liter. Price competition has been one of the greatest difficulties for German beer in the U.S. market. The two brands dominating imports from Germany were Beck's and St. Pauli Girl, imported by Dribeck Importers and Barton Beers, respectively. About 87 percent of all beer imported from Germany was bottled, while 10 percent was bulk and only 3 percent was canned.

United Kingdom

Imports from the United Kingdom grew by 46 percent to 49 million liters, during 1989-93, and represented 5 percent of the total quantity of U.S.

[118] U.S. beer imports from the Czech Republic enter duty free under the GSP.

[119] During Jan. through Oct. 1994, the quantity of U.S. beer imports from the Netherlands was 10 percent higher than during that same period in 1993.

[120] During Jan. through Oct. 1994, the quantity of U.S. beer imports from Canada was 36 percent higher than during that same period in 1993.

[121] Grupo Financiero Serfin, "The Mexican Beer Industry: Competitiveness and Risks," *El Indicador Especial*, No. 12, Apr. 1994.

[122] The quantity of U.S. beer imports from Mexico was 13 percent higher during Jan. through Oct. 1994, than during that same period in 1993. This increase can be attributed in part to NAFTA, which lowered the U.S. tariff on Mexican beer from 1.6 cents per liter in 1993, to 1.2 cents per liter in 1995.

[123] During Jan. through Oct. 1994, the quantity of U.S. beer imports from Germany was slightly higher than during that same period in 1993.

imports in 1993.[124] The imports were valued at $45 million in 1993, and their unit value was in the high-range—about 93 cents per liter. Regardless of their relatively high price, however, British beers have done well in the United States in recent years, in part due to the U.S. microbrewed, specialty beer trend which has increased the popularity of British-style ales. The brand dominating imports from this country was Bass Ale, imported by the Guinness Import Co. About 51 percent of all beer imported from the United Kingdom was bulk, while 47 percent was bottled and only 2 percent was canned.

FOREIGN MARKETS

Foreign Market Profile

Factors affecting the demand for and competitiveness of U.S. beer in foreign markets can vary widely from country to country. In general, U.S. beer is price competitive relative to most foreign brands; however, transportation costs can price it out of foreign markets, especially in the case of Africa and Australia. U.S. beer exports are generally most competitive in countries neighboring the United States (Canada and Mexico) or in those whose abundance of transportation reduces ocean freight rates. Tariffs can also price U.S. beer out of foreign markets (for example, out of some parts of Latin America and Asia).

Corporate relationships among U.S. and foreign breweries can have a positive impact on exports as they often create the channels of distribution and marketing for U.S. beer exports in such foreign markets as Japan and Mexico. If the relationships are licensed-brewing agreements, however, the level of U.S. beer exports may fall. In addition, federal and regional government regulations with respect to nontariff import measures, marketing and advertising practices, environmental fees, and so forth also affect the competitiveness of U.S. beer abroad.

Demographic, social, and political factors are also important. Countries with large drinking age populations, such as China[125] and India, are often promising export markets, especially if they have cultural traditions of beer drinking, combined with adequate levels of disposable income, as is the case in Belgium and Germany. However, substitute products (sake and shochu in East Asia or wine in France and Italy) and national preferences for types and styles of beer not abundantly produced in the United States (certain types of ales preferred in the United Kingdom or the preference in Germany for beer brewed according to the German purity law) can inhibit U.S. beer exports. Lapses in beer production caused by major political events in foreign markets can also significantly affect U.S. beer exports (for instance, to Eastern Europe and the Former Soviet Union (FSU)).

Data reflecting the U.S. import share of foreign beer markets are unavailable in most cases. However, the largest competitors of U.S. beer in foreign markets (aside from beer produced in those markets) are generally brands imported from nearby countries. For instance, China exports primarily to Hong Kong and Russia; the United Kingdom, to Ireland; Germany, to the United Kingdom and Italy; and Brazil, to the rest of South America. Overall, the largest competing brands in the world, after Budweiser and Miller Light, are Kirin Lager from Japan and Brahma and Antarctica, both from Brazil.[126]

U.S. Exports

After remaining at about 65 million liters during the early- and mid-1980s, the quantity of U.S. beer exports started to grow in 1987 and continued to increase at an average annual growth rate of about 25 percent to 330 million liters, valued at $202 million, in 1993 (table 8). Furthermore, during January through October 1994, the quantity of U.S. beer exports was 52 percent higher than during that same period in 1993.[127] The rapid increase in exports is primarily due to stepped up foreign marketing efforts by the top three U.S. brewing companies, which have established distribution channels through their foreign subsidiaries and joint-ventures, or through export distribution agreements (EDAs) with foreign brewing companies. Although U.S. beer exports represented only slightly more than 1 percent of U.S. beer production in 1993, the rate of export growth is important to the industry in terms of future growth potential, especially relative to the static U.S. beer market.

Budweiser (BUD),[128] Miller Light, and Coors were among the leading U.S. beer brands exported

[124] During Jan. through Oct. 1994, the quantity of U.S. beer imports from the United Kingdom was 23 percent higher than during that same period in 1993.

[125] The Chinese beer market has grown by 14 percent annually for 5 years, and is now the world's third-largest beer market behind the United States and Germany. Some brewers believe that China is the largest potential market for U.S. beer. ("Anheuser-Busch Set to Take Major Stake in Chinese Brewery," *Tribune Business News*, June 19, 1994.)

[126] "Impact Magazine," in *USA Today*, Mar. 24, 1993.

[127] For a discussion of the potential impact on U.S. beer exports of the GATT Uruguay Round, see USITC publication 2790, ch. 12.

[128] Due to a trademark dispute with Czech brewer Budvar, which holds the rights to distribute its Budweiser Budvar in many European countries, AB cannot sell Budweiser as "Budweiser" in much of Europe. In Germany and Austria, AB cannot sell Budweiser at all. In Italy, Belgium, France, the Netherlands, Spain, Greece, Gibraltar, the Canary Islands, Russia, and Switzerland, American Budweiser is sold as BUD. AB can use the

Table 8
Beer: U.S. exports of domestic merchandise, by principal markets, 1989-93

Market	1989	1990	1991	1992	1993
			Quantity *(1,000 liters)*		
Japan	38,981	67,547	65,378	89,790	75,351
Hong Kong	16,851	20,573	34,767	21,086	42,205
Mexico	13,159	16,732	18,886	19,961	28,496
Canada	52,795	56,773	50,941	41,032	24,542
Former Soviet Union[1]	27	96	11,515	10,713	23,534
Taiwan	7,527	12,129	11,419	11,624	16,005
United Kingdom	5,646	4,468	9,612	10,802	14,816
Panama	8,036	3,071	3,691	6,028	13,620
Dominican Republic	76	21	0	1,139	8,150
Brazil	143	3,425	7,601	6,271	6,519
All other	38,380	47,859	63,790	88,835	76,299
Total	181,621	232,695	277,602	307,281	329,537
			Value *(1,000 dollars)*		
Japan	29,636	50,153	49,109	68,455	57,447
Hong Kong	8,437	10,424	18,092	10,464	20,688
Mexico	6,785	8,742	9,852	10,960	16,533
Canada	26,448	29,243	26,279	21,542	12,542
Former Soviet Union[1]	24	72	6,255	5,840	11,278
Taiwan	3,785	6,812	6,594	6,810	9,798
United Kingdom	3,555	3,098	6,124	7,100	9,637
Panama	4,611	1,909	2,235	4,410	7,738
Dominican Republic	40	14	0	648	4,217
Brazil	79	2,081	4,656	3,607	3,506
All other	23,665	26,367	39,327	53,756	48,616
Total	107,064	138,914	168,522	193,593	202,000
			Unit value *(per liter)*		
Japan	$0.76	$0.74	$0.75	$0.76	$0.76
Hong Kong	.50	.51	.52	.50	.49
Mexico	.52	.52	.52	.55	.58
Canada	.50	.52	.52	.53	.51
Former Soviet Union[1]	.90	.75	.54	.55	.48
Taiwan	.50	.56	.58	.59	.61
United Kingdom	.63	.69	.64	.66	.65
Panama	.57	.62	.61	.73	.57
Dominican Republic	.53	.64	-	.57	.52
Brazil	.55	.61	.61	.58	.54
All other	.62	.55	.62	.61	.64
Average	.59	.60	.61	.63	.61

[1] The Former Soviet Union includes Armenia, Azerbaijan, Byelarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.

Note.—Quantities and values may not sum to totals because of rounding.

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

during the past 5 years. Almost all U.S. beer exports were shipped either in bulk or in cans as cans are more cost effective to transport than bottles. The price of U.S. beer exports grew slowly from 57 cents per liter during the mid-1980s to slightly more than 60 cents per liter during the early 1990s. U.S. exports tended to compete in the low- to medium-priced segments of foreign beer markets. During 1989-93, about 63 percent of total U.S. beer exports were destined to Japan, Hong Kong, Mexico, Canada, and the FSU. In recent years, U.S. breweries have participated significantly in several new export markets, including the FSU, the Dominican Republic, and Brazil.

Japan

U.S. beer exports to Japan grew by 93 percent to 75 million liters, during 1989-93, and represented

128—*Continued*
name Budweiser in Ireland, Sweden, Iceland, Finland, Denmark, Cyprus, Malta, and the United Kingdom. Budweiser Budvar is completely shut out of North America. (*Wall Street Journal*, Sept. 20, 1993; and *Tribune Business News*, Jan. 21, 1994.)

23 percent of the total quantity of U.S. exports in 1993. The exports were valued at $57 million in 1993, and their unit value was in the mid-range—about 76 cents per liter. Despite its significant unit value, however, U.S. beer is considered discount beer in Japan partly because of the strong yen and partly because of Japanese retail discounting practices.[129] While Japanese brands sell at a retail price of about $2.30 per 12 oz. can, U.S. brands range in price from about $1.60 to $2.20 per 12 oz. can.[130]

Beer is the most popular alcoholic beverage in Japan, accounting for more than 70 percent of the country's annual consumption of alcoholic beverages.[131] Imported beer represents only about 2 percent of the Japanese market, and about 77 percent of Japanese beer imports originate in the United States.[132] Most imports from the United States are facilitated by AB's export agreement with Kirin and by Miller's agreement with Sapporo. During January through October 1994, the quantity of U.S. exports to Japan was 170 percent higher than during that same period in 1993. This sharp increase in exports was due in part to Japan's unusually hot summer, which prompted higher levels of Japanese beer consumption.[133]

Hong Kong

Exports to Hong Kong grew by 150 percent to 42 million liters, during 1989-93, and represented 13 percent of the total quantity of U.S. exports in 1993. During January through October 1994, the quantity of U.S. exports to Hong Kong was 25 percent higher than during that same period in 1993. The exports were valued at $21 million in 1993, and their unit value was in the low-range—about 49 cents per liter. U.S. beer exports to Hong Kong have been driven primarily by direct U.S. beer purchases by Hong Kong's two largest supermarket chains.[134] The emergence of warehouse stores in Hong Kong, for instance GrandMart, which sell U.S. beer in six-packs, as opposed to the individual cans and bottles in which beer is sold in most Asian countries, has also aided the success of U.S. beer in Hong Kong.

[129] Trade and Economic Analysis Division, FAS, USDA, "Product Spotlight: Beer," *Trade Highlights*, Sept. 1994, p. 10.

[130] Washington Post, Aug. 17, 1994, pp. F1, F3.

[131] Wall Street Journal, Oct. 28, 1993.

[132] U.S. Embassy, "New Japan Microbrewery Law Boon for US Hops," report to FAS, USDA, AGR #JA4064, Tokyo, July 15, 1994.

[133] Trade Highlights, Sept. 1994, p. 10.

[134] Trade Highlights, Sept. 1994, p. 11.

Mexico

Exports to Mexico grew by 117 percent during 1989-93, from 13 million liters to 28 million liters, and represented 9 percent of the total quantity of U.S. exports in 1993. The exports were valued at $17 million in 1993, and their unit value was in the low-range—about 58 cents per liter. Much of this export growth can be attributed to the establishment of an EDA between AB and Modelo in June 1993. Without ties to Mexico's beer duopoly (Modelo and FEMSA), U.S. beers cannot gain access to the many Mexican retail outlets controlled by the duopoly.

Since NAFTA went into effect on January 1, 1994, the growth rate of U.S. beer exports to Mexico has escalated even further. During January through October 1994, the quantity of U.S. exports to Mexico was 43 percent higher than during that same period in 1993. Under NAFTA, Mexico's 20-percent tariff on beer was reduced to 16 percent on January 1, 1994, and will be phased out by 2001.

Canada

In 1989, Canada was the top export market for U.S. beer, receiving nearly a third of total U.S. beer exports. During 1989-93, however, exports to Canada fell by 54 percent to 25 million liters and represented only 7 percent of the total quantity of U.S. exports in 1993. The exports were valued at $13 million in 1993, and their unit value was in the low-range—about 51 cents per liter.

There are four basic reasons for the export decline. First, during the late 1980s, AB established a licensed-brewing agreement with Labatt, and Miller and Coors did the same with Molson. This led to an expansion of U.S. brands produced in Canada, whose access to Canadian channels of distribution was superior to U.S. brands that were exported. Second, the antidumping margins imposed on Heileman, Pabst, and Stroh products by Canada in early June 1991 (see appendix B), caused a reduction in U.S. beer exports to British Columbia. Third, Ontario's 50 percent retaliatory duties on Heileman and Stroh products, from July 24, 1992, to August 5, 1993, caused the Liquor Control Board of Ontario to suspend all imports from these breweries (see appendix B). And fourth, Canadian tax increases[135] precipitated an overall decline in Canadian beer sales during 1987-92. In some areas of Canada, high beer taxes have encouraged homebrewing and "brew on premises" operations.

[135] On a national average basis, tax makes up 53 percent of the retail price of beer in Canada, whereas in the United States, the equivalent is 19 percent (*The Globe and Mail*, June 20, 1992).

On account of the elimination of Canada's retaliatory and CFTA tariffs, and other provisions of the "memorandum of understanding" between the United States and Canada (especially the provision for U.S. access to Ontario's 450 Brewers Retail stores), the quantity of U.S. exports to Canada was 55 percent higher during January through October 1994, than during that same period in 1993.

Former Soviet Union

In 1989, U.S. beer exports to the FSU were negligible. By 1993, however, exports to the FSU had grown to nearly 24 million liters and represented 7 percent of the total quantity of U.S. exports. The exports were valued at $11 million in 1993, and their unit value was in the low-range—about 48 cents per liter. Most of these exports were destined for Russia[136] and resulted from the economic liberalization and restructuring of that republic during 1990-93. Miller established an EDA with a Russian brewery in 1993, and other U.S. companies are pursuing similar relationships.

[136] About 94 percent of the volume of U.S. beer exports to the FSU in 1993 were destined for Russia, particularly Moscow.

U.S. beer is sold primarily in Russian kiosks and supermarkets, and its sale is quite sensitive to price fluctuations.[137] Therefore, abrupt tariff increases, like that which was recently posted by Russia (table 5), have a significant negative impact on U.S. beer exports. During January through October 1994, the quantity of U.S. exports to Russia was 38 percent lower than during that same period in 1993.

U.S. TRADE BALANCE

The U.S. beer industry had a $727 million trade deficit in 1993. This deficit has fluctuated over the past 5 years from $644 million in 1991 to $768 million in 1990 (table 9). This deficit is somewhat smaller than that in the wine and distilled spirits industries, and, not unlike these other industries, the trade deficit in beer is driven primarily by imports. U.S. beer imports have exceeded exports by more than 400 percent, on average, during the past 5 years.

[137] Trade Highlights, Sept. 1994, p. 13.

Table 9
Beer: U.S. exports, imports, and merchandise trade balance, by selected countries and country groups, 1989-93[1]

(Million dollars)

Item	1989	1990	1991	1992	1993
U.S. exports of domestic merchandise:					
Netherlands	(2)	(2)	1	1	1
Mexico	7	9	10	11	17
Canada	26	29	26	22	13
Germany[3]	0	(2)	1	1	1
Japan	30	50	49	68	57
United Kingdom	4	3	6	7	10
Ireland	0	0	(2)	1	1
Hong Kong	8	10	18	10	21
Former Soviet Union	(2)	(2)	6	6	11
Taiwan	4	7	7	7	10
All other	28	30	45	60	63
Total	107	139	169	194	202
EU-12	7	6	12	16	16
CBERA	10	9	9	14	19
East Asia	26	28	30	30	29
U.S. imports for consumption:					
Netherlands	298	351	305	322	355
Mexico	144	153	130	147	163
Canada	174	157	144	141	156
Germany[3]	108	117	95	102	101
Japan	17	17	19	20	18
United Kingdom	28	31	34	39	45
Ireland	18	21	27	33	39
Hong Kong	(2)	(2)	(2)	(2)	0
Former Soviet Union	0	(2)	(2)	(2)	(2)
Taiwan	(2)	(2)	(2)	(2)	(2)
All other	51	60	59	49	52
Total	839	907	813	854	929
EU-12	463	532	472	511	556
CBERA	5	5	5	6	7
East Asia	26	28	30	30	29
U.S. merchandise trade balance:					
Netherlands	-298	-351	-304	-321	-354
Mexico	-137	-144	-120	-136	-146
Canada	-148	-128	-118	-119	-143
Germany[3]	-108	-117	-94	-101	-100
Japan	13	33	30	48	39
United Kingdom	-24	-28	-28	-32	-35
Ireland	-18	-21	-27	-32	-38
Hong Kong	8	10	18	10	21
Former Soviet Union	(2)	(2)	6	6	11
Taiwan	4	7	7	7	10
All other	-23	-30	-14	11	11
Total	-732	-768	-644	-660	-727
EU-12	-456	-526	-460	-495	-540
CBERA	5	4	4	8	12
East Asia	18	41	46	57	63

[1] Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.
[2] Less than $500,000.
[3] U.S. trade with East Germany is included in "Germany."

Note.—The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products. Because of rounding, figures may not add to the totals shown.

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

APPENDIX A
EXPLANATION OF 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 incorporate the internationally adopted Harmonized Commodity Description and Coding System through the 6-digit level of product description and have U.S. product subdivisions at the 8-digit level. Chapters 98 and 99 contain special U.S. classifications and temporary rate provisions, respectively.

Duty rates in the ***general*** subcolumn of HTS column 1 are most-favored-nation (MFN) rates, many of which have been eliminated or are being reduced as concessions resulting from the Uruguay Round of Multilateral Trade Negotiations. Column 1-general duty rates apply to all countries except those enumerated in HTS general note 3(b) (Afghanistan, Azerbaijan, Cuba, Kampuchea, Laos, North Korea, and Vietnam), which are subject to the rates set forth in ***column 2***. Albania, Armenia, Belarus, Bosnia, Bulgaria, the People's Republic of China, Croatia, the Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Macedonia, Moldova, Mongolia, Poland, Romania, Russia, Slovakia, Slovenia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan are accorded MFN treatment. Specified goods from designated MFN-eligible 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 or in the general notes. If eligibility for special tariff rates is not claimed or established, goods are dutiable at column 1-general rates. The HTS does not enumerate those countries as to which a total or partial embargo has been declared.

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 for 10 years and extended three times thereafter, applies to merchandise imported on or after January 1, 1976 and before the close of July 30, 1995. Indicated by the symbol "A" or "A*" in the special subcolumn, 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 4 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. Indicated by the symbol "E" or "E*" in the special subcolumn, the CBERA provides duty-free entry to eligible articles, and reduced-duty treatment to certain other articles, which are the product of and imported directly from designated countries, as set forth in general note 7 to the HTS.

Free rates of duty in the special subcolumn followed by the symbol "IL" are applicable to products of Israel under the ***United States-Israel Free Trade Area Implementation Act*** of 1985 (IFTA), as provided in general note 8 to the HTS.

Preferential nonreciprocal duty-free or reduced-duty treatment in the special subcolumn followed by the symbol "J" or "J*" in parentheses is afforded to eligible articles the product of designated beneficiary countries under the ***Andean Trade Preference Act*** (ATPA), enacted as title II of Public Law 102-182 and implemented by Presidential Proclamation 6455 of July 2, 1992 (effective July 22, 1992), as set forth in general note 11 to the HTS.

Preferential or free rates of duty in the special subcolumn followed by the symbol "CA" are applicable to eligible goods of Canada, and those followed by the symbol "MX" are applicable to eligible goods of Mexico, under the ***North American Free Trade Agreement***, as provided in general note 12 to the HTS, implemented effective January 1, 1994 by Presidential Proclamation 6641 of December 15, 1993.

The ***General Agreement on Tariffs and Trade 1994*** (GATT 1994), annexed to the Agreement Establishing the World Trade Organization, replaces an earlier agreement (the GATT 1947 [61 Stat. (pt. 5) A58; 8 UST (pt. 2) 1786]) as the primary multilateral system of disciplines and principles governing international trade. Signatories' obligations under both the 1994 and 1947 agreements focus upon 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, dispute settlement, and other measures. The results of the Uruguay Round of multilateral tariff negotiations are set forth by way of separate schedules of concessions for each participating contracting party, with the U.S. schedule designated as Schedule XX.

APPENDIX B
CHRONOLOGY OF THE UNITED STATES-CANADA BEER DISPUTE

1988	a GATT panel requested by the European Community finds that the following practices of the Canadian provincial liquor boards are inconsistent with the GATT: 1) restrictions on the number of points of sale, 2) listing and delisting practices, and 3) discriminatory markups on the price of beer sold by the liquor boards[1]
1/1/89	the CFTA goes into effect
5/15/90	Heileman files a petition under Sect. 302 of the Trade Act of 1974 (Trade Act) regarding Canadian provincial listing requirements, discriminatory markups, and restrictions on distribution of beer; Heileman asserts that these practices violate GATT and the CFTA, and requests that the U.S. Trade Representative (USTR) take action under Sect. 301 of the Trade Act[2]
6/29/90	USTR initiates an investigation under Sect. 302 of the Trade Act regarding Canada's allegedly restrictive practices affecting imports of beer;[3] USTR also requests consultations with Canada under Article XXIII:1 of the GATT[4]
7/20/90	the United States holds consultations with Canada under Article XXIII:1; the consultations do not lead to a solution
9/14/90	Stroh files a petition under Sect. 302 of the Trade Act regarding the same Canadian practices affecting imports of beer; Stroh requests that USTR take action under Sect. 301 of the Trade Act[5]
10/19/90	USTR decides to investigate the Heileman and Stroh allegations in the same 302 investigation[6]
12/12/90	the United States requests the establishment of a GATT panel under Article XXIII:2 to examine Canadian practices concerning imports of beer[7]
2/6/91	in response to the U.S. request, a GATT panel (Beer I) is established to examine the extent to which Canada is meeting its 1988 GATT report obligations, and to examine the following Canadian practices: listing/delisting, container size requirements, access to points of sale, restrictions on private delivery, differential markups, methods for assessing markups and taxes, minimum prices, beer container taxes, and notification procedures for new practices[8]
3/7/91	Canada holds consultations with the United States under Article XXIII:1 concerning measures relating to imported beer, wine, and cider; the consultations do not result in a solution
3/91	the Canadian International Trade Tribunal (CITT) begins investigating allegations that Heileman, Pabst, and Stroh are dumping beer in the British Columbia market

[1] 56 F.R. 229, pp. 60128-9.
[2] 55 F.R. 129, pp. 27731-2.
[3] USTR docket No. 301-80.
[4] 55 F.R. 129, pp. 27731-2, and 56 F.R. 229, pp. 60128-9.
[5] 55 F.R. 208, pp. 43251-2.
[6] 55 F.R. 208, pp. 43251-2.
[7] 56 F.R. 229, pp. 60128-9.
[8] GATT, "Canada - Import, Distribution and Sale of Certain Alcoholic Drinks by Provincial Marketing Agencies: Report of the Panel," DS17/R, USTR docket No. 301-80, Oct. 16, 1991; and 56 F.R. 229, pp. 60128-9.

4/12/91	Canada requests the establishment of a GATT panel under Article XXIII:2 to examine U.S. practices concerning imports of beer, wine, and cider
4/16/91	Canada again holds consultations with the United States over U.S. import practices; however, the consultations do not result in a solution
5/29/91	in response to Canada's request, a GATT panel (Beer II) is established to examine the following U.S. practices: 1) Federal excise tax rate preferences for certain domestic brewers, and credits for certain domestic wines and ciders, and 2) State measures that allegedly discriminate against out-of-State beer, wine, and cider, including State excise tax reductions, credits, and exemptions; market access and distribution restrictions; discriminatory licensing fees for selling beer; transportation requirements; alcohol content preferences for low alcohol beer; labelling restrictions; listing/delisting practices; and pricing preferences[9]
6/91	the CITT makes a preliminary determination of dumping with respect to certain U.S. beer, and provisional duties equal to 33.4, 17.4, and 16.3 percent are charged, respectively, on beer brewed by Heileman, Stroh, and Pabst and imported into British Columbia[10]
9/18/91	the Beer I panel rules that the following Canadian practices are inconsistent with the GATT: listing/delisting practices in Ontario, beer container size requirements in Ontario, restricted access to points of sale in most Provinces, restrictions on private delivery in most Provinces, differential markups in most Provinces, and minimum prices for beer in some Provinces; the Beer I panel further ruled that "Canada's failure to make serious, persistent, and convincing efforts to ensure observance of the provisions of the General Agreement by the liquor boards...constituted a violation of Canada's obligations under Article XXIV:12 and consequently a *prima facie* nullification or impairment of benefits accruing to the United States under the General Agreement;" Canada was given until March 1992 to change its access to points of sale and differential markup restrictions, and until July 1992 to change its other practices found inconsistent[11]
10/2/91	the CITT makes a final determination of dumping on beer brewed by Heileman, Stroh, and Pabst and imported into British Columbia[12]
11/22/91	USTR proposes to determine that the rights of the United States under GATT are being denied as a result of certain practices of the Canadian provincial liquor boards, and if a mutually satisfactory resolution can not be reached with Canada by December 29, 1991, USTR will consider suspending duty bindings and increasing duties on Canadian beer and other alcoholic beverages[13]

[9] GATT, "United States - Measures Affecting Alcoholic and Malt Beverages: Report of the Panel," USTR docket No. 301-80, Feb. 7, 1992; and U.S. Department of State, "GATT: Canadian Letter on Request for Panel Formation on U.S. Beer Practices," telegram, message reference No. 03566, from U.S. Embassy in Ottawa, May 30, 1991.

[10] U.S. Department of State, "Anti-Dumping—Preliminary Determination Respecting U.S. Beer Exports to British Columbia," telegram, message reference No. 03679, from U.S. Embassy in Ottawa, June 4, 1991.

[11] GATT, "Canada - Import, Distribution and Sale of Certain Alcoholic Drinks by Provincial Marketing Agencies: Report of the Panel," DS17/R, USTR docket No. 301-80, Oct. 16, 1991; and 56 F.R. 229, pp. 60128-9.

[12] Canada Gazette, Part 1, Oct. 12, 1991.

[13] 56 F.R. 229, pp. 60128-9.

12/27/91	USTR determines that acts, policies, or practices of Canada violate the provisions of a trade agreement (the GATT), and announces that action will be taken in the form of substantially increased duties on beer from Canada no later than April 10, 1992[14]
2/7/92	the Beer II panel rules that the U.S. Federal excise tax preferences for certain U.S. beer, wine, and cider producers are inconsistent with the GATT; the panel also rules that certain State practices are inconsistent with the GATT, including State excise taxes on beer in 8 States and Puerto Rico, wholesaler requirements for out-of-State beer in 27 States, common carrier requirements for out-of-State beer in 5 States, higher licensing fees for selling out-of-State beer in 2 States, price affirmation requirements for out-of-State beer in 2 States, and listing/delisting discrimination against out-of-States beer in 6 States[15]
3/31/92	Canada submits to the Beer I panel a plan of proposed provincial actions to address the recommendations of its report; the United States finds this plan unacceptable because it would not bring Canada into GATT conformity and would be implemented over three years[16]
4/13/92	Canada submits another proposal addressing short-term U.S. concerns, providing specific dates for steps in compliance, and guaranteeing full access by mid-1994
4/14/92	USTR rejects Canada's offer on the grounds that U.S. brewing companies deserve access to the Canadian market sooner than mid-1994; U.S. Customs clearance is suspended for Canadian beer, making shippers retroactively liable for any new duties that might be imposed; the Ontario Liquor Control Board responds by cancelling all imports of U.S. beer;[17] USTR announces, however, that because of U.S. negotiations with Canada, it is desirable to delay implementation of the action announced on 12/27/91 until 7/24/92 (the statutory deadline for U.S. action)[18]
4/25/92	the United States and Canada reach an "Agreement in Principle" whereby Canada is given until 10/1/93 to end its alleged discrimination and let U.S. producers have more direct access to provincial retail outlets; in addition, Canada is given until 7/1/92 to dismantle its inter-provincial barriers, allow imports to be sold in other than 6-packs, and lower retail markup for imported beer
4/27/92	Ontario begins importing U.S. beer again[19]

[14] 57 F.R. 2, pp. 308-9.
[15] GATT, "United States - Measures Affecting Alcoholic and Malt Beverages: Report of the Panel," USTR docket No. 301-80, Feb. 7, 1992.
[16] 57 F.R. 76, p. 14440.
[17] USITC, *Operation of the Trade Agreements Program, 44th Report, 1992 (OTAP)*, USITC publication 2640, July 1993, pp. 54-5.
[18] USTR, "United States and Canada to Hold Negotiations on Canadian Provincial Beer Practices," press release, USTR docket No. 301-80, Apr. 14, 1992; and 57 F.R. 76, p. 14440.
[19] OTAP, p. 55.

5/92	negotiations following the "Agreement in Principle" fail to result in the removal of many of the discriminatory practices; some provinces propose modifications; however, Ontario and Quebec insist on maintaining discriminatory distribution systems that require an extra warehousing step for imported beer; Ontario adopts a new beer pricing system that includes cost-of-service charges, and other pricing mechanisms that serve to raise the retail price of U.S. beer[20]
5/25/92	Ontario doubles its existing environmental tax on non-refillable beer containers to 10¢/can[21]
6/92	Ontario refuses to accept proposal that would require removal of beer import barriers by 10/1/93, and instead comes up with its own proposal which is rejected by U.S. breweries because: 1) its new pricing formula raises rather than lowers prices, 2) U.S. brewing companies would still have to ship through Ontario Government warehouses, and 3) Ontario refuses to lift its non-refillable container tax
6/19/92	USTR agrees to work toward resolution of the Beer II report; however, USTR rejects the Beer II panel's interpretation of the balance between Federal and State powers; USTR cites the 21st Amendment saying the panel inappropriately interjected itself into weighty and unresolved issues of Federal versus State authority; the Beer II report cites a U.S. Supreme Court decision saying the Federal Government has the power to override State laws in order for the United States to abide by international obligations[22]
7/92	another GATT panel, requested by the United States, is established to review Canadian antidumping duties on U.S. beer
7/14/92	during a GATT Council meeting the United States addresses Canada's failure to bring its beer practices into conformity with the Beer I report, leaving the United States with few options for resolving the dispute through the multilateral process; the United States seeks authorization from GATT to withdraw trade concessions made to Canada in retaliation for Canada's slow, limited response to the Beer I report; Canada blocks and the EU opposes this request[23]
7/24/92	USTR imposes an increased duty of 50 percent ad valorem on beer brewed and bottled in Ontario, and announces that it will monitor imports from the other provinces to determine whether there is trade diversion from Ontario; the four problems cited as prompting the action are Ontario's warehousing requirements, minimum pricing structure, in-store cost of service charge, and environmental levy[24]
7/24/92	Ontario retaliates against the United States by imposing a 50 percent ad valorem duty on imports of beer produced by Heileman and Stroh; this duty caused the Liquor Control Board of Ontario to suspend all imports from these breweries[25]

[20] 57 F.R. 147, pp. 33747-8.
[21] "Ontario Urged to Nix Its Tax on Beer Cans," *American Metal Market*, July 7, 1992, p. 6.
[22] OTAP, p. 55.
[23] 57 F.R. 147, pp. 33747-8.
[24] Julius Katz, "Increased Import Duties on Beer from Ontario, Canada," transcript of news conference at the Office of the United States Trade Representative, Washington, DC, July 24, 1992, Transcript ID No. 851380, and 57 F.R. 147, pp. 33747-8.
[25] "Canada Beer Dispute Flares on Eve of Trade Talks," *New York Times*, July 25, 1992, p. 17.

8/26/92 .... the CFTA Binational Panel affirmed in part and remanded in part the final determination of injury made by the CITT on beer brewed by Pabst, Heileman, and Stroh and imported into British Columbia[26]

10/8/92 .... The United States and Canada discuss U.S. plans to implement the recommendations of the Beer II report; Canada presses the United States to implement them by the summer of 1993; the United States indicates steps it has already taken to comply with the recommendations[27]

12/92 .... Ontario introduces amendments to its Liquor Control Act, which would open the Brewers Retail stores to imported beer; the amendment does not, however, lower the price of imported beer[28]

3/15/93 .... USTR receives a letter from Canada outlining actions already taken or being taken by the Provinces to comply with the Beer I report[29]

5/20/93 .... Canada presents a proposal to USTR which would admit U.S. beer to Ontario's 450 Brewers Retail outlets[30]

6/2/93 .... the United States and Canada meet to discuss the beer trade dispute, but no agreement is reached; the USTR considers a beer embargo against Ontario[31]

6/15/93 .... Ontario makes a new offer on pricing and distribution, but the United States demands action with respect to the nonrefillable beer can tax (can tax); AB and the U.S. aluminum industry lobby against the can tax; Heileman also disputes the can tax; however, Stroh decides to sell bottled beer instead[32]

7/93 .... many States announce that they have passed legislation to remove measures found to be discriminatory; the Federal tax exemption for small brewing companies has not been eliminated[33]

7/93 .... President Clinton meets with Canadian Prime Minister Campbell in Tokyo after which senior White House officials request that USTR drop its planned retaliation against Ontario and negotiate a settlement[34]

8/5/93 .... USTR terminates the 50 percent duty increase on imports of beer from Ontario, under Section 307 of the Trade Act, after signing a "memorandum of understanding" (MOU)[35] with Canada; under the MOU, Canada agrees to: 1) implement immediately the terms of the "Agreement in Principle" that were scheduled to be implemented by June 30, 1992, 2) eliminate its 50 percent duty increase on beer produced by

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[26] 57 F.R. 176, p. 41474.

[27] Canadian Minister for International Trade, "Backgrounder: Canada-U.S. Beer Disputes," news release, No. 151, Aug. 5, 1993.

[28] "Ontario Plans to Hike Sales of Imported Beer," *Journal of Commerce*, Dec. 10, 1992, p. 3A.

[29] U.S. Department of State, "Canadian Provincial Actions to Implement GATT Beer Decision," telegram, message reference No. 01548, from U.S. Embassy in Ottawa, Mar. 15, 1993.

[30] "US-Canada Beer Battle May Be Coming to Head," *The Journal of Commerce*, May 21, 1993.

[31] "Canada May Face New Levies in Beer Dispute With US," *The Journal of Commerce*, June 3, 1993.

[32] "Canned-Beer Tax Slows US-Canada Trade Talks," *The Journal of Commerce*, June 18, 1993.

[33] "Beer Market Tighter Than Expected," *The Globe and Mail*, July 22, 1993.

[34] "US and Canada Near Settlement In Beer Dispute," *The Journal of Commerce*, July 23, 1993.

[35] "United States — Canada Memorandum of Understanding on Provincial Beer Marketing Practices," signed by U.S. Trade Representative, Michael Kantor, and Canadian Trade Minister, Tom Hockin, in Washington, DC on August 5, 1993, USTR docket No. 301-80.

Stroh and Heileman and imported into Ontario, and 3) eliminate its CFTA duty on Canadian beer imports from the United States; under the MOU Ontario agrees to: 1) provide U.S. beer immediate access to its 450 Brewers Retail stores, 2) limit the fees that the Brewers Retail stores can charge for carrying U.S. beer, 3) reduce its minimum retail price for beer, and 4) reduce the Ontario Liquor Board's fees for handling U.S. beer; a "termination clause" is secured in the MOU that allows trade action against individual Provinces if trade barriers are imposed again; the MOU is silent with respect to Ontario's can tax[36]

8/93 .... Ontario imposes a handling fee for beer passing through Ontario Government warehouses[37]

11/3/93 .... Quebec imposes a minimum beer price allegedly as a social policy to limit excessive beer consumption by young people[38]

11/29/93 .... USTR sends a letter to Quebec stating that the United States views the recent introduction of a minimum price for beer in Quebec as "justifiable grounds for termination of the memorandum of understanding"[39]

12/93 .... USTR threatens to impose import duties on beer from Quebec[40]

1/12/94 .... Canada sets "new normal" values and export prices for U.S. beer subject to the antidumping order for imports into British Columbia[41]

5/4/94 .... the United States and Canada agree to incorporate an Annex, entitled "Terms of Access of U.S. Beer to the Quebec Market," to the MOU of August 5, 1993; the Annex will allow U.S. brewers to transport and deliver their product themselves, and sell their product in private convenience and grocery stores in Quebec; the United States and Canada also agree on interim and permanent changes to British Columbia's beer distribution and warehousing policies; Canada agrees to review its antidumping duties on U.S. beer imported into British Columbia and, in exchange, both countries agree to seek suspension of GATT panel proceedings regarding these Canadian antidumping duties; minimum pricing policies, e.g. those in British Columbia and Quebec, are not addressed[42]

12/2/94 .... the CITT rescinds its finding of injury made on October 2, 1991, concerning beer produced by Pabst, Heileman, and Stroh and imported into British Columbia on the grounds that a "regional industry" no longer exists in British Columbia for beer; CITT eliminates the antidumping margins[43]

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[36] 58 F.R. 157, pp. 43674-5.

[37] "Canadian Fee Imperils Beer Pact," *The Journal of Commerce*, Aug. 13, 1993.

[38] U.S. Department of State, "Quebec Imposes Minimum Beer Prices," telegram, message reference No. 0370, from U.S. Consulate in Quebec, Nov. 19, 1993.

[39] "Canada Denies Beer Pricing Violates US Access Accord," *The Journal of Commerce*, Dec. 8, 1993.

[40] "Canada-US Beer War on the Horizon," *The Financial Post*, Dec. 7, 1993, p. 5.

[41] "Customs Notice," Customs, Excise and Taxation, Revenue Canada, Jan. 12, 1994.

[42] Letters between Canadian Minister for International Trade, Roy MacLaren, and U.S. Trade Representative, Michael Kantor, Apr. 29, 1994; USTR, "United States and Canada Reach Agreement on Beer Market Access in Quebec and British Columbia Beer Antidumping Case," press release, May 4, 1994; and CITT, "Notice of Review of Injury Finding on Dumping of Certain Beer," Review No. RR-94-001, May 25, 1994.

[43] CITT, Review No. RR-94-001, Inquiry No. NQ-91-002, conducted under subsection 76(2) of the Special Import Measures Act, Dec. 2, 1994.