

Industry & Trade Summary

Distilled Spirits



USITC Publication 3373

November 2000

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

UNITED STATES INTERNATIONAL TRADE COMMISSION

COMMISSIONERS

Stephen Koplan, Chairman

Deanna Tanner Okun, Vice Chairman

Lynn M. Bragg

Marcia E. Miller

Jennifer A. Hillman

Thelma J. Askey

Robert A. Rogowsky
Director of Operations

Vern Simpson
Director of Industries

This report was prepared principally by

George S. Serletis

*Agricultural Crops Branch
Agriculture and Forest Products Division*

**Address all communications to
Secretary to the Commission
United States International Trade Commission
Washington, DC 20436**

ITC READER SATISFACTION SURVEY

Industry and Trade Summary: Distilled Spirits

11/00

The U.S. International Trade Commission (ITC) is interested in your voluntary comments (burden < 15 minutes) to help us assess the value and quality of our reports, and to assist us in improving future products. Please return survey by fax (202-205-2384) or by mail to the ITC.

Your name and title (please print; responses below not for attribution): _____

Please specify information in this report most useful to you/your organization: _____

Was any information missing that you consider important? Yes (specify below) No

If yes, please identify missing information and why it would be important or helpful to you: _____

Please assess the *value* of this ITC report (answer below by circling all that apply): SA—Strongly Agree; A—Agree; N—No Opinion/Not Applicable; D—Disagree; SD—Strongly Disagree

- | | | | | | |
|--|----|---|---|---|----|
| ▶ Report presents new facts, information, and/or data | SA | A | N | D | SD |
| ▶ Staff analysis adds value to facts, information, and/or data | SA | A | N | D | SD |
| ▶ Analysis is unique or ground breaking | SA | A | N | D | SD |
| ▶ Statistical data are useful to me/my organization | SA | A | N | D | SD |
| ▶ Subject matter and analysis are timely | SA | A | N | D | SD |
| ▶ ITC is the only or the preferred source of this information | SA | A | N | D | SD |

If not, please identify from what other source the information is available _____

Please evaluate the *quality* of this report (answer below by circling all that apply): SA—Strongly Agree; A—Agree; N—No Opinion/Not Applicable; D—Disagree; SD—Strongly Disagree

- | | | | | | |
|--|----|---|---|---|----|
| ▶ Written in clear and understandable manner | SA | A | N | D | SD |
| ▶ Report findings or executive summary address key issues | SA | A | N | D | SD |
| ▶ Figures, charts, graphs are helpful to understanding issue | SA | A | N | D | SD |
| ▶ Analysis throughout report answers key questions | SA | A | N | D | SD |
| ▶ Report references variety of primary and secondary sources | SA | A | N | D | SD |
| ▶ Sources are fully documented in text or footnotes | SA | A | N | D | SD |

Please provide further comment on any of the above performance measures, as appropriate:

Suggestions for improving this report and/or future reports: _____

Other topics/issues of interest or concern: _____

Please provide your Internet address and update your mailing address below, if applicable:

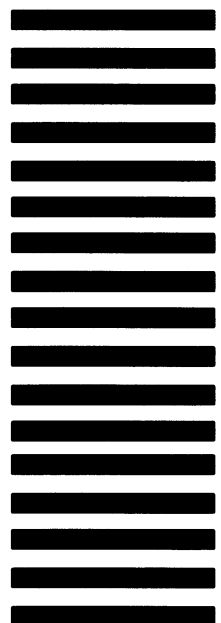
FOLD

UNITED STATES
INTERNATIONAL TRADE COMMISSION
WASHINGTON, DC 20436

OFFICIAL BUSINESS
PENALTY FOR PRIVATE, USE \$300



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 12840 WASHINGTON, DC

POSTAGE WILL BE PAID BY ADDRESSEE

U.S. INTERNATIONAL TRADE COMMISSION
500 E STREET, SW.
WASHINGTON, DC 20277-2840

ATTN:
OFFICE OF INDUSTRIES
ITS: Distilled Spirits



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 distilled spirits covers the period 1995-99. Listed below are the individual summary reports published to date on the agriculture and forest product sectors.

USITC

<i>publication number</i>	<i>Publication date</i>	<i>Title</i>
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	June 1993	Cocoa, Chocolate, and Confectionery
2636	May 1993	Olives
2639	June 1993	Wine and Certain Fermented Beverages
2693	October 1993	Printing and Writing Paper
2702	November 1993	Fur Goods
2726	January 1994	Furskins
2737	March 1994	Cut Flowers
2749	March 1994	Paper Boxes and Bags

¹ The information and analysis provided in this report are for the purposes 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.

PREFACE—*Continued*

<i>USITC publication number</i>	<i>Publication date</i>	<i>Title</i>
2762	April 1994	Coffee and Tea
2859	May 1995	Seeds
2865	April 1995	Malt Beverages
2875	May 1995	Certain Fresh Deciduous Fruits
2898	June 1995	Certain Miscellaneous Vegetable Substances and Products
2917	October 1995	Lumber, Flooring, and Siding
2918	August 1995	Printed Matter
2928	November 1995	Processed Vegetables
3015	February 1997	Hides, Skins, and Leather
3020	March 1997	Nonalcoholic Beverages
3022	April 1997	Industrial Papers and Paperboards
3080	January 1998	Dairy Products
3083	February 1998	Canned Fish, Except Shellfish
3095	March 1998	Milled Grains, Malts, and Starches
3096	April 1998	Millwork
3145	December 1998	Wool and Related Animal Hair
3148	December 1998	Poultry
3171	March 1999	Dried Fruits Other Than Tropical
3268	December 1999	Eggs
3275	January 2000	Animal Feeds
3350	September 2000	Grains (Cereals)
3352	September 2000	Edible Nuts
3355	September 2000	Newsprint

CONTENTS

	<i>Page</i>
Preface	i
Abstract	1
Introduction	3
General	3
Description	4
Production methods	5
Stills	6
Bourbon production	6
U.S. industry profile	10
Industry structure	10
Number, concentration, geographic distribution of firms	10
Number and level of concentration of firms	10
Geographical distribution of firms	13
Employment, earnings, and productivity	14
Vertical and horizontal integration	14
Marketing	16
Methods of distribution	17
Pricing practices	18
Taxes	19
Government regulation	20
Federal regulation	20
State regulation	21
U.S. market	22
Factors affecting demand	22
Consumption	23
Consumption trends	23
Consumer characteristics	26
Import penetration levels	26
Conditions of competition between foreign and U.S. spirits products	28
Production	28
Inputs	29
Distilled spirits plants/locations of production	29

CONTENTS—Continued

	<i>Page</i>
U.S. trade	30
Overview	30
U.S. imports	31
Principal import suppliers and import levels	31
Products imported	31
Import levels and trends	31
Principal import suppliers	32
U.S. trade measures	32
U.S. exports	33
Principal markets and export levels	33
Products exported	33
Exports levels and trends	34
Principal export markets	34
Foreign trade measures	35
Tariff measures	35
Nontariff measures	35
State trading entities	36
Licensing requirements	36
Quantitative restrictions	36
Foreign industry profile	37
Overview of world market	37
Country profiles	37
European Union	37
China	38
Russia	39
Brazil	39
Japan	39
Canada	40
Mexico	41
Appendixes	
A. Statistical tables	A-1
B. Explanation of tariff and trade agreement terms	B-1
Figures	
1. Bourbon production flow chart	8
2. Distilled spirits: Structure of the U.S. three-tier industry	11
3. Share of advertising expenditures, 1997	17
4. Distilled spirits: U.S. consumption of distilled spirits by category, 1998	24
5. Distilled spirits: U.S. shares of distilled spirits consumption by category, 1998	25
6. Distilled spirits: Percentage U.S. consumption of domestic and imported spirits for all spirits and by category, 1998	27

CONTENTS—Continued

		<i>Page</i>
Tables		
1.	Major U.S. distilled spirits producers/suppliers, parent companies, location of production facilities, products, and core brands	12
A-1.	Distilled spirits plants: Number of companies, employees, and establishments	A-2
A-2.	Distilled spirits: Number of U.S. companies producing selected bottled spirits	A-2
A-3.	Distilled spirits: Geographic distribution of licensed distilled spirits plants by State, 1999	A-3
A-4.	U.S. distilled spirits: Number of employees, payroll, manhours, wages, and value of shipments, 1993-97	A-3
A-5.	Distilled spirits: Price indexes, 1995-99	A-4
A-6.	Distilled spirits: U.S. Federal tax collections on distilled spirits, beer and wine, 1996-99	A-4
A-7.	Distilled spirits: Major world producers relative magnitude of spirits production	A-5
A-8.	Alcoholic beverages: U.S. domestic per capita consumption and total consumption, 1993-97	A-5
A-9.	Distilled spirits: Conversion factors	A-6
A-10.	Distilled spirits: U.S. domestic consumption by category and type, 1995-98	A-7
A-11.	Distilled spirits: U.S. domestic consumption of spirits and all alcoholic beverages by gender, 1998	A-7
A-12.	Distilled spirits: U.S. domestic consumption of spirits and all alcoholic beverages by age, 1998	A-7
A-13.	Distilled spirits: U.S. domestic consumption of spirits and all alcoholic beverages by category and age, 1998	A-8
A-14.	Distilled spirits: U.S. domestic consumption of spirits and all alcoholic beverages by region, 1998	A-8
A-15.	Distilled spirits: U.S. domestic consumption of spirits and all alcoholic beverages by household income, 1998	A-8
A-16.	Distilled spirits: U.S. consumption of U.S.-produced and imported spirits by category, 1996-98	A-9
A-17.	Distilled spirits: Value of product shipments and selected inputs	A-10
A-18.	Distilled spirits: U.S. domestic production of selected bottled spirits	A-11
A-19.	Distilled spirits: Production by volume, 1993-96	A-12
A-20.	Distilled spirits: Grains used in production, 1993-96	A-12
A-21.	Distilled spirits: Percent production capacity utilization rates for selected beverage industries, 1993-98	A-12
A-22.	Distilled spirits: Distillery establishment size by number of employees, 1997	A-13
A-23.	Distilled spirits: Geographic distribution of spirits production by State, 1996	A-13
A-24.	Distilled spirits: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1995-99	A-14
A-25.	Distilled spirits: World imports by selected countries and country groups	A-15
A-26.	Distilled spirits: World exports by selected countries and country groups, 1995-98	A-16
A-27.	Distilled spirits: Composition of U.S. imports for consumption, 1995-99	A-17

CONTENTS—*Continued*

	<i>Page</i>
Tables—<i>Continued</i>	
A-28. Distilled spirits: U.S. imports for consumption of selected spirits by major supplier countries, 1995-99	A-18
A-29. Distilled spirits: U.S. imports for consumption by major source countries, 1995-99	A-19
A-30. Distilled spirits: Harmonized tariff schedule subheadings; description; U.S. col. 1 rate of duty as of Jan. 1, 2000; U.S. exports, 1999; and U.S. imports, 1999	A-20
A-31. Distilled spirits: Composition of U.S. domestic exports, 1995-99	A-23
A-32. Distilled spirits: U.S. exports of domestic merchandise by principal markets, 1995-99	A-24
A-33. Distilled spirits: U.S. domestic exports of whiskey to major market countries and country groups, 1995-99	A-25
A-34. Distilled spirits: Applied tariff levels for selected countries, 2000	A-26
A-35. Distilled spirits: Per capita consumption of selected countries by region, 1995-98	A-27

ABSTRACT

This report addresses trade and industry conditions for the distilled spirits industry for the period 1995-99.

- Regulations and taxes significantly affect distilled spirits in the United States. Federal and State laws strictly regulate most activities of the industry, including production, advertising, and distribution; Federal, State and local taxes account for a significant percentage of the retail cost to consumers.
- Per capita consumption declined by more than 6 percent during 1993-97, consistent with a decades long trend of falling rates of consumption brought about by lifestyle changes, increased regulation, and stricter enforcement of driving under the influence laws. Apparent consumption remained stable during the period.
- The United States is the world's third-largest producer of spirits with production amounting to \$3.4 billion in 1997. During the most recent measured 10-year period, nominal rates of production marginally increased; however, the real value of production, adjusted for inflation, fell by 26 percent, with the production value of bottled spirits falling by over 31 percent. With the exception of unprocessed whiskey, volumes of production for most spirits similarly declined.
- The U.S. and world spirits industry underwent major consolidation and restructuring during the 1990's. The three-leading U.S. producers/ suppliers are subsidiaries of multinational corporations. The top 10 world producers account for 70 of the leading 100 premium brands marketed. The U.S. wholesale distribution tier has also undergone rapid consolidation during the period.
- The United States ranked as the world's leading importer of distilled spirits with the value of imports totaling \$2.4 billion in 1999, nearly three times the value of the world's second leading importer, Japan. U.S. exports totaling \$440 million of mainly bourbon and Tennessee whiskey, ranked U.S. shipments among the five leading exporting nations. The U.S. trade deficit for distilled spirits amounting to almost \$2.0 billion, expanded by nearly 60 percent during 1995-99, with the United States registering trade deficits with 8 out of the top 10 trading partners for spiritous beverages in 1999.
- Tariff levels for the world's leading trading nations, particularly the developed nations of the OECD, are relatively low compared to developing nations. The United States and the EU maintain duty-free rates on most categories of spirits as part of a distilled spirits "zero for zero" tariff accord.

INTRODUCTION

General

This summary covers the following distilled spirits:

- Spirits obtained by distilling grape wine or grape marc, including grape brandies; pisco and singani.
- Whiskies,¹ including Irish whiskey, Scotch whisky and bourbons.
- Rums and tafia.
- Gin and geneve.
- Vodka.
- Liqueurs and cordials.
- Aquavits.
- Bitters.
- Brandy that is not produced from grapes, including slivovitz, kirschwasser, and ratafia.
- Tequila.
- Brandy imitations.
- Mescal.
- Compound alcoholic preparations used in the manufacture of beverages.

This summary does not cover beer, wine, or spirits distilled for uses other than human consumption. All the covered products are classified in chapter 22 of the *Harmonized Tariff Schedule of the United States* (HTS),² except for compound alcoholic preparations, which are provided for in HTS chapter 21. This report provides information on the structure of the U.S. and foreign distilled spirits industries, domestic and foreign tariff and trade measures, and the competitiveness of U.S. industries in domestic and foreign markets. The study principally examines the period 1995-99;³ however, historical data will show longer-term trends.

The spirits industry is a highly regulated industry in the United States, subject to Federal, State and local laws that govern many functions of the sector. At the Federal level, the Treasury Department's Bureau of Alcohol, Tobacco, and Firearms (BATF) enforces Federal laws relating to distilled spirits while State Governments (and some local jurisdictions) have regulatory control on distribution and sales within their borders.

¹ For products of U.S. and Irish origin, the spelling is "whiskey," and for products originating elsewhere the spelling is "whisky." In this report, the spelling "whiskey" will be used generally.

² The Standard Industrial Classification (SIC) code for alcoholic beverage is 2085, except for brandies categorized under SIC 2084. Distilled spirits are classified under the NAICS product code 312140, while brandy is classified under NAICS product code 312130.

³ Where the most recent data are unavailable, the latest 5-year data available will be used to examine trends. 3

The U.S. distilled spirits industry is characterized by a three-tier structure of (1) producers/suppliers, (2) wholesale distributors, and (3) retailers. Each tier must operate independently from the other two tiers as mandated by Federal and State laws. During the last two decades, the number of companies producing distilled spirits, totaling 44 firms in 1997, declined by 31 percent, while the number of distilled spirits plants (60 facilities) fell by 42 percent. Decreased demand, regulation, and legal pressures have forced major consolidation in the domestic and international spirits sector during the 1990's. The industry is highly concentrated, with many of the largest U.S. producers integrated into the global industry that is dominated by a few large worldwide producers/suppliers.

Consumption in the United States and many major world markets has been characterized by static to slow overall growth, while demand in potential growth markets, such as countries in Asia and Latin America has been modest owing to economic weakness. Although overall volume has been static, U.S. consumers have shifted demand to premium higher valued domestic and imported products for most major spirits types. U.S. employment and per capita consumption have also been declining in the sector. Most production of distilled spirits by the world's leading producers is consumed domestically, while those products that are traded internationally are produced by a concentrated number of large multinational corporations that produce and market a wide portfolio of brands.

Description

Distilled spirits are distinguished in the industry by three major groupings, "white," "brown," and "specialties." Within these major categories, spirits can be further classified by fermentation base, distillation method, alcoholic strength, and country or region of origin. White spirits include vodka, gin, rum, and tequila; brown spirits consist of whiskies; specialties include brandies, liqueurs and cordials, and other spiritous beverages.

White, brown, and specialty spirits including whiskies, most vodkas, gin, and others result most often from fermentation and distillation of grain (corn, wheat, rye, barley, etc.).⁴ However, spirits are also obtained from bases of fruit, plants, roots, and tubers.⁵ Examples include brandies (grapes); rums (sugarcane and sugarcane-based materials, such as molasses); gin and geneve (barley, rye, or corn redistilled with juniper berries and other flavors); vodka (potatoes); brandy that is not produced from grapes, including slivovitz, kirschwasser, calvados, and ratafia (cherries, apples, and others); and tequila (Mexican blue agave plant). In addition some spiritous beverages are produced with spirits that are redistilled or blended with flavoring spices. Examples are: liqueurs and cordials (based on brandy, cognac, whiskey, and rum with added extracts and flavors); vodka, gin, and some liqueurs that are flavored and/or redistilled with fruit, spices, seeds, roots, flowers, sugar, or essences. Some distilled spirits are also aged, such as whiskeys and brandy.⁶ Aging is typically carried out in oak barrels that impart color, additional flavoring, and aromas to the

⁴ G. Brown, *Classic Spirits of the World: A Comprehensive Guide* (New York, NY: Abbeville Press, 1995), pp. 59-70 and 153-188.

⁵ *Ibid.*, pp. 191-193.

⁶ Some premium rums, tequilas and other spirits are also aged.

liquors. Spirits range from low proofs, such as the liqueur creme de cassis, 32 proof,⁷ to very high proofs, such as 150 proof rums and 196 proof grain neutral spirits.

Spirits are also distinguished by national or regional designation codified in U.S. law. Examples include brandies—cognac and armagnac produced exclusively in France; Spanish brandy, Greek brandy; and South American Pisco brandy. Many whiskies are also designated distinctive products of national origin such as Scotch, Irish, Canadian, and bourbon (U.S.) whiskies. Tequila is also designated a distinctive product of national origin (Mexico) and, like all other so designated spirits marketed in the United States, is manufactured in compliance with the laws of the manufacturing country.⁸ Some vodkas are also marketed by country of origin, whether Russian, Polish, Finnish, or Swedish vodkas.

Production Methods

The production of distilled spirits consists of two essential processing steps: (1) fermentation, whereby the sugar in organic substances such as grain mash or fruit juice is converted to alcohol, and (2) distillation, whereby of the fermented beverage is purified and strengthened by boiling, condensation, and collection. Fermentation is the naturally occurring chemical process that breaks down the sugar of organic substances into ethyl alcohol through a chemical reaction with the natural agent yeast. During this process, each molecule of sugar reacts with the yeast and is converted into two molecules of ethyl alcohol or ethanol, C_2H_5OH , and two molecules of carbon dioxide gas, CO_2 .⁹ The gas escapes leaving behind the fermented product such as beer or wine. The resulting alcoholic beverage is relatively low in alcohol content (about 8 percent) and retains much of the underlying flavors and characteristics of the primary base of the organic substance such as grain, fruit, or molasses.

Distillation is a heating process of boiling the fermented liquid, then collecting and condensing the vapor in a “still.” The procedure of separating the alcohol from the water-based fermented solution is possible because alcohol boils at a lower temperature, 173 degrees Fahrenheit, than water at 212 degrees Fahrenheit. The cooling and collecting of the resultant vapors into liquid form yields a strengthened and purified alcoholic beverage of about 20 percent alcohol by volume after the initial distillation. Subsequent distillations (for pot stills, see below)¹⁰ yield more concentrated alcohol solutions that can reach 96 percent alcohol by volume,¹¹ yet most spirits are distilled out at between 60 and 80 percent

⁷ Proof is defined as two times the percentage amount of ethyl alcohol by volume. For example, 32 proof creme de cassis contains 16 percent alcohol.

⁸ U.S. Code of Federal Regulations, (CFR) Title 27, Alcohol, Tobacco Products and Firearms labeling and advertising of distilled spirits.

⁹ Harold J. Grossman, *Grossman's Guide To Wines, Beers, And Spirits*, 6th (New York: Charles Scribner and Sons, 1977), p. 4; G. Brown, p. 11, and K. Herstein and T. Gregory, *The Chemistry and Technology of Wines and Liquors* (New York, DP: Van Nostrand Co., Inc., 1935), p. 79.

¹⁰ Column still distillation requires only one distillation to achieve the desired alcoholic strength. See “stills” section.

¹¹ Grossman, p. 305.

alcohol.¹² Although many of the underlying characteristics of the fermented beverage are lost in the distillation process, the resultant distillate is more pure, stronger in alcohol by volume, and retains some of the characteristics of the underlying substances. These retained substances are called congeners and are essential to the spirits having particular characteristics highly valued by spirits producers. The higher the proof at which the spirit is distilled, the less flavorful the beverage, such that vodkas and grain alcohols of high proof are neutral in flavor.

Stills

Various modifications and perfections of the distilling process notwithstanding, distillation methods and technology have not significantly changed in more than a century.¹³ The two basic types of stills are the traditional “pot” still; and the more complex “patent” still. The pot still is an enclosed copper kettle that narrows toward the top to allow for collection of vapors as the fermented organic contents are boiled. A downward pipe from the pot still’s head funnels the distilled vapor through cold water, resulting in the vapor’s condensation and collection. The pot still is labor-intensive as the pot must be loaded for each distillation “cycle;” dregs must be emptied, and only a single batch of alcohol can be distilled at a time.¹⁴ Pot stills produce spirits that carry through more of the flavors, aromas, and fragrances of the underlying fermented material. Pot stills are used to produce some whiskies (such as some single-malt scotch), brandies, and other spirits.

The second, more recently developed, distilling device is the patent or continuous column still of two chambers. A column has steam rising and wash (or the weak fermented liquid) descending through successive interior baffles or “stories.”¹⁵ The steam strips-out alcohol from the wash, and carries the alcohol to a second chamber, called a “doubler,” for condensation at the required strength.¹⁶ Compared with the pot still, the column still requires less labor, costs less to operate, and produces higher proof, purer, and more uniform spirits. Column stills are used to produce whiskies, (particularly blended scotch,¹⁷ and bourbon and Tennessee whiskies), some brandies,¹⁸ vodka, high-proof grain alcohol, and other spirits.

Bourbon production

The unique distilled spirit produced exclusively in the United States is straight whiskey, including straight bourbon and Tennessee straight whiskey. Straight whiskey,¹⁹ according

¹² The higher the volume of alcohol at which a spirit is distilled, the more neutral the spirit, such that spirits above 90 percent alcohol are essentially flavorless neutral grain spirits.

¹³ Brown, pp. 11-17.

¹⁴ Ibid.

¹⁵ Ibid., pp. 11-13, 254.

¹⁶ Ibid., pp. 11-13.

¹⁷ The smooth and more uniform quality of spirits produced from a continuous still are used in many blended scotch varieties. Ibid. p. 18.

¹⁸ Brown, pp. 11-13.

¹⁹ U.S. Federal codes use the spelling “whisky” for all whiskies whether or not they are produced in the United States.

to U.S. Federal law, must be made from a mash of grain, distilled at no higher than 160 proof aged in new charred oak containers for at least 2 years,²⁰ and bottled at a minimum of 40 percent alcohol. In addition, bourbon must be produced from a mash or “distillation beer,” composed of at least 51 percent corn.²¹ Tennessee whiskey²² is almost identical to bourbon, but is filtered through maple charcoal before aging, and because of this additional processing step, is designated as a unique category of “straight whiskey.”

Figure 1 provides a flow chart of the bourbon production process. Mashing, whereby grain is converted into starch, is the initial step of production. The basic sweetness of the spirit comes from corn, the predominant grain ingredient used in bourbon. Most bourbon formulas are composed from 70 percent to 90 percent corn. In addition, flavoring grains such as wheat and rye are added to the mash to provide additional flavoring characteristics to the whiskey. First the corn is milled and boiled in water,²³ which breaks down the corn cells releasing starch. The temperature is then reduced, and depending on the formula, wheat and/or rye and barley are added to the mixture. Enzymes in the barley assist in the conversion of the starch in the mash into simple sugars that will become alcohol during the fermentation process. The entire mashing process takes under an hour. The converted mash is cooled to room temperature in preparation for fermentation.²⁴

After the mash is cooled, it is sent to a fermentation tub, a large tank, where a water solution of yeast (a fungus) is added to the mixture to facilitate fermentation. During fermentation, organic compounds called esters or fruity flavor substances are created that add flavoring qualities to the fermented mash.²⁵ All bourbon and Tennessee whiskeys are produced using the “sour mash” method of fermentation, where the fermented mash from a previous distillation, also called “backset,” is added to the mash for each new fermentation.²⁶ This ensures consistency of character between batches and controls acidity to improve the environment for the new yeast.²⁷

Fermentation takes 2 to 4 days, after which the newly fermented mash or “distillers beer” is ready for distillation. Most distillation of bourbon and Tennessee whiskey is carried out in column stills²⁸ where the “fermenter’s beer” is run through the various heated baffles of

²⁰ Straight whiskeys must be labeled if aged for less than 4 years.

²¹ CFR, Labeling.

²² Includes “Jack Daniels” and “George Dickel” brands.

²³ The water in Kentucky and Tennessee is an important ingredient in the production of bourbon and Tennessee whiskey. It naturally filters through limestone in the region making it high in calcium and free of iron salts, which aids the yeast in the fermenting process. Charles Cowdery, “The Bourbon Barrel, Mere Container or Active Partner?” *Malt Advocate*, found at <http://www.realbeer.com/maltadvocate/S95/S95COWDR.html>, retrieved Jan. 19, 2000.

²⁴ John Hansell, “The Lincoln County Process,” *Malt Advocate*, found at <http://www.realbeer.com/maltadvocate/u95/U95DAN.html>, retrieved Jan. 19, 2000.

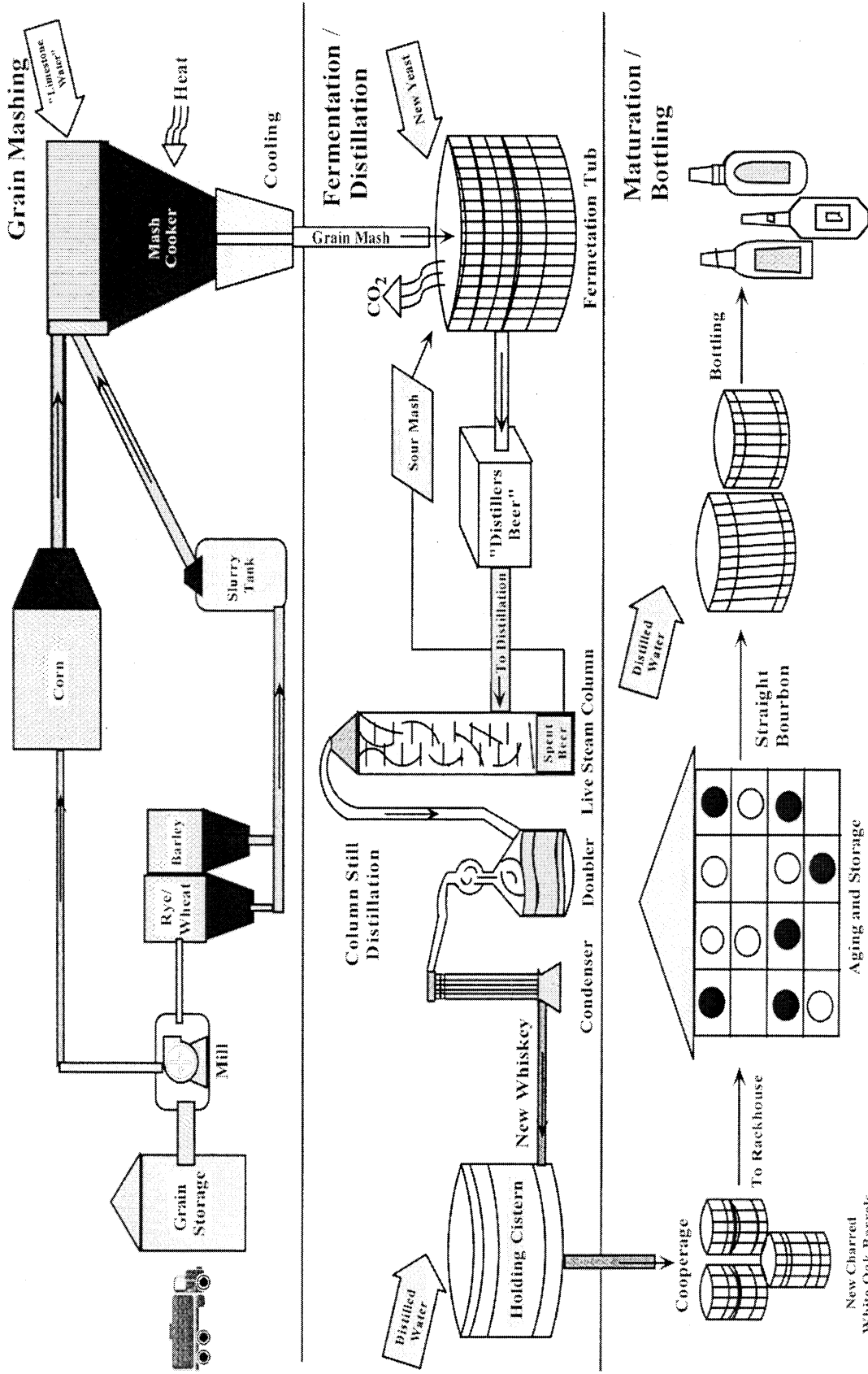
²⁵ “From Cereal Corn to Alcohol,” *The Whisky Store*, found at <http://thewhiskystore.com/experts/starch.htm>, retrieved Jan. 19, 2000.

²⁶ Cowdery, “So What Is Bourbon Exactly?.”

²⁷ “The Baffling World of Bourbon,” *The Whisk(e)y Pages*, found at http://whiskeypays.com/All_American/story_1/page3.html, retrieved Dec. 21, 1999.

²⁸ At least one distiller is now using the traditional pot still for distillation of bourbon, while a number of others are considering this distillation method, particularly for highly aged premium 7 whiskeys. “Bourbon’s Great Confidence Trick,” *Wine and Spirit International*, Jan. 2000, p. 30.

Figure 1
Bourbon production flow chart



Source: Compiled by USITC staff from various sources.

a live steam column which separates the alcohol from the mash. During this process, the whiskey is in a vapor state, allowing the volatile components from the mash to be burned off.²⁹ The vaporized whiskey is then transported to the second chamber of the column still, variously called a “doubler” or “thumper,” that further purifies and strengthens the new spirit to the desired alcohol content.³⁰ New bourbon whiskey typically exits the column still at a concentration between 55 and 65 percent alcohol³¹ and is a colorless spirit that is harsh and relatively sweet compared to the final product.

From the still, the spirit is moved to holding cisterns where distilled or demineralized water may be added to the new spirit to reduce the alcohol content before barreling and aging.³² Maturation is the final step in the production of bourbon and imparts color and additional flavoring to the spirit.³³ Federal regulations specify that bourbon whiskey be stored in new charred oak barrels—most bourbon producers use American white oak. Barrels are typically constructed in 50-gallon sizes with the insides charred or toasted, which caramelizes the natural sugars in the wood.³⁴ Aging in new charred barrels is an essential production step because the whiskey derives its distinctive aroma, red amber color, mellowness, and additional flavoring characteristics from the porous oak barrel.³⁵ Barrels are stored in warehouses for a minimum of 2 years, but typically they are racked for over 4 years. Once sealed, barrels cannot be topped off or re-filled. During aging, the whiskey evaporates through the barrel, the portion lost is known in the industry as the “angel’s share.” As a result, the alcohol content rises. Before bottling therefore, distilled water may be added to adjust the alcohol content. Most bourbons are bottled between the legal minimum of 80 proof and 100 proof. Once bottled, bourbon (and all spirits) does not mature further.

²⁹ Hansell.

³⁰ Ibid. and, Mark Vaughan, “Making Bourbon and Tennessee Whiskey,” reprinted by permission of the author from *Sante*, vol.1, No. 3, Mar./Apr. 1997, found at <http://www.straightbourbon.com/articles/sm97MarApr.html>, retrieved Dec. 21, 1999; and “Science of ‘Early Times’ Smoothness - Six Steps to Quality,” Brown and Foreman Beverages Worldwide, found at <http://www.earlytimes.com/heritage/3step.html>, retrieved Jan. 20, 2000.

³¹ Federal regulations specify that bourbon cannot be produced to exceed 80 percent alcohol. CFR, labeling.

³² Some distillers produce at a lower proof to manufacture a heavier bourbon with more grain characteristics, while other bourbon producers distill at a higher alcohol content which yields a lighter smoother whiskey, then add distilled water to the new whiskey to reduce alcohol content for barreling and maturation. Cowdery, “So What *Is* Bourbon Exactly?”

³³ Federal regulations specify that no color or flavoring may be added to straight whiskey.

³⁴ Mark Vaughan, “Making Bourbon and Tennessee Whiskey.”

³⁵ During maturation: “the whiskey gradually soaks into the wood, passing through the char into the ‘red layer’ of partially-caramelized sugars. In summer, warm temperatures cause the liquid to expand, forcing it deeper into the wood. When the whiskey cools and contracts, it bring back flavor and color from the ‘red layer.’ Meanwhile, carbon in the char transforms and ‘softens’ the fusel oils that make ‘green’ whiskey so harsh.” Cowdery, “The Bourbon Barrel, Mere
9
Container or Active Partner?”

U.S. INDUSTRY PROFILE

Industry Structure

The structure of the U.S. distilled spirits industry is provided in figure 2. The current three-tier structure of the U.S. industry developed out of post-Prohibition Federal legislation and the 21st amendment to the U.S. Constitution. Federal and subsequent State legislation prohibit producers of alcoholic beverages, including manufacturers of distilled spirits, from operating wholesale distribution and/or retail businesses associated with the alcoholic beverages industry. The three tiers of the industry—producer/supplier, wholesaler, and retailer—operate independently from one another, with each of the three tiers proscribed from operating or having financial interests in any other tier in the industry. See “Government Regulation” and “Methods and Distribution” sections for further discussion of the functions of the three tiers.

Number, Concentration, Geographic Distribution of Firms

Number and level of concentration of firms

Distilled spirits were produced by 44 companies at 60 production facilities in 1997, representing a continuous decline of both companies (31 percent) and distilling plants (42 percent) during the past two decades (table A-1). The decline in both companies and distilleries reflects a decades-long trend of declining consumption, a mature spirits market, increased regulation, and legal burdens that have forced spirits manufacturers to either merge with competitors or exit the industry.³⁶

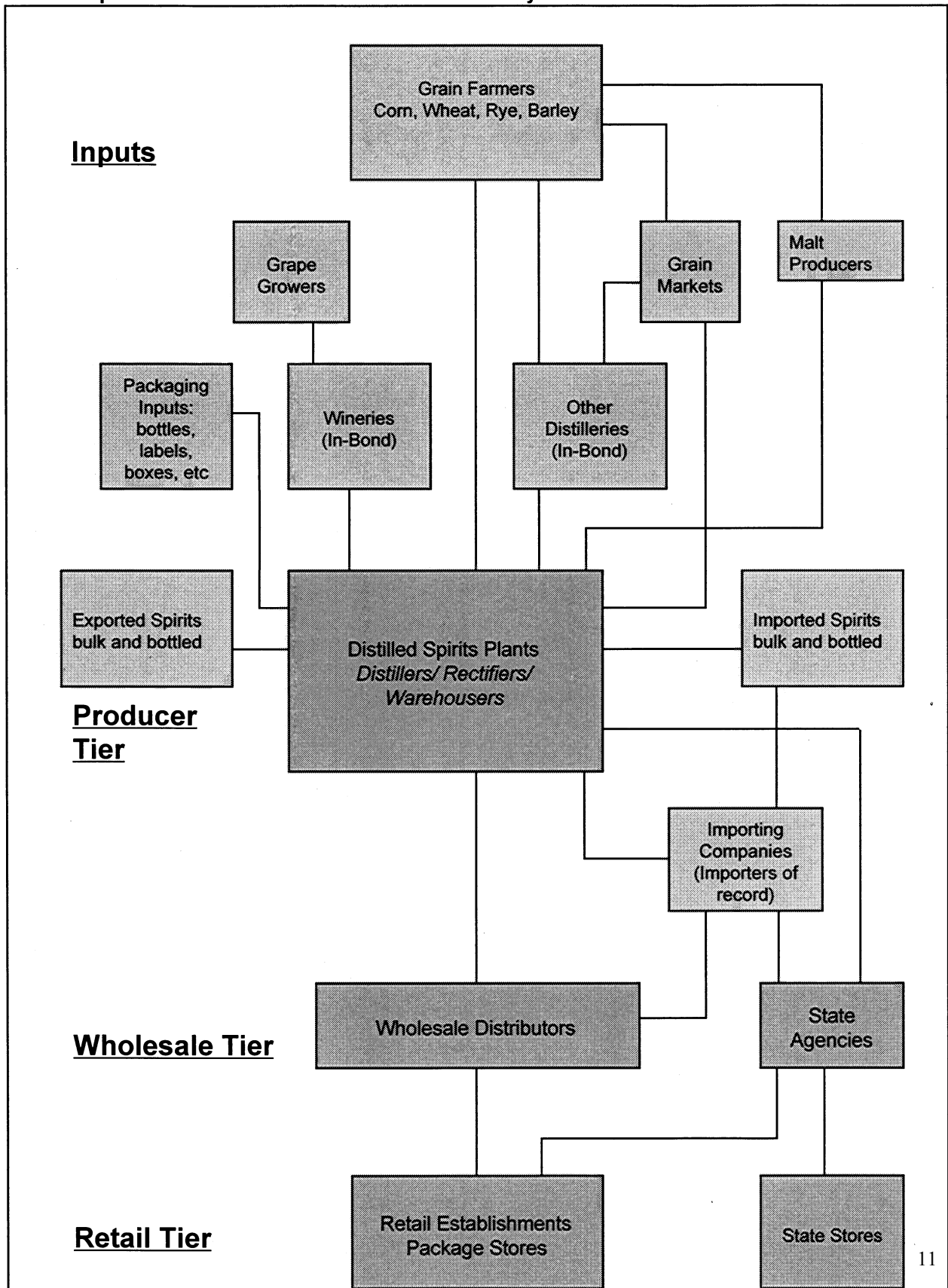
The most recent Census of Manufactures by the U.S. Department of Commerce in *Distilleries 1997*, indicates that the number of companies in the United States distilling specific categories of spirits similarly declined during 1987-97. Businesses producing all types of whiskey fell by 41 percent to 37 companies (table A-2),³⁷ while companies producing rum and gin declined by about 50 percent to 9 and 12 companies, respectively. For businesses distilling vodka, liqueurs and cordials, and all other bottled liquors, exit rates from the industry ranged from 35 percent to over 48 percent during the period.

The U.S. spirits industry is highly integrated into the world spirits industry, inasmuch as many of the leading spirit brands marketed in the United States are owned by multinational corporations that produce, market and/or are distribution agents for a wide variety of internationally-produced and traded brands (see table 1). Concentration within the U.S.

³⁶ Standard & Poors' *Industry Surveys*.

³⁷ Data regarding businesses producing whiskey may reflect double counting. For example, companies producing unprocessed whiskey may also produce blends of whiskey and therefore 10 show up in both categories in table A-2.

Figure 2
Distilled spirits: Structure of the U.S. three-tier industry



Source: Compiled by the Commission.

Table 1
Major U.S. distilled spirits producers/suppliers, parent companies, location of production facilities, products, and core brands¹

U.S. subsidiary, parent company (parent company's headquarters location)	Distilled spirits		
	Major production regions	Products portfolio	Core brands marketed ²
United Distillers and Vintners North America, Diageo (United Kingdom)	North America Europe Caribbean	Whiskey Gin Vodka Rum Liqueurs Tequila Brandy/Cognac	Johnny Walker, J&B Rare, Gordon's, Gilbey's, Tanqueray, Smirnoff, Malibu, Baileys, Jose Cuervo, Hennessy
Allied Domceq, USA Allied Domecq PLC (United Kingdom)	Europe North America Asia Caribbean	Whiskey Gin Tequila Liqueurs Brandy/Cognac	Ballantine's, Teacher's, Laphroaig, Maker's Mark, Beafeater, Sauza, Harvey's Bristol Cream, Kahlua, Courvoisier, Presidente
Joseph E. Seagram & Sons, Seagram Co. Ltd.³ (Canada)	North America South America Europe Asia Australia	Whiskey Gin Rum Vodka Brandy/Cognac	Chivas Regal, Seagram 7 Crown, Four Roses, Crown Royal, Seagram V.O., Seagram Gin, Glenlivet, Captain Morgan, Absolut, Martell
Bacardi-Martini USA, Bacardi-Martini (Bermuda)	North America Central America South America Caribbean Europe	Rum Whiskey Brandy Gin Vodka Liqueurs Premixed cocktails	Bacardi, Dewars, Bombay Sapphire
Jim Beam Brands, Fortune Brands (United States)	United States - Kentucky Canada United Kingdom	Whiskey Gin Vodka Cordials Premixed cocktails	Jim Beam, DeKuyper Cordials, Ronrico
Brown-Forman (United States)	United States - Tennessee Canada Caribbean Europe	Whiskey Tequila Brandies Premixed cocktails	Jack Daniels, Bushmills, Glenmorangie, Canadian Mist, Southern Comfort
Barton Inc. Canadaigua Brands (United States)	North America	Vodka Whiskey Tequila	Barton vodka, Skol, Black Velvet, Montezuma, Canadian LTD, Thor's Hammer Vodka

¹ List is not all-inclusive and subject to change.

² Includes agency brands that are marketed but not produced by company.

³ At the time of publication French multinational utilities and media conglomerate, Vivendi, is acquiring Seagram subject to shareholder approval. If approved, Seagram will divest itself of its alcoholic beverages portfolio.

Source: Compiled by the Commission.

industry must be viewed within the context of the global spirits industry, where the top 10 multinational companies produce 70 of the leading 100 premium brands marketed.³⁸ In terms of market share, the five leading global marketers of spirits accounted for 42.5 percent of the world market for premium spirit brands,³⁹ with the top 10 companies accounting for nearly 60 percent of global spirits sales for premium spirits in 1998.⁴⁰ Moreover, the largest distilled spirits company is United Distillers & Vintners, which is more than double the size of the next largest competitor. These large multinationals market a wide range of spirits including brown, white, and specialty spirits, and are characterized by extensive product diversification (table 1).

Geographical distribution of firms

Data from the BATF indicates that licenses for operating distilled spirits plants (DSPs) for beverage purposes were held by 88 establishments in 26 States in 1999 (table A-3).⁴¹ The location of licensed distilled spirits plants is generally a function of geographic proximity to inputs. For example, California, New York, Oregon, and Washington, the largest U.S. grape- and wine-producing States, account for 45 percent of all U.S. licensed DSPs numbering 40. In addition to brandy, which is distilled from wine, neutral ethyl alcohol is also manufactured from wine and can be used as an input to produce other spirit types. California, the center of U.S. wine and brandy production,⁴² is the leading State, with 26 licensed DSPs, located mainly at wineries and vineyards. New York, another large producer of wine and grapes, has 7 licensed DSPs.

Kentucky, located close to sources of corn and limestone enriched water, is the center of U.S. whiskey production and has 13 licensed DSPs. Tennessee has three DSPs that principally manufacture Tennessee straight whiskey. Grain neutral spirits primarily made from corn are produced in Midwestern States such as Illinois, Indiana, Michigan, and Ohio. Florida has two licensed DSPs, Bacardi Bottling Corp. and Mango Bottling Inc., that are close to major rum-producing regions. Puerto Rico, although not included in table A-3, whose distilleries are regulated by the BATF has 21 licensed distilleries producing mainly rum. Although DSPs are generally near sources of inputs, distilled spirits are produced in most regions of the country including the Northeast and Mid-Atlantic States (10 DSPs),⁴³ and Southern States (7 DSPs),⁴⁴ see table A-3.

³⁸ "World's Top Spirits Companies, Concentrate on Organic Growth" *Impact*, vol 29, Nos. 20 & 21, Oct. 15 & Nov. 1, 1999, p.68.

³⁹ "Premium spirits" is an important distinction. These premium brands do not include locally produced and regional brands manufactured in countries such as China and Brazil.

⁴⁰ "World's Top Spirits Companies," p. 8.

⁴¹ This total differs from Census data referenced on page 11 of this report as these are *licensed* establishments.

⁴² California accounts for about 90 percent of all domestically-produced wine.

⁴³ Not including New York.

⁴⁴ Not including Kentucky, Tennessee, and Florida.

Employment, Earnings, and Productivity

U.S. distilled spirits producers (NAICS 312140)⁴⁵ employed a total of 6,500 employees in 1997, of which 71 percent, or 4,600, were production workers. During 1993-97, total employment in the industry declined by 9 percent, while the workforce employed in production fell by 10 percent, mainly owing to consolidation within the industry and the addition of labor saving technology. Wages for all workers increased 3 percent to \$252.4 million in 1997, while total wages earned by production workers declined nearly 2 percent to \$158.4 million during 1993-97 (table A-4). Hourly wages per hour for production workers increased modestly, increasing 5.2 percent during the period to \$16.30 in 1997.

Worker productivity in the industry increased during 1993-97 with fewer workers required to produce more output. In 1993, 10.4 million man hours were required to produce \$3.6 billion of distilled spirit products, yet by 1997, 9.7 million man hours produced nearly \$4 billion in product. Increased worker productivity, measured in output per production worker, increased by over 17 percent during the period (table A-4). Productivity improvements resulted from a focus by U.S. spirit companies on production of higher -value premium brands, and by the addition of more efficient production technologies and automation, particularly after distillation, including improved warehousing techniques, bottling, and finished product distribution management.⁴⁶

Vertical and Horizontal Integration

The three-tier structure of the distilled spirits industry prohibits companies in each of the three tiers (producers/suppliers, wholesalers, and retailers) from operating businesses in other sectors of the system. This framework severely restricts the kind of downstream vertical integration that characterized the pre-Prohibition era alcoholic beverages industry, in which spirits producers and brewers owned and operated retailing establishments called “saloons” or “tied houses.” The perceived excesses of that system contributed to the drive for Prohibition (1920-1933).⁴⁷ Upon repeal, the 21st amendment gave States the power to regulate the sale and distribution of alcoholic beverages within their jurisdictions. In addition, the U.S. Congress enacted the Federal Alcohol Administration Act that “prohibited suppliers from having interests in retail outlets and from engaging in many of the types of commercial practices which were associated with the ‘tied house’ prior to Prohibition.”⁴⁸ Upstream vertical integration is limited as major inputs in the production process for spirits are farm products, spirits-manufacturing equipment, and packaging materials.

⁴⁵ The NAICS classification corresponds with SIC 2085.

⁴⁶ For example see “Conveyors, palletizers cuts costs, product damage,” *Modern Materials Handling*; Mid-Sept. 1998. “What’s in Storage,” *Beverage World*, Aug. 15, 1998. Stefanie Ringo, “The QC Challenge,” *Beverage World*, Feb. 15, 1999.

⁴⁷ Steve L. Barsby and Associates, *The Regulatory and Economic Basis of Franchised Wholesaling in the Alcoholic Beverages Industry*, prepared for the Wine and Spirits Wholesalers of America Inc., 1983.

⁴⁸ *Ibid.*, p. 1.

The distilled spirits industry has undergone major consolidation and restructuring during the past decade. Many of the industry's largest producers horizontally integrated with competitors through merger and acquisition, buyouts, joint-venture agreements, and marketing alliances due to overall flat or modest sales growth in most major world markets, increased costs of marketing and distribution, increased regulation, and social and legal pressures. Horizontal integration has also allowed manufacturers to acquire differentiated product lines across the wide spectrum of white, brown and specialty products that are marketed globally, as well as enabling suppliers to increase the exposure of existing brands to new markets. The largest merger in the industry to date occurred in 1997 between Grand Metropolitan and Guinness PLC, creating Diageo PLC, whose subsidiary United Distillers and Vintners (UDV) is the leading U.S. and global spirits producer. Other acquisitions include Canadaigua's acquisition of Barton Brands creating the fourth-largest U.S. spirits producer,⁴⁹ and the acquisition of leading spirits brands by other global suppliers, Barcardi and Seagram & Sons.

Distilled spirits producers also integrate marketing and distribution operations through joint-venture agreements. An example of such a partnership is the joint-venture agreement among Jim Beam Brands (U.S.), Remy Cointreau (France), and Highland Distillers (U.K.). Under the partnership agreement, the distillers fund a separate company that markets and distributes their products. These ventures allow manufacturers to maintain independence yet pool marketing and distribution resources, enabling them to compete in the increasingly consolidated global industry.⁵⁰ Another important integration method in the global spirits industry is large spirits producers serving as agents for smaller distillers's products. The large producers with extensive marketing and distribution networks add these products, referred to as "agency brands," to their portfolios. Under this arrangement, smaller producers enjoy the marketing and distribution clout of large global industry leaders, while large producers add valuable brands to their product portfolios. Examples of agency brand relationships include UDV marketing and distributing "Jose Cuervo" brand tequila, Allied Domecq representing "Kahlua" liqueur, and Joseph Seagram & Sons representing "Absolut" vodka, (table 1).

Horizontal integration and consolidation through mergers, buyouts, and closings have also characterized the wholesale tier of the alcoholic beverages industry. Over the last four decades the number of wine and spirits wholesale establishments declined by 75 percent: having numbered over 10,000 in 1960, there are now just over 2,000 wholesalers in the United States.⁵¹ Markets that once had 12 to 24 wholesale tier competitors now have only 2 to 4 competitors.⁵² The most recent survey of the U.S. wholesale/distributor tier by *Impact*, the alcoholic beverages industry news and research firm, indicates that at the end of 1999, the top five U.S. wholesalers maintained a 33.1-percent market share, increasing from a 23.1-percent share in 1990. Moreover, the top 25 wholesale distributors, in terms of sales revenue, accounted for over 60 percent of the U.S. market in 1999.⁵³

⁴⁹ *Impact*, vol. 29, No. 13, (July 1), 1999, p. 24.

⁵⁰ *Impact*, vol. 29, Nos. 15 & 16, (Aug. 1), p. 4.

⁵¹ Wholesalers carry both distilled spirits and wine. Statistics according to wine industry trade associations: American Vintners Association, Wine Institute, Et Al, Facts on interstate wine shipping, found at <http://www.freethegrapes.org/>, retrieved Mar. 15, 2000.

⁵² *Impact*, vol. 28, Nos. 8 & 9, (Apr. 15) and (May), 1998, p. 18.

⁵³ *Impact*, vol. 29, No. 9, (May 1), 1999.

Much of the realignment and consolidation in the wholesale tier was brought about by consolidation in the producer tier. For example, International Distillers & Vintners and United Distillers each had their own wholesale distributors in particular U.S. markets, but since their recent merger are reportedly reorganizing distribution contracts to a single distributor for each market under the newly formed company, UDV.⁵⁴ Moreover, the overall decline in spirits consumption, the reduction in the number of producers and retailers, and the technological and marketing advantages enjoyed by larger wholesaledistributors suggest that further consolidation is likely in the wholesale tier. Horizontal integration through consolidation is also occurring in the retail tier as larger discount outlets are displacing smaller package stores.

Marketing

The marketing strategy for distilled spirits producers and wholesalers centers around developing and maintaining branded products. The wave of consolidation and restructuring among the world's leading producers during the past decade focused on realigning and optimizing brand portfolios. Many of the leading distillers restructured brand portfolios to position marketing resources to higher-value premium core brands.⁵⁵ For example, industry leader UDV is concentrating its marketing efforts on nine priority brands that currently provide over 50 percent of the company's revenue, and are projected to account for 75 percent of the firm's profits. Other leading distillers have similar core-brand⁵⁶ marketing strategies, repositioning their portfolios in mature world markets, particularly in the United States where premium quality brands have experienced sales and volume growth.⁵⁷

Focusing on enhancing brand image and awareness, advertising and promotion efforts are targeted towards both retail sales (package stores) and on-premise sales (restaurants and bars).⁵⁸ Expenditures for spirits advertising totaled \$256.3 million in 1997, with 91 percent of the outlays spent on promoting the top 50 brands.⁵⁹ Moreover, the leading 25 producers/suppliers accounted for 99.9 percent of all advertising dollars.⁶⁰ Advertising is focused on 4 media categories: magazines, newspapers, outdoor (billboards, etc.), and broadcast media. Magazine advertisements receive the majority of funding, accounting for \$212 million or nearly 83 percent of total advertising outlays in 1997 (figure 3).

⁵⁴ Ibid., p. 6.

⁵⁵ Sir George Bull, a spirits industry executive for over 40 years, and the former chairman of UDV parent company, Diageo PLC, commented on the importance of brands at a recent spirits industry conference: "In an ocean of change [that has beset the industry over the last several decades, including shrinking volumes and stagnant sales], the brand stands like a gigantic rock that the wind and waves beat against without any effect whatsoever...our trade relies on brands. We must always have faith in them and invest in them-that much will never change." The Impact 22d Annual Marketing Seminar, Mar. 12, 1998. *Impact*, vol. 28, Nos. 8 & 9, (Apr. 14) and (May 1), 1998, p. 15.

⁵⁶ Core brands may include third-party "agency brands."

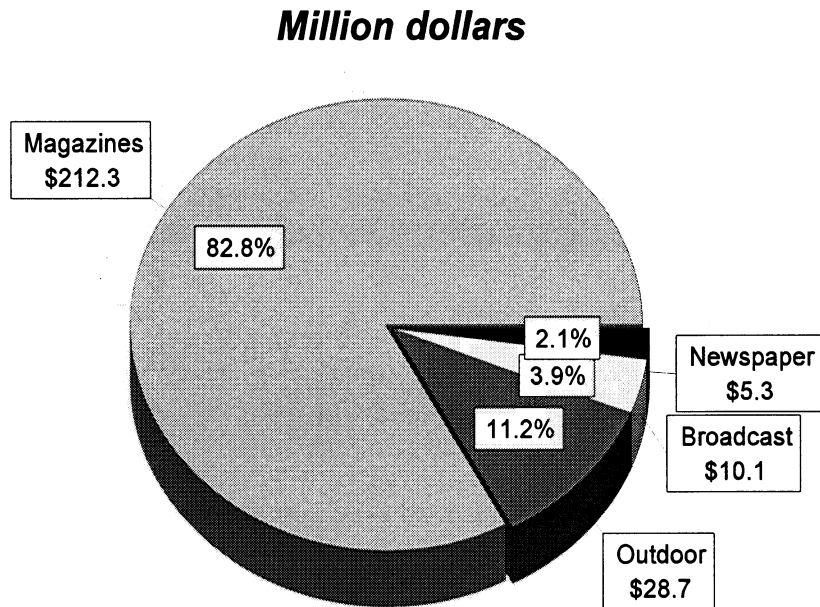
⁵⁷ For marketing strategies of the world's leading distillers, see *Impact*, vol. 29, Nos. 20 & 21, Oct. 15 and (Nov. 1, 1999), pp. 8-18.

⁵⁸ For brand marketing strategy see, Cheryl Palmer, "The high-risk, big reward world of brand revitalization," *Beverage World*, Feb. 15, 1999, p. 96.

⁵⁹ Adams Business Media, *Liquor Handbook 1998* (New York: Adams Business Media, 1998) p. 227.

⁶⁰ Ibid.

Figure 3
Share of advertising expenditures, 1997



Source: Adams Business Media, *Liquor Handbook 1998*.

Methods of Distribution

Distribution of distilled spirits from suppliers to wholesalers is subject to State regulation, as provided for by the 21st amendment. There are two types of State distribution systems in the United States: open-license States and the District of Columbia numbering 33, and control States numbering 18. Open license states permit private enterprises, licensed by the State, to purchase distilled spirits from producers/suppliers and to distribute those products to on-premise establishments (restaurants, bars, and other outlets where consumption is permitted) and off-premise retail outlets (package and liquor stores). Control States operate State monopolies that serve the same function as privately owned wholesalers, but are the sole wholesaler and distributor of spirits within their borders. Some control States are also monopoly retailers, selling spirits exclusively in State-operated stores, while other control States sell to privately-owned and licensed retail package stores.

According to the Wine and Spirits Wholesalers of America Inc. (WSWA), approximately 500 wholesale/distribution firms operated as wine and spirits⁶¹ wholesalers.⁶² Wholesalers are active partners with suppliers and retailers in the marketing process. In addition to purchasing spirits from suppliers/producers and selling them to restaurants and retail establishments, wholesalers offer credit to retailers, conduct marketing activities such as promoting products through tastings for on- and off- premise establishments, develop advertising and promotional programs in local markets, and serve as local representatives for producers.⁶³ Licensed retailers operating in the United States are estimated to number between 550,000 and 600,000.⁶⁴

Pricing Practices

Each State has its own unique and widely -varying price structure for distilled spirits. In control States, the State Government, acting as the sole wholesaler, sets uniform wholesale prices paid by retail establishments. In control States that are also monopoly retailers for off-premise spirits sales (State package or ABC stores), retail prices for distilled spirits products are uniform throughout the State. Because of the monopoly structure of control states, prices for spirits at the retail level are more uniform⁶⁵ compared to open license States where prices are more likely to vary according to market factors.

Federal and State taxes are significant determinants of the retail price for spirits and limit the flexibility of producers to set retail prices as taxes account for a significant percentage of the retail price. Moreover, widely varying State and local tax patterns for distilled spirits detract from the distillers' ability to devise national-scale strategies for pricing, advertising, and marketing programs.

Distilled spirits prices, as measured by the producer (PPI) and consumer price indexes (CPI) tracked by the Bureau of Labor Statistics, indicate that most spirits prices increased modestly, by less than 10 percent during 1995-99. Producer prices (the price paid by wholesalers to suppliers) have demonstrated less price inflation than consumer prices. The PPI for all distilled and blended liquors increased by 3.1 percent during the period (table A-5). The PPI for all bottled liquor, except brandy, increased by 5.7 percent during the period, with bottled whiskey (8.6 percent), vodka (6.6 percent), and gin (5.9 percent) experiencing the largest price increases at the wholesale level. Liqueurs and cordials, and other bottled spirits, except brandy, experienced price inflation of just under 3 percent during the same period (table A-5). Moderate price rises for whiskies, vodka, and gin can be partially explained by higher prices for premium, high -value products that have been a major component of the U.S. spirits market during the period.

⁶¹ Distilled spirits and wine are handled by the same set of wholesalers while beer is wholesaled and distributed through separate wholesale establishments and is sold through private wholesalers in all States. WSWA website found at <http://www.wswa.org/whole/history.htm>, retrieved Mar. 22, 2000.

⁶² WSWA website found at <http://www.wswa.org/about/faq.htm>, retrieved Mar. 22, 2000.

⁶³ Ibid.

⁶⁴ M. Shanken Communications Inc., *Market Watch*, Mar.-Apr. 2000, p. 7.

⁶⁵ Commission discussion with the National Alcoholic Beverage Control Association, Inc., Mar. 23, 2000. 18

Consumer prices paid by urban consumers for distilled spirits at retail establishments, including on- and off-premise outlets,⁶⁶ increased by an average of just over 7 percent during 1995-99, indicating less price escalation than overall prices for alcoholic beverages, which increased more than 10 percent during the period (table A-5). The CPI for distilled spirits purchased at off-premise package stores rose by 7.2 percent, while the CPI for spirits, excluding whiskey, rose by 7.4 percent. Whiskey prices purchased from package stores rose by 7.2 percent during the period. Prices for all alcoholic beverages sold at retail package stores increased by 7.4 percent, tracking closely with the moderate consumer price increases for distilled spirits. The CPI for all alcoholic beverages at restaurants and bars experienced the highest price increases, rising 13.9 percent during the period (table A-5).

Taxes

Distilled spirits are subject to Federal, State, and local taxes that account for a significant percentage of the retail cost to consumers. Federal excise taxes, paid by producers/suppliers, are levied at \$13.50 per proof gallon of ethyl alcohol which translates to about \$2.14 per 750ml bottle of 80 proof spirits.⁶⁷ At the State and local level, distilled spirits are subject to excise taxes levied on the basis of wine gallons or liters, and *ad valorem* taxes based on value.⁶⁸ State and local taxes are collected by the wholesalers/distributors and/or at the retail sales counter. These taxes vary by State and local jurisdiction. The distilled spirits industry trade association, the Distilled Spirits Council of the United States (DISCUS), maintains that distilled spirits are “the most heavily taxed consumer product in the United States,” and bear a higher burden of taxation than other alcoholic beverages, beer or wine.⁶⁹

U.S. Federal taxes collected⁷⁰ on distilled spirits totaled \$3.7 billion in 1999, of which more than 79 percent or nearly \$3 billion was levied on domestically-produced spirits, while taxes on imported products accounted for \$758.7 million (table A-6). Federal taxes collected remained relatively stable during fiscal years 1996-99, increasing by 2.1 percent during the period. Federal taxes in fiscal year 1999 on beer (\$3.4 billion) and wine (\$654 million)⁷¹ also remained relatively stable, increasing 0.6 percent and 5.4 percent respectively during the period.

⁶⁶ Off-premise establishments (liquor and package stores) correspond to the CPI for “distilled spirits at home.”

⁶⁷ Credit is provided for wine and flavor content. BATF, “Tax and Fee Rates,” found at <http://www.atf.treas.gov/core/alcohol/info/atftaxes.htm>, retrieved Jan. 24, 1999.

⁶⁸ DISCUS, <http://www.DISCUS.org/repguide.htm>, retrieved Mar. 24, 2000.

⁶⁹ DISCUS argues that Federal and State taxes account for 39 percent of the purchase price on a typical 750ml bottle of spirits, and that indirect taxes and fees raise the total to 58 percent. See DISCUS “Fact Sheet, Distilled Spirits Excise Taxes,” found at <http://www.DISCUS.org/exctaxfact.htm>, retrieved Mar. 24, 2000.

⁷⁰ Collection figures correspond to tax assessments, and are subject to revision. Totals may differ from statistics in BATF Chief Financial Officer Annual Reports.

⁷¹ The Federal Government assesses a “regular rate” of \$17 per barrel on beer, while wine is taxed at differential rates ranging from \$1.07 - \$3.40 per wine gallon, depending on alcohol content and type. For full Federal tax rates see BATF “Tax and Fee Rates,” found at <http://www.atf.treas.gov/core/alcohol/info/atftaxes.htm>, retrieved Jan. 24, 2000.

According to the Federation of Tax Administrators, an organization whose members include all 50 State tax collection agencies, excise taxes on distilled spirits were assessed in all 33 open-license states. Rates ranged from \$1.50 to \$6.50 per wine gallon, with the median rate levied amounting to \$3.50 on each gallon of spirits;⁷² most excise taxes are collected from wholesalers/distributors. License States do not levy excise taxes because State monopolies are the sole wholesalers in their States; however, revenues are generated from net liquor profits and various fees. Sales taxes are applied on spirits in 42 States, with 4 of those States charging sales tax only for on-premise sales. In addition, 24 open-license States charge additional taxes, such as differential liquor taxes for on- and off-premise establishments.⁷³ Local jurisdictions, such as New York City and Chicago, and individual counties may also levy special taxes on distilled spirits.⁷⁴ According to DISCUS, excise taxes levied by all three levels of government have been increased more than 200 times since 1980.⁷⁵

Government Regulation

The 21st amendment provided for two levels of government oversight and regulation of the distilled spirits industry. Federal authorities were given regulatory authority over such industry activities as consumer protection, trade practices, and collection of taxes, while State Governments were granted explicit regulatory control over channels of distribution within their borders.⁷⁶

Federal regulation

The Federal Alcohol Administration Act (FAA) of the 1930s enacted after Prohibition provided for the initial regulation of the alcoholic beverages industry at the Federal level.⁷⁷ The Treasury Department's Bureau of Alcohol, Tobacco, and Firearms is the Federal agency that enforces the rules related to distilled spirits set forth in Title 27 of the Code of Federal Regulations.⁷⁸ These rules relate to quality and standards issues, such as standards of identity, formula composition, certification of age, labeling, fill requirements, and advertising. In addition, the BATF oversees the licensing and operations of distilled spirits plants, rectifiers and other manufacturers, regulates imports, and ensures the collection of Federal excise taxes.

⁷² Federation of Tax Administrators, "State Tax Rates on Distilled Spirits," found at <http://www.taxadmin.org/fta/rate/liquor.html>, retrieved Feb. 27, 2000.

⁷³ For updated list of state excise and other state taxes, see Federation of Tax Administrators website: <http://www.taxadmin.org/fta/rate/liquor.html>.

⁷⁴ Ibid.

⁷⁵ DISCUS "Fact Sheet, Distilled Spirits Excise Taxes," found at <http://www.discUS.org/exctaxfact.htm>, retrieved Mar. 24, 2000.

⁷⁶ 21st amendment, Sec. 2: "The transportation or importation into any State, territory, or possession of the United States for delivery or use therein of intoxicating liquors, in violation of the laws thereof, is hereby prohibited."

⁷⁷ The FAA was abolished in 1940 when its functions were transferred to the Treasury Department. The BATF was established in 1968. Grossman, p. 501.

⁷⁸ For Federal Regulations on alcoholic beverages, including distilled spirits, see BATF website, <http://www.atf.treas.gov/regulations/index.htm>.

State regulation

At the time of the repeal of Prohibition in 1933, the states were given total authority to control all aspects of the distribution and sale of distilled spirits within their borders, with “virtual plenary powers to regulate alcoholic beverages.”⁷⁹ Eighteen States have chosen to directly control wholesale spirits distribution (control States), while 33 States and the District of Columbia⁸⁰ license private commercial entities to serve as wholesalers (open-license States). Both systems serve the function of separating producers from retailers, as envisioned in the 21st amendment.

Control States are monopoly purchasers and wholesalers of distilled spirits.⁸¹ Under this system, all distilled spirits must be purchased through the state wholesale authority. Control State systems also regulate the retail sale of distilled spirits through a variety of outlets. Control States operate (or license) State package stores, contract agency package outlets, and privately owned package stores, or a combination of these retail establishments.⁸²

Open-license States allow private wholesale establishments to purchase and distribute distilled spirits. The majority of open-license states have “primary source laws” that require suppliers to sell to in-state wholesalers; these are also known as “coming to rest” laws. Ensuring wholesale distribution through in-state distributors facilitates tax collection and audit procedures.⁸³ Most open-license State laws also include legislation that prohibits suppliers, wholesalers, and retailers from having business interests in sectors outside of their tier. This ensures the independence of wholesalers and limits the ability of dominant suppliers to control the downstream wholesale and retail markets that characterized the pre-Prohibition industry.⁸⁴

⁷⁹ Statement of Douglas W. Metz, special counsel, WSW, found at http://www.wswa.org/dir_ship/testimony.htm, retrieved Feb. 27, 2000.

⁸⁰ Open-license States (jurisdictions) include Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Florida, Georgia, Hawaii, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Minnesota, Missouri, Nebraska, Nevada, New Jersey, New Mexico, New York, North Dakota, Oklahoma, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, and Wisconsin. DISCUS *Summary of State Laws & Regulations Relating to Distilled Spirits*, 29th ed., Jan. 1996.

⁸¹ Control States include Alabama, Idaho, Iowa, Maine, Michigan, Mississippi, Montana, New Hampshire, North Carolina, Ohio, Oregon, Pennsylvania, Utah, Vermont, Virginia, Washington, West Virginia, and Wyoming. Montgomery County, MD is also a monopoly control jurisdiction. *Ibid.*

⁸² National Alcohol Beverage Control Association (NABCA), “Background,” found at: <http://www.nabca.org/memberbackground.html>, retrieved Mar. 28, 2000.

⁸³ Distilled Spirits Council of the United States, Inc., (DISCUS), “Fact Sheet: Primary Source Law,” found at <http://www.discus.health.org/primsour.htm>, retrieved Mar.23, 2000.

⁸⁴ Frederick M. Switzer, “The Three-Tier System Of Distribution in the Wine and Spirits Industry” (St. Louis: Wine and Spirits Wholesalers of America, 1975) p. 8.

U.S. MARKET

The United States is one of the world's leading consumers of distilled spirits. Per capita consumption, estimated at 1.86 liters of pure alcohol (lpa) in 1998, ranked the United States among the world's top 20 consuming countries, and in the top 5 nations in terms of total apparent spirits consumption, with over 500 million lpa.⁸⁵ Although world production data are not readily available, estimates in *World Drink Trends* place the United States, with output in 1997 of over 5 million hectoliters of pure alcohol, as the world's third-largest producer of spirits after China and Russia, (table A-7).

Factors Affecting Demand

Two contradictory health trends have affected U.S. consumption of distilled spirits during the past three decades. Beginning in the late 1970s and continuing through the early 1990s consumers shifted demand away from spiritous beverages to lower alcohol and nonalcoholic beverages as a result of increased health awareness, particularly among the baby-boom generation. Although consumption rates for all alcoholic beverages declined, per capita rates for spirits dropped by the greatest magnitude, falling by over 40 percent.⁸⁶

More recent health information made public in the mid 1990s and subsequent epidemiological evidence suggests that some alcohol consumption may have beneficial health affects. USDA dietary guidelines now advise that moderate consumption of alcoholic beverages may lower the risk of coronary heart disease.⁸⁷ This positive health information has not reversed the decades-long decline in consumption although the rate of decline has slowed. Per capita rates during 1993-97 fell by 6.1 percent (table A-8), compared to a 14-percent drop during the previous 5-year period.⁸⁸

Other factors influencing consumption of spiritous beverages include increased government regulation, measures to limit under-age consumption, and demographic changes in the consumer base. In addition, greater awareness and enforcement of driving-under-the-influence laws, and stricter State blood alcohol level legislation have also affected alcoholic beverage consumption rates.

⁸⁵ *World Drink Trends 1999* (Henley-on-Thames, NTC Publications Ltd., 1999), p. 13.

⁸⁶ 1978 per capita consumption totaled 3.15 lpa compared to 1.86 in 1998. *Ibid.*, p. 136.

⁸⁷ USDA, "If you drink alcoholic beverages, do so in moderation," found at <http://www.nal.usda.gov/fnic/dga/dga95/alcohol.html>, retrieved Feb. 14, 2000.

⁸⁸ Adams Business Media, *Liquor Handbook 1998* (New York: Adams Business Media, 1998) p. 13.

Consumption

Consumption trends

Consumption of distilled spirits amounted to 138 million 9-liter⁸⁹ cases in 1998, representing a marginal increase in total consumption of 1.7 percent during 1995-98, owing to increased imports (table A-10). Consumption of white spirits, (vodka, gin, rum, and tequila) totaling 65 million cases outpaced brown spirits (whiskey) consumption of 43 million cases in 1998 (figure 4).

During 1995-98, consumption of both white and brown spirit categories were relatively stable. Consumption of white spirits categories increased by 4 percent, while consumption of brown spirits slipped by 6 percent (table A-10). Consumption of specialty spirits rose by 10 percent to 30 million cases in 1998.

Among market leading white spirits, vodka was the leading spirit of choice for U.S. consumers, accounting for just over one-quarter of all spirits purchases during 1995-1998 (figure 5). Vodka consumption was steady during the period with annual consumption in 1998 of 35 million cases. Consumption of rum (13 million cases) and tequila (7 million cases) posted double-digit growth rates, increasing by 14 percent and 25 percent respectively. Consumption of gin fell by nearly 7 percent to 11 million cases in 1998 (table A-10).

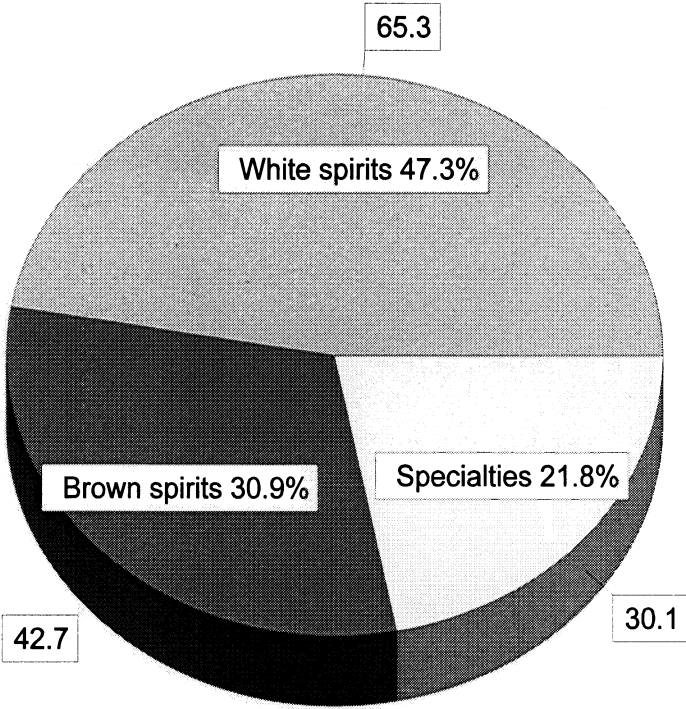
Consumption of almost all categories of brown spirits declined during 1995-1998. Canadian whiskey, the leading brown spirits category, fell by 5.6 percent to 15 million cases in 1998, while consumption of the second-leading consumed brown spirit, U.S.-produced straight whiskey, including bourbon and Tennessee whiskeys, declined by 3 percent to 13 million cases. Scotch (8.3 million cases), and American blended whiskey (6.2 million cases) also experienced contraction of consumer demand during the period (table A-10).

Consumption of specialty spirits recorded gains of 10 percent during the 1995-98. Apparent consumption of cordials and liqueurs totaling 17.3 million cases in 1998, was the second-leading consumed spirit category (after vodka). Consumption by volume for liqueurs and cordials increased by 5.5 percent during the period. Brandy/Cognac (9 million cases), and premixed drinks and cocktails (4 million cases) each recorded strong growth rates in apparent consumption, recording gains of 13 percent and 29 percent during 1995-98 (table A-10).

⁸⁹ The distilled spirits industry uses 9-liter cases as the unit of volume for consumption. All references to cases are for 9-liter cases. See conversion factors table A-9 for conversion to proof gallons and wine gallons.

Figure 4
Distilled spirits: U.S. consumption of distilled spirits by category, 1998

(Million 9-liter cases)



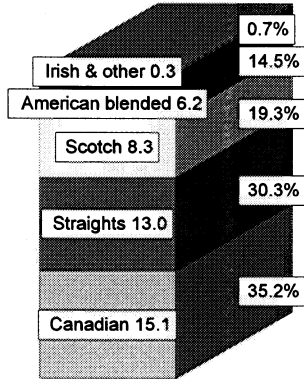
Total distilled spirits = 138.1 million 9-liter cases

Source: "U.S. Market's Higher-End Brands Continue to Bolster Their Presence," *Impact*, M. Shanken Communications Inc., vol 29, Nos. 15 and 16, Aug. 1 and 15, 1999, pp. 8-10.

Figure 5
Distilled spirits: U.S. shares of distilled spirits consumption by category, 1998

Whiskey

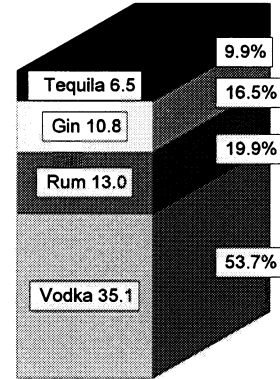
Consumption share 1998
 (Million 9-liter cases)



Total whiskey = 42.7 million 9-liter cases

White spirits

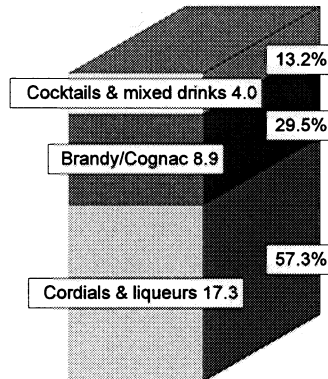
Consumption share 1998
 (Million 9-liter cases)



Total white spirits = 65.3 million 9-liter cases

Specialties

Consumption shares 1998
 (Million 9-liter cases)



Total specialties = 30.1 million 9-liter cases

Source: "U.S. Market's Higher-End Brands Continue to Bolster Their Presence," *Impact*, M. Shanken Communications Inc., vol 29, Nos. 15 and 16, Aug. 1 and 15, 1999, pp. 8-10.

Consumer Characteristics

Tables A-11 through A-15 provide demographic statistics on U.S. consumers of distilled spirits. By gender, males consume nearly two-thirds (63 percent) of all distilled spirits products consumed in the United States (table A-11). Consumers aged 60 and over were the leading consumers of spiritous beverages, accounting for 33 percent of total consumption, followed closely by the 30-39 age bracket, which purchased 28 percent of spirits consumed. Young consumers ages 20-29, an important age group for distillers focusing on developing brands and building market share, were the smallest consuming age group, accounting for just over 7 percent of U.S. consumption (table A-12).

Identifying and targeting specific age groups is fundamental for spirits marketers seeking to strengthen and/or alter category and brand demand. Some spirits categories are closely correlated with particular age groups; for example in 1998, 81 percent of consumers of scotch were 60 years and older, while nearly 60 percent of tequila drinkers were under 40 years old. Consumption of bourbon, vodka and gin were more evenly distributed among age groups (table A-13).

Consumption of spiritous beverages by geographic region was relatively uniform throughout the United States: The West region (32.5 percent share by volume) led all regions in volume consumption, followed by the South (29.1 percent), North Central (20.9 percent), and the Northeast regions (17.5 percent) (table A-14). Regional consumption rates for all alcoholic beverages were nearly reversed. The South and Northeast region each captured 30 percent of volume consumption, followed by the North Central (20.3 percent) and Western regions (19.6 percent) (table A-14).

Household income appears to be positively correlated to distilled spirits consumption. Households with incomes of \$35,000 and over accounted for two-thirds of all spirits consumed, with the highest income bracket, \$60,000 and over, consuming 32 percent, the largest share of the total. Households in the under \$15,000 income bracket consumed the least spiritous beverages by volume, 8.7 percent (table A-15).

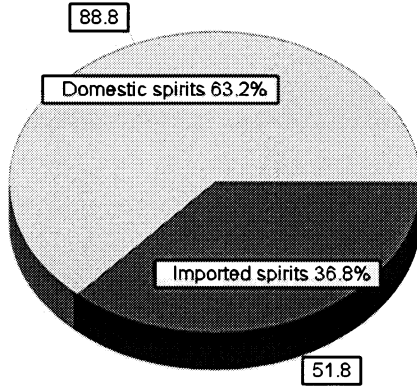
Import Penetration Levels

Figure 6 displays the import levels for various categories of distilled spirits. Imported spirits accounted for over one-third of all distilled spirits consumed in the United States in 1998, amounting to 52 million cases (table A-16). Import penetration was greatest in the whiskey category, with imported spirits capturing 57 percent (26 million cases) of apparent U.S. consumption of mainly Canadian and Scotch whiskies compared to 43 percent for domestically-produced whiskey spirits (19 million cases).

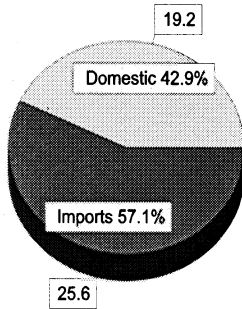
Import penetration is also significant in other distilled spirits categories. Imported vodka, amounting to 6 million cases in 1998, accounted for over 17 percent of apparent consumption that year, while imports of cordials and liqueurs (7 million cases) and gin (2.6 million cases) totaled 43 percent and 23 percent, respectively, of U.S. consumption of their respective categories (table A-16). Imports are also significant among products that are not manufactured in the United States, including tequila, an exclusive product of Mexico (6 million cases), and cognac distilled in France (2.4 million cases).

Figure 6
Distilled spirits: Percentage U.S. consumption of domestic and imported spirits
for all spirits and by category, 1998

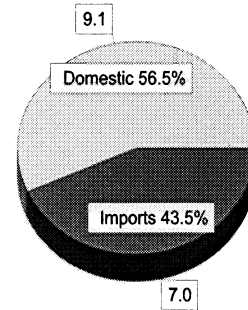
Percentage consumption domestic and Imported spirits, 1998
 (Million 9-liter cases)



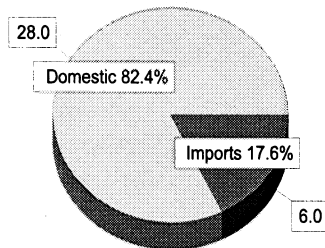
Whiskey consumption, imports vs. domestic, 1998
 (Million 9-liter cases)



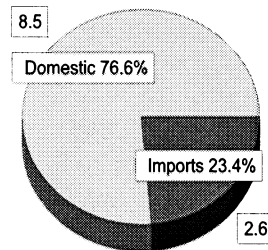
Cordials & liqueurs consumption, domestic vs. imports, 1998
 (Million 9-liter cases)



Vodka consumption, domestic vs. imports, 1998
 (Million 9-liter cases)



Gin consumption, domestic vs. imports, 1998
 (Million 9-liter cases)



Source: Adams Business Media, *Liquor Handbook*, 1999.

Imports of bulk distilled spirits bottled in the United States represent a sizable share of the imported spirits market. Over 60 percent of Canadian whiskey shipments were imported in bulk containers representing 9.7 million cases in 1998, while imports of bottled Canadian whiskey totaled 6.1 million cases the same year (table A-16). Imports of bulk Scotch whisky accounted for 3.3 million cases or 35 percent of total Scotch imports. Other products imported in bulk quantities and bottled in the United States include tequila, rum, and some liqueurs and cordials.

Conditions of Competition Between Foreign and U.S. Spirits Products

Distilled spirits production is truly global. The largest spirits companies operating in the United States are headquartered outside the country so that competition between U.S. and foreign-produced spirits can be ambiguous. Specific distilled spirits such as Scotch, Canadian whiskey, tequila, and many branded cordials and liqueurs are not manufactured in the United States. Competition among these imported spirits and domestically produced spirits is at a broader category level. Other spirits products including vodka and gin that are produced both domestically and internationally foster closer competition for U.S. consumers, particularly for the high-quality premium branded products where price is not the only factor driving demand. For example, product differentiation between imported Scotch whisky and U.S.-produced bourbon is greater than between: Finlandia vodka produced in Finland and Skyy vodka produced in the United States.

Production

According to the most recent data from the U.S. Department of Commerce, the total value of production at U.S. distilleries,⁹⁰ (North American Industrial Classification System (NAICS) number 31214) was \$3.9 billion in 1997,⁹¹ with the value of primary distilled spirits products manufactured amounting to \$3.4 billion, a nominal increase in value of 6.4 percent during 1987-97 (table A-17). The real value of production adjusted for inflation, however, indicates that the deflated value of spirits produced actually declined 26 percent during 1987-97, and declined 7.5 percent in real terms during the past 5 years (table A-17).

Production of bottled spirits, totaling \$2.6 billion accounted for over 75 percent of the value of output produced by U.S. distilleries in 1997 (table A-17). During the most recent 10 year period for which data are available, this represented a nominal increase in production. However, adjusting for inflation, the real value of production actually dropped by 31 percent during 1987-97. Whiskey was the leading bottled spirit produced, accounting for more than \$1 billion (nearly 85 million gallons) of production in 1997 (table A-18). Among whiskies, unprocessed or straight whiskey, including bourbons and Tennessee whiskies, was the leading bottled whiskey category produced, totaling \$651 million (46 million gallons) in 1997. Vodka, accounting for 33.6 million gallons of production was the second-leading

⁹⁰ Includes production byproducts such as dried grains and solubles used as animal feeds.

⁹¹ DOC, *Distilleries, 1997 Economic Census*.

bottled spirits category produced, followed by cordials and liqueurs (28.4 million gallons), and gin (13.2 million gallons).

Production of unprocessed whiskey nearly doubled during 1987-97, as a result of strong demand, with the real value of production increasing 24 percent and volume rising by 97 percent during this period. Production volumes of all other categories of bottled whiskeys declined, with blends of whiskey falling in volume by 60 percent, and the “other whiskey” category declining by 42 percent due to weak consumer demand (table A-18). Production of bottled gin, cordials & liqueurs, and vodka also fell in both real value and quantity of production during 1987-97, see table A-18.

Volumes of production, measured in proof gallons⁹² tracked by the BATF are displayed in table A-19. The largest category of production was ethyl alcohol with a strength of over 190 degrees proof. This category includes vodka and neutral liquors used for manufacture of distilled spirits, and for nonbeverage industrial purposes. Production of whiskey of 160 proof and under exhibited growth during the most recent period for which full-year data is available,⁹³ while production of most other spirits categories remained stable.

Inputs

Grains, the principal raw materials used in the production of distilled spirits, are listed in table A-20. Corn and corn products were the leading input, accounting for over 90 percent of the grain used in production or 7.2 billion pounds, in 1995.⁹⁴ Wheat and wheat products were the second-leading grain (316.4 million pounds), followed by sorghum (196.5 million pounds), rye (80.9 million pounds), and malt (80.5 million pounds). According to the BATF, grain usage by the distilled spirits industry was relatively stable, decreasing by 3.3 percent between 1993 and 1995.

A listing of the input values used by distilleries in the production of spiritous beverages in 1997, as compiled by the Census Bureau, is provided in table A-17. In addition to grain and grain products, distilling companies purchased: glass containers (\$337.6 million), plastic containers (\$63 million), cooperage or barrels used for aging (\$46.3 million), and paperboard boxes and containers (\$23.4 million).

Distilled spirits plants/locations of production

Flat to declining production levels in the U.S. distilled spirits industry are reflected in the decline in plant capacity utilization levels for U.S. DSPs. For plants producing distilled and blended liquors, the percent utilization of plant capacity amounted to 63 percent in 1998, falling from 81-percent utilization recorded in 1993 (table A-21). Plant utilization for wines,

⁹² BATF monitors production in proof gallons because that is the unit value on which taxes are levied.

⁹³ Full-year data are not available from BATF for 1996, period includes 1993-1995. See table A-19.

⁹⁴ Figure may also include industrial, non-beverage-use alcohol.

brandy, and brandy spirits plants exhibited higher utilization levels (79 percent). In comparison, malt beverage plants operated at 82-percent capacity in 1998, while soft drink plants operated at 60 percent capacity. The average utilization rate for all beverages plants totaled 68 percent.

Table A-22 displays the distribution of distillery establishments by number of employees as tracked by the Department of Commerce. The data indicate that DSPs are generally not large-scale operations as measured by number of workers. Out of the 60 DSPs for which data were compiled, nearly half, or 27 DSPs employed fewer than 50 employees, with 18 of those plants employing 19 or fewer workers. DSPs with 100 to 249 employees were the most numerous, numbering 18 DSPs, while only 9 establishments employed more than 250 workers each.

According to the latest data of the BATF, Kentucky with output of 42.2 million proof gallons (p.g.) and Tennessee with output of 13.4 million p.g., were the principal States manufacturing whiskey spirits (table A-23).⁹⁵ Gin, manufactured with mainly ethyl alcohol and with U.S. production totaling 12.5 p.g., was produced in Indiana (7.4 million p.g.), Illinois (1.9 million p.g.), and Iowa (1.4 million p.g.). U.S. brandy production (11.2 million p.g.) was produced in California (9.1 million p.g.) and Florida (2.1 million p.g.). Most rum consumed in the United States is produced in Puerto Rico; however, a small quantity is manufactured in Florida (800 thousand p.g.).

U.S. TRADE

Overview

The United States ranked as the world's leading importer of distilled spirits with the value of imports for consumption totaling \$2.4 billion in 1999, nearly three times the value of the world's second-leading importer, Japan. Domestic exports totaling \$440 million ranked U.S. shipments in the top five exporting nations (tables A-24, A-25, and A-26). The U.S. trade deficit for spirits, amounting to \$1.9 billion in 1999, expanded by nearly 60 percent during 1995-1999, with the United States registering trade deficits with 8 out of the top 10 trading partners at the end of the period (table A-24).

U.S. trade flows of spiritous beverages are dominated by trade with the developed countries of the OECD which accounted for 95 percent of U.S. imports and 87 percent of U.S. exports during 1999 (table A-24). Among these nations, most represent mature markets with static growth in consumption, while trade with many Asian and Latin American countries that represent potential market growth declined or remained flat, owing to weakness in their economies during the period.

⁹⁵ Small quantities of whiskey were produced in Indiana and Virginia.

U.S. Imports

Principal Import Suppliers and Import Levels

Products imported

Record values of imports were recorded in nearly all major categories of distilled spirits in 1999. Whiskey was the leading import, accounting for \$856 million (table A-27). Scotch and Irish whiskey⁹⁶ was the largest whiskey type imported on a value basis totaling \$494 million for bottled and bulk products. The “other” whiskey category composed of mainly Canadian whiskey, was the second leading whiskey import category with \$362 million in imports in 1999. Imports of liqueurs and cordials, which represented the most diversified distilled spirit product category, amounted to \$432 million in imports. Although the United States is a large producer of vodka, gin, and brandy, imports of those spirits were significant in 1999, with shipments of vodka totaling \$367 million, brandy \$345 million, and gin amounting to \$112 million. Imports of rum totaling \$23 million⁹⁷ and the “other spirits” category with imports amounting to \$247 million also recorded record values in 1999 (table A-27).

Whiskey was also the leading U.S. import by volume, with shipments totaling 173 million proof liters (p.l.) in 1999 (table A-27). Imports by volume of vodka (54 million p.l.), liqueurs and cordials (47 million p.l.), and brandy (24 million p.l.) increased by double digit rates during the period. Most spiritous beverages are imported in retail sized bottles; however, several spirit categories including whiskey, rum, and tequila are imported in bulk containers for bottling at U.S. distilled spirits plants.

The unit value of imported spirits ranged from high values for brandy (\$14 per p.l.) and bottled Scotch and Irish whiskeys (\$11 per p.l.) to liqueurs and cordials (\$9 per p.l.) and vodka (\$7 per p.l.) to lower unit value products such as gin (\$5 per p.l.) and rum (\$2 per p.l.). With the exception of the liqueurs and cordials category, the unit value of all imported spirits increased, with whiskey and brandy displaying the greatest increases, recording over 30-percent growth in import unit values during 1995-99 (table A-27).

Import levels and trends

The rapid expansion of imported spirits into the United States, representing a 46-percent rise in value during 1995-99, was generated by a strong U.S. economy and increases in income that allowed consumers to trade up to higher value premium imported spirits. Although overall demand for spiritous beverages remained relatively stable, the value of imports grew by double-digit rates (table A-27). Imports of whiskey increased by 28 percent in value,

⁹⁶ The United States classifies Scotch and Irish whiskeys under one HTS item, 2208.30.30. In 1999, Scotch whisky accounted for nearly 95 percent of these imports, see table A-28.

⁹⁷ This does not include rum from Puerto Rico and other rum produced within the United States customs territory.

with the value of shipments of bottled Scotch and Irish whiskies rising by 39 percent. Imports of “other whiskey,” primarily Canadian, rose by 23 percent, to \$362 million in 1999. Strong growth in import value was also recorded for brandy (increasing by 70 percent), vodka (63 percent), gin (41 percent), and rum (107 percent).

Principal import suppliers

As indicated in table A-28 displaying major supplier countries and products, the EU, Canada and Mexico are the principal suppliers of spiritous beverages to the United States. Imports from the United Kingdom, the leading supplier of whiskey and gin, totaled \$605 million in 1999, representing a 27-percent increase in shipments during 1995-99 (table A-24). Shipments from France, the second-leading supplier, of mainly brandy and liqueurs, jumped by 67 percent to \$523 million. Other leading suppliers included Canada, the leading supplier of whiskey by volume, with shipments amounting to \$378 million, Mexico supplying mainly tequila (\$210 million), and Sweden supplying mainly vodka (\$189 million). The U.S. trade deficit in distilled spirits with these five leading supplier countries totaled more than \$1.9 billion in 1999.

Imports from principal supplier countries by value, volume, and unit values are provided in table A-29. The value of shipments for all leading supplier countries increased, with France, Mexico, Russia, and the Netherlands posting the largest rates of increase in value during 1995-98. Imports from Canada were the leading import by volume, comprised of Canadian whiskey in bottled and bulk shipments. Whiskey shipments were also the principal shipment from the United Kingdom, the second-leading supplier by volume. Unit values of imports were high from France, amounting to over \$15 per proof liter during 1995-99 owing to its principal shipments, brandy and liqueurs, having relatively low alcohol and high value per volume of spirit. Imports from Ireland, consisting mainly of liqueurs, similarly recorded high per unit import values. The lowest unit value imports originated in Canada and Mexico owing to a substantial portion of lower priced bulk shipments that are bottled in the United States (table A-29).

U.S. Trade Measures

Most distilled spirits products enter the United States duty-free. At the WTO Ministerial Conference in December 1996, the United States and the EU concluded an agreement to eliminate tariffs on most categories of distilled spirits by 2000. Along with the Information and Technology Agreement (ITA) reached at the ministerial, the “zero for zero” agreement on spirits, promoted by the U.S. and EU industries, accelerated tariff reduction on whiskies and brandy (“brown spirits”) that were scheduled to be eliminated in 2003 as part of the Uruguay Round Agreements, and added “white spirits” vodka, gin, and liqueurs and cordials. Special provisions were made for rum: high-value rum is scheduled for tariff elimination in 2003, while tariffs on low-value rum were maintained in order to provide preferential treatment for Virgin Island and Caribbean suppliers.⁹⁸ Table A-30 provides the

⁹⁸ USITC, *Advice Concerning the Proposed Modification of Duties on Certain Information Technology Products and Distilled Spirits*, Investigation No. 332-380, USITC publication 3088, 32 Apr. 1997, p. E2-3.

Harmonized Tariff Schedule (HTS) tariff rates for U.S. distilled spirits imports. Column 1 indicates the “normal tariff rates” (NTR) that are applied to WTO member countries. For most categories of spirits the U.S. tariff rate is “free.”

At the four-digit HTS level 2208, under which most distilled spirits are classified, column 1 tariffs are only applied to rum products. As part of the ITA, the United States and EU maintained tariff rates on rum in order to provide preferential treatment to imports of rum from certain Caribbean countries. These rum products enjoy duty free treatment as part of the Caribbean Basin Initiative (CBI) that afford protection against lower-cost producers in Central and South America. NTRs for rum (2208.40) range from 13¢-23.7¢ per proof liter.

U.S. tariffs on other distilled spirits products, including compound preparations containing alcohol (2106.90) have 2000 tariff rates ranging from 4.2¢/kg - 17¢/kg plus 1.9 percent; ethyl alcohol with an alcoholic strength over 80 percent by volume used for beverage purposes (2207.10.30) is 18.9¢/proof liter; and ethyl alcohol under 80 percent alcohol by volume (2208.90.80) is 21.1¢ per proof liter. These products were not part of the ITA agreement and are not eligible for duty-free treatment.

U.S. Exports

Principal Markets and Export Levels

Products exported

Tables A-31 through A-33 summarize export data for major categories of distilled spirits providing total and per unit values and volume statistics for the most recent 5-year period. The data indicate that U.S. exports of spiritous beverages were dominated by shipments of bourbon and Tennessee whiskey.⁹⁹ In 1999, bourbon amounted to \$302 million or 70 percent of all U.S. spirits exports (table A-31). Shipments included 38 million proof liters of bottled bourbon valued at \$261 million, and 21.4 million proof liters of bourbon in bulk containers (\$41 million). All other exports of whiskey amounted to 9.6 million liters valued at \$24.9 million. Exports of rum valued at \$29 million were the second-leading export category representing 7 percent of spirits shipments, with bulk rum (19.7 million proof liters) accounting for over three-quarters of all rum shipments by volume. Exports of liqueurs and cordials representing 5 percent by value or 3 percent by volume of U.S. shipments, totaled \$20 million with shipments of 3.1 million proof liters, while shipments of vodka, brandy, and gin were relatively small, each totaling under \$8 million in 1999. All other exports of distilled spirits, with the exception of ethyl alcohol and alcoholic preparations, were valued at \$36.4 million amounting to 14.3 million proof liters (table A-31).

⁹⁹ In the U.S. Customs Service Schedule B (U.S. export schedule), “bourbon” includes Tennessee straight whiskey.

Exports of bottled spirits have higher average per unit values than bulk products. In 1999, for example, bottled bourbon averaged \$6.90 per proof liter and was the highest valued spiritous beverage exported, contrasted with bulk bourbon valued at \$1.90 per proof liter (table A-31). Likewise, bottled rum was valued at \$1.80 per proof liter compared to bulk rum shipments averaging under \$1 per proof liter. Liqueurs and cordials have a relatively low ratio of alcohol content to volume; consequently, per unit export values are high, averaging \$6.30 per proof liter in 1999.

Export levels and trends

Exports of distilled spirits, excluding alcoholic preparations, rose by 10.4 percent in value during 1995-99, while the total volume of shipments increased by nearly 14 percent. Whiskies posted overall strong export growth, rising 44 percent in value, with shipments of the leading export category, bottled bourbon (including Tennessee whiskey), increasing by over 20 percent (table A-31). The volume of bourbon exports increased steadily, with bottled product shipments rising by 33 percent and bulk shipments rising by 6 percent. Exports of rum more than doubled in value during the period, driven by increased shipments of bulk product to Canada and The Bahamas. Exports of liqueurs and cordials rose by 16 percent in value, but remained unchanged in terms of volume during 1995-99. Shipments of brandy valued at \$9.3 million in 1995 declined to \$7.4 million in 1999 due to a 40-percent decline in export volume, while exports of vodka declined by half in value and over 70 percent in volume during 1996-99. Exports of gin increased to \$3.7 million in 1999, with volume more than doubling during the period (table A-31).

Principal export markets

The leading export markets for distilled spirits are summarized in table A-32, with export markets for bottled and bulk whiskey presented in table A-33. Major export markets include Japan, the EU, Australia, and U.S. NAFTA partners Canada and Mexico. Japan was the leading destination for U.S. exports, accounting for 18 percent by value (\$77.5 million) and 15 percent of volume (17.9 million proof liters) exported in 1999. In 1995, Japan imported nearly twice the value of U.S. spirits as the second leading market, Germany, but weakness in the Japanese economy led to a 17-percent decline in value during 1995-99 (table A-32). Meanwhile, exports to Germany rose by 44 percent to \$70 million, with growth in volume rising 60 percent to 17 million proof liters of spirits during the period. Exports to Australia (\$46 million) and Canada (\$39 million) exhibited strong growth, rising by over 30 percent each during the period, while shipments to the United Kingdom fell by 6 percent to \$36 million. France, Spain, and Italy were the destinations for the highest valued exports of U.S. spirits that increased by 60 percent or more in value, while the volume of shipments to these countries rose by 74 percent during 1995-99.

Export markets for whiskey, consisting mainly of bourbon and Tennessee whiskey, track closely with markets for all distilled spirits shipments (table A-33). For high-value bottled whiskey, Germany was the leading market with \$57 million in such shipments, displacing Japan as the leading market in 1999. The United Kingdom was the third-leading market for bottled and bulk shipments, with exports of both products declining during the period. Australia was the fourth-largest export market for bottled whiskey (\$22 million) and the leading destination for bulk bourbon shipments (\$22 million). Australia is the largest off-

shore bottler of U.S. bourbon, importing more than four times the value of whiskey in containers of over 4 liters than any other country. In addition, the EU, Japan, and Canada imported bulk whiskey, although exports did not exceed \$6 million to any single country in these markets (table A-33).

Foreign Trade Measures

Tariff measures

Tariff rates on most distilled spirits, including whiskies, gin, vodka, and liqueurs and cordials, vary by country and trading group. Generally, duty rates imposed by developed nations are lower than rates imposed by developing nations. Table A-34 provides tariff levels for major U.S. trading partners. For the leading U.S. export markets, tariff rates on spirits are duty free or relatively low. The EU, the largest U.S. trading partner, does not levy duties on most spirits. Similar to the United States, the EU offers duty-free rates on an MFN basis to all WTO members, except for rum which has duties ranging from 0.6 ECU/%vol./hl + 0-3 ECU/hl.¹⁰⁰ Tariff rates for Canada¹⁰¹ and Mexico¹⁰² are applied at a preferential NAFTA rate with U.S. shipments of spirits entering both countries duty free.

Applied tariff rates for Japan vary by spirit, with rates for certain whiskies, including bourbon, equaling 7.9 percent ad valorem.¹⁰³ Australia applies compound rates on most spirits imports; for imports of whiskey, Australia levies 5% plus \$A32.10/liter of alcohol.¹⁰⁴ Tariff rates for other large potential markets include China (65 percent *ad valorem*),¹⁰⁵ Korea (20 percent *ad valorem*),¹⁰⁶ Russian Federation (2 ECU per liter of spirits),¹⁰⁷ India (230 percent *ad valorem*),¹⁰⁸ Brazil (23 percent *ad valorem*),¹⁰⁹ and Vietnam (50 percent *ad valorem*).¹¹⁰

Nontariff measures

Although high tariffs are the principal barrier restricting U.S. exports of distilled spirits, nontariff barriers are also significant obstacles to market access, particularly for emerging markets. Such barriers include state trading entities that limit imports and foreign

¹⁰⁰ *Official Journal of the European Communities*, L 278, vol. 42, Oct. 28 1999.

¹⁰¹ Customs Tariff Schedule of Canada, 1999.

¹⁰² Schedule of Mexico, North America Free-Trade Agreement, Annex 3021.2.

¹⁰³ For 1999, Japan Tariff Association, *Customs Tariffs for Japan 1999*, Apr. 1999.

¹⁰⁴ Tariff schedules posted by the APEC Secretariat, found at <http://www.apectariff.org>, retrieved Apr. 27 2000.

¹⁰⁵ *International Customs Journal*, China, No. 13, 7th ed. 1999.

¹⁰⁶ Tariff schedules posted by the APEC Secretariat, found at <http://www.apectariff.org>, retrieved Apr. 27 2000.

¹⁰⁷ UNCTAD, TRAINS, 2000 (CD ROM).

¹⁰⁸ "Customs Tariffs of India 1999-2000," K.K. Bassi (New Delhi: Cen-Cus Publications, 2000), p. III-130.

¹⁰⁹ For bottled spirits, UNCTAD, TRAINS, 2000 (CD ROM).

¹¹⁰ In addition, spirits are subject to consumption taxes ranging from 25 to 90 percent. ITA, *Vietnam, Market Research Report* No. ISA980901. USDOC, 1999.

participation, quantitative restrictions that suppress imports, and licensing requirements that cause inefficiency and delay for U.S. traders of spirits.

State trading entities

In Canada, “listing” practices, whereby provincial liquor control boards (LCBs) limit the number of imported products that retailers can carry at any one time, restrict retailers from stocking new and niche product imports. According to DISCUS this serves to “insulate Canadian distilled spirits producers from the full force of import competition.”¹¹¹ In Turkey, the government monopoly, TEKEL, controls the production of all alcoholic beverages and prohibits foreign participation in the domestic industry. Moreover, TEKEL is the sole importer of most distilled spirits into Turkey with the exception of whiskies.¹¹²

Licensing requirements

Import permits are required to import spirits into Turkey, and U.S. exporters have noted that obtaining these permits is burdensome because the rules and regulations for obtaining such permits are nontransparent. In addition, Turkey requires other certification documents that require approval from various government authorities which reportedly cause delays.¹¹³ Indonesia requires licenses to import spirits, but has granted only two companies such licenses since 1983.¹¹⁴ Russia also maintains a “burdensome” import regime and requires import licenses for the importation of ethyl alcohol and vodka.¹¹⁵

Quantitative restrictions

Although Indonesia has committed to phasing out quantitative import restrictions, distilled spirits are still subject to import limits. Moreover, most imports of spirits are allocated to duty-free stores which further restrict access to the domestic market.¹¹⁶ Vietnam imports spirits under a quota system that grants quota licenses to “official” importers each year; foreign companies are excluded from obtaining these quota licenses. According to USTR, Russia restricts imports of alcoholic beverages to 10 percent of total Russian alcohol sales; however, 60 percent of these imports must contain 15 percent or less alcohol.¹¹⁷ As most distilled spirits (including bourbon, rum, and vodka), contain about 40 percent alcohol by volume the effective rate of imports allowed totals only about 4 percent of domestic sales according to DISCUS.¹¹⁸

¹¹¹ Written submission, DISCUS, received by facsimile transmission, May 3, 2000.

¹¹² USDOC, ITA, “Turkey, Investment Climate Statement,” Market Research Report, No. IMI990706, Jul. 6, 1999; USTR, “2000 National Trade Estimate Report on Foreign Trade Barriers,” p. 402.

¹¹³ Written submission, DISCUS.

¹¹⁴ Ibid.

¹¹⁵ USTR, p. 352.

¹¹⁶ Ibid., p. 169.

¹¹⁷ Written submission, DISCUS.

¹¹⁸ Ibid.

FOREIGN INDUSTRY PROFILE

Overview of World Market

Distilled spirits are produced and consumed in most countries of the world. Total world production data are not readily available, but estimates of the relative quantities of production during the 1990s for the leading producing countries are listed in table A-7. For individual countries, China is the leading manufacturer of spiritous beverages with over 11 million hectoliters (hl) of pure alcohol (300 million gallons), followed by Russia with nearly half of China's estimated production, 5.5 million hl (144 million gallons). The United States with 5 million hl (132 million gallons) is the third-leading producer. The United Kingdom is the leading producer in the EU and the fourth-largest world producer, with production of 4.9 million hl (129 million gallons), followed by Brazil producing 3.9 million hl (102 million gallons) and Japan with 3 million hl (80 million gallons).

The leading producers are also the world's leading consumers. Most spirits production is consumed locally so that the leading world producers are not necessarily leading world exporters and importers. Trade in spirits, composed mainly of high quality and high value spirits, is conducted primarily among the developed nations of the OECD, particularly by countries in Europe, North America and parts of Asia. The most recent world trade data collected by the United Nations Statistical Office indicates that the countries of the EU (with exports valued at over \$7 billion¹¹⁹) were the leading and dominant world exporters in 1998, with shipments amounting to more than 18 times the value of the second- and third-largest exporters Canada (\$394 million) and the United States (\$385 million) (table A-26). World data on per capita rates of consumption track closely with production. The highest consumption rates were recorded by Russia and certain Eastern European countries, China, Thailand, and some members of the EU. Per capita consumption rates by country are provided in table A-35.

Country Profiles

European Union

EU member countries combined are the world's leading producers of distilled spirits with production of spirits representing over 11 million hl of pure ethyl alcohol. Production estimates vary by country with the United Kingdom producing 4.9 million hl of pure alcohol, Germany 1.8 million hl, France 1.4 million hl, Italy 1 million hl, Spain 802 thousand hl, and Greece 215 thousand hl (table A-7). These 6 EU countries rank among the top 20 world producers. The leading EU producers include the United Kingdom, the largest EU producer of whiskey, (but also manufactures gin and vodka), Germany, producer of vodka, gin, brandy, and liqueurs, France, the largest producer of brandy and aniseed spirits,

¹¹⁹ Includes intra-EU trade.

and a leading producer of liqueurs, and Italy and Spain producers of mainly brandy and liqueurs.¹²⁰

Consumption of distilled spirits has been declining in the EU, resulting from forces similar to those that have depressed U.S. consumption, including life-style changes and health consciousness among consumers, taxation policies, and government programs designed to discourage alcohol abuse.¹²¹ This phenomenon is reflected by declining rates of per capita consumption. Only 2 out of 15 EU-member countries recorded positive increases in consumption rates during 1995-98 (table A-35). Resulting from declining rates of consumption, EU distillers are rationalizing their product portfolios, aggressively marketing core product lines, and expanding marketing efforts in Asia and Latin America.¹²²

China

China, with production of over 11 million hl of pure alcohol, is the world's largest national producer and consumer of distilled spirits; imports, valued at \$10 million according to U.N. data,¹²³ account for only a fraction of total consumption. The Chinese market for spiritous beverages is regionally segmented with very few nationally recognized brands.¹²⁴ Distilled spirits are produced at an estimated 35,000-40,000 distilleries that produce mostly "white" spirits (imports are designated as "red" spirits).¹²⁵ Distilled spirits are the largest segment of the alcoholic beverages market in China with rates of consumption of 3.0 liters of pure alcohol (lpa) among the highest in Asia (table A-35).

Market growth for spirits is expected to continue with expansion of the economy and liberalization of duties and nontariff barriers. Negotiations between the United States and China on permanent NTR and accession to the WTO have yielded agreements to lower tariffs on "U.S. priority exports" (whiskies, rum, vodka, liqueurs) from the current rate levied by China of 65 percent to 10 percent in 2005; in addition, quotas and licenses would be abolished upon accession.¹²⁶ Problems with infrastructure, distribution channels, and traditional business practices, however, are expected to constrain development of the Chinese spirits market.¹²⁷

¹²⁰ European Commission, *Panorama of EU Industry 97* (Luxembourg: Office for Official Publications of the European Commission, 1997), p. 3-115.

¹²¹ *Ibid.*

¹²² *Ibid.*, p. 3-117.

¹²³ Other estimates value actual imports at \$500 million yearly. Team Canada Research Center, "The Alcoholic Beverages Market in China," Jan. 1998, found at <http://atn-riae.agr.ca/public/htmldocs/e1975.htm>, retrieved Apr. 11, 2000.

¹²⁴ Team Canada Research Center, "The Alcoholic Beverages Market in China," Jan. 1998, found at <http://atn-riae.agr.ca/public/htmldocs/e1975.htm>, retrieved Apr. 11, 2000.

¹²⁵ *Ibid.*

¹²⁶ USTR, China Trade Relations Working Group, Distilled Spirits, Beer & Wine, found at <http://www.chinapntr.gov>, retrieved May 8, 2000.

¹²⁷ "Holding Pattern," Wine & Spirit International, June 1999, pp. 89-90.

Russia

Russia is the world's second-largest producer of spirits, with production of 5.5 million hl of pure alcohol consisting mainly of vodka (table A-7). According to some estimates, nontaxed counterfeit and home-distilled spirits account for as much as 75 percent of Russian production. The Russian Government operates 116 spirits plants out of 184 legally licensed production facilities and owns a minority share in 26 others. In 1998, the government, seeking to restore historically important alcohol tax revenues, pledged to renew oversight of the production and sale of distilled spirits (for spiritous beverages of over 40 percent alcohol).¹²⁸

Part of the Russian Government's policy has been to augment revenue through increased taxes on spirits; however, this has led to a decrease in domestic demand and resulted in falling volumes for the three leading domestic producers Stolichnaya, Moskovaskaya, and Russkaya.¹²⁹ Russia's debt crisis in the mid 1990's led to economic contraction, causing imports to substantially drop, as Russian consumers shifted demand to domestically-produced spirits including illegal products.¹³⁰ High taxes and economic weakness have also led to a decline in per capita consumption during 1995-98, although Russia remains the world's leader with 6.0 lpa consumed per person in 1998 (table A-35).

Brazil

Brazil is a leading producer and consumer of spirits, with yearly production amounting to 3.9 million hl of pure alcohol. Cachaca, an 80 proof spirit fermented and distilled from molasses derived from sugar cane, is the most widely produced distilled liquor in Brazil. With annual production estimated at 345 million gallons, cachaca ranks among the world's leading spirits produced by volume.¹³¹ Most cachaca is consumed domestically, with exports accounting for only about 1 percent of production.¹³² Per capita consumption of spirits in Brazil remained steady at 1.5 lpa during 1995-98 ranking it in the middle of Central and South American countries (table A-35). According to the U.N. Statistical Office, Brazilian imports of spirits expanded from \$47 million in 1995 to \$71 million in 1998, with 89 percent of such exports supplied by the EU and composed mainly of whiskey (table A-25).¹³³

Japan

Japan, with estimated production of over 3 million hl of pure alcohol (table A-7), is a leading world producer of Shochu, a white spirit produced from various materials, including

¹²⁸ Sergey Minko, "Trade Opportunities for U.S. Bottling, Packaging, And Labeling Companies In The Russian Hard Liquor Market," USDOC, 1999. Found at <http://www.bisnis.doc.gov/bisnis/isa/9902PACK.HTM>, retrieved May 12, 2000.

¹²⁹ Ibid.

¹³⁰ Ibid.

¹³¹ Mery Galanternick, "Poor Man's Champagne," *Latin Trade*, Feb. 2000. p. 36.

¹³² Ibid.

¹³³ Calculated by the Commission using data from USDA, FAS.

grains, potatoes, and rice.¹³⁴ Japan also produces malt (Scotch style) and grain whiskies. In 1998, Japanese shipments of domestically produced distilled spirits totaled approximately 287 million gallons, of which Shochu¹³⁵ accounted for 63 percent of production (180 million gallons), whiskey 10 percent (28 million gallons), and other local spirits 27 percent (78 million gallons).¹³⁶

Japan is the world's second-leading importer of spirits after the United States. Principal suppliers include the EU, the United States, and Korea, which principally supply whiskey, brandy and Soju.¹³⁷ During 1995-98, imports declined by 30 percent in value from almost \$1.2 billion in 1995 to \$824 million in 1998, owing to underlying weakness in the Japanese economy (table A-25). Three factors have influenced the Japanese distilled spirits market during the period of reduced imports: (1) the depressed economy has forced consumers to purchase less expensive domestically-produced brands, (2) younger Japanese consumers are switching to lower proof spirits such as shochu, and (3) a tax reduction initiated in 1997 to harmonize rates between shochu and other spirits, including imported whiskey, has given a boost to the domestic whiskey industry that has aggressively marketed its lower priced brands.¹³⁸ Per capita consumption in Japan, one of the highest rates in Asia, was stable during 1995-98 averaging 2.25 lpa (table A-35).

Canada

Distilled spirits production in Canada amounted to C\$997 in 1997 with volume estimated at over 1 million hl of ethyl alcohol.¹³⁹ "Canadian whisky," distilled from rye and corn, accounts for about 40 percent of Canadian production with the balance of spirits products composed of vodka, gin, rum, brandy, liqueurs, spirit coolers, and ethyl alcohol.¹⁴⁰ Similar to the U.S. industry, the Canadian industry is highly concentrated with 3 of Canada's 13 distillers accounting for 80 percent of production. These large producers are subsidiaries of multinational corporations that are strongly focused on export markets.

Canadian exports, accounting for over half of domestic shipments,¹⁴¹ totaled \$394 million in 1998, most of which (95 percent) consisted of Canadian whiskey. The United States is Canada's largest export market accounting for 88 percent of exports in 1998, primarily bottled and bulk whiskey.¹⁴² Canadian imports amounted to \$203 million in 1998, with the EU supplying over 65 percent of shipments that included liqueurs, whiskey, and brandy.¹⁴³

¹³⁴ Both distillation methods use malted rice for fermentation. Brown, p. 252.

¹³⁵ Figure may include some soju imports from Korea.

¹³⁶ Calculated by the Commission using data from *Impact*, vol. 29, No. 10, May 15, 1999.

¹³⁷ Produced in Korea, it is similar to shochu.

¹³⁸ *Impact*, "Japanese Spirits Market, Amidst Major Change, Still Awaits Upturn, vol. 29, No.10, May 15, 1999, p. 15.

¹³⁹ "All about Canada's alcoholic beverage industry..." Agriculture and Agri-Food Canada, found at <http://www.agr.ca/cb/factsheets/alce.html>, retrieved Apr. 11, 2000.

¹⁴⁰ *Ibid.*

¹⁴¹ *Ibid.*

¹⁴² Calculated by the Commission using data from the FAS Global database and the U.N. Statistical Office.

¹⁴³ FAS Global database using data from the U.N. Statistical Office.

Per capita consumption in Canada remained relatively constant during 1995-98 amounting to 1.8 lpa in 1998 (table A-35). Increased health awareness by consumers, stricter laws for driving under the influence, and higher prices all contributed to weakened demand.¹⁴⁴

Mexico

With production of distilled spirits representing 659 thousand hl of pure alcohol, Mexico ranks among the world's top 15 manufacturers. Brandy and tequila are the principal spiritous beverages produced. Although beer is the alcoholic beverage of choice for most Mexican consumers, representing over 70 percent of the domestic market, spirits consisting of equal shares of rum, brandy and tequila,¹⁴⁵ account for 26 percent of the alcoholic consumption in Mexico.¹⁴⁶

Mexican imports, totaling \$71.3 million in 1998, increased by more than 8 percent during 1995-98, despite underlying weakness in the Mexican economy (table A-25). Mexican exports, however, expanded by 35 percent during the period, to over \$242 million, fueled by strong export demand for tequila, which accounted for approximately 83 percent of exports in 1998 (table A-26).

Per capita consumption in Mexico was stable at 0.7 lpa during 1995-98, though less than half the rate for NAFTA partners the United States (1.9 lpa) and Canada (1.8) (table A-35). High domestic taxes and a weakened economy still recovering from the currency crisis of the mid 1990s have dampened domestic demand forcing domestic producers to focus on export markets. A significant portion (nearly 30 percent) of Mexican spirits production was shipped to foreign markets, with the trend expected to increase, given the strong demand for tequila in North American and European markets.¹⁴⁷

¹⁴⁴ Agriculture and Agri-Food Canada, "The Canadian Distillery Industry," found at http://aceis.agr.ca/food/facts/e_profile/distillery/dist-pro.html, retrieved May 11, 2000.

¹⁴⁵ In 1998, Mexican spirits consumption was estimated at brandy,-32 percent, rum,-28 percent, tequila,-27 percent, and all other spirits,-13 percent. "Mexican Spirits Market Faces Difficulty, Despite Tequila's Rise," *Impact*, vol. 29, No. 7, Apr. 1, 1999, p. 3.

¹⁴⁶ *Ibid.*, and USDOC, ITA, "Mexico, Distilled Spirits Market Report," No. ISA980301, Mar. 1, 1998, p. 2.

¹⁴⁷ *Ibid.*, p. 3

APPENDIX A
STATISTICAL TABLES

Table A-1
Distilled spirits plants: Number of companies, employees, and establishments¹

Year	Companies	Employees (1,000)	Establishments with 20 or more employees	Total establishments
1977	64	15.7	77	104
1982	71	12.2	75	104
1987	48	9.0	57	72
1992	43	7.1	48	65
1997	44	6.5	42	60
Percentage change:				
77/97	-31.3	-58.6	-45.5	-42.3

¹ Except brandy.

Source: DOC, *Census of Manufactures, Beverages, 1987, 1992, and Census of Manufacturers, Distilleries, 1997*.

Table A-2
Distilled spirits: Number of U.S. companies producing selected bottled spirits¹

Item	Number of companies			Percentage change 87/97
	1987	1992	1997	
Whiskies:				
Unprocessed whiskey	10	7	8	-20.0
Blends of whiskey	12	11	8	-33.3
Blends with neutral spirits	18	12	8	-55.6
Other whiskey	23	16	13	-43.5
Gin	26	16	12	-53.8
Cordials, liqueurs	23	17	14	-39.1
Vodka	29	19	15	-48.3
Rum	18	17	9	-50.0
Other bottled liquors	20	17	13	-35.0

¹ With shipments of \$100,000 or more.

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

Table A-3
Distilled spirits: Geographic distribution of licensed distilled spirits plants by State, 1999

State	Number of DSPs
Arkansas	1
California	26
Connecticut	3
Florida	2
Georgia	2
Hawaii	1
Illinois	2
Indiana	1
Kentucky	13
Louisiana	2
Massachusetts	1
Maryland	2
Michigan	3
Minnesota	1
Missouri	1
Montana	1
New Jersey	3
New York	7
Ohio	2
Oregon	5
Pennsylvania	1
Tennessee	3
Texas	1
Virginia	1
Washington	2
West Virginia	1

Source: Compiled by USITC staff using data from Bureau of Alcohol, Tobacco, and Firearms.

Table A-4
U.S. distilled spirits: Number of employees, payroll, manhours, wages, and value of shipments, 1993-97

Item/year	All employees		Production workers			Wages — Million dollars —	Value of production
	Number 1,000 persons	Payroll Million dollars	Number 1,000 persons	Production hours Million	Hourly wage Dollars per hour		
Distilled sprits and blended liquors:							
1997	6.5	252.4	4.6	9.7	16.3	158.4	3,904.8
1996	6.6	242.2	4.7	9.8	16.1	157.5	3,672.9
1995	6.9	240.9	4.9	10.0	15.6	155.9	3,826.9
1994	6.6	240.1	4.7	10.1	15.4	155.8	3,887.5
1993	7.1	245.1	5.1	10.4	15.5	161.1	3,568.8

Source: U.S. DOC, *Annual Survey of Manufactures*, Statistics for Industry Groups and Industries, 1993-96

Table A-5
Distilled spirits: Price indexes, 1995-99

Item	1995	1996	1997	1998	1999 ¹	Percentage
						change
						1995/1999
<i>Price indicator</i>						
Producer price index:						
Distilled and blended liquors ²	145.0	149.1	152.0	152.3	149.5	3.1
Bottled Liquor, except brandy ²	147.3	150.1	153.3	154.0	155.7	5.7
Whiskey, including bottled in bond ³	115.8	119.4	123.2	123.5	125.8	8.6
Vodka ²	144.7	147.8	151.2	153.6	154.2	6.6
Liqueurs and cordials ²	157.1	159.2	161.8	163.0	160.5	2.2
Gin ²	151.8	153.7	158.7	159.3	160.8	5.9
Other bottled liquors, except brandy ³	121.5	121.6	121.7	121.2	124.7	2.6
Consumer price index:						
Distilled spirits at home ⁴	145.7	147.5	150.8	152.7	156.2	7.2
Distilled spirits away from home ⁵	(⁶)	(⁶)	(⁶)	101.3	103.9	(⁶)
Distilled spirits, excluding whiskey, at home ⁴	145.5	147.1	150.6	152.6	156.3	7.4
Whiskey at home ⁴	145.0	147.3	150.8	152.2	155.5	7.2
Alcoholic beverages ⁴	153.9	158.5	162.8	165.7	169.7	10.3
Alcoholic beverages at home ⁴	143.1	146.8	149.5	150.6	153.7	7.4
Alcoholic beverages away from home ⁴	176.5	182.7	189.4	195.0	201.0	13.9

¹ Producer price index values for 1999 are preliminary estimates and subject to revision.

² Base date, June 1983 = 100.

³ Base date, June 1990 = 100.

⁴ Base date, 1982-84 = 100.

⁵ Base date, Dec. 1990 = 100.

⁶ Not applicable.

Source: Producer Price Index Revision -Current Series, Consumer Price Index -All Urban Consumers, Bureau of Labor Statistics.

Table A-6
Distilled spirits: U.S. Federal tax collections¹ on distilled spirits, beer and wine, 1996-99

(Million dollars)

Item/fiscal year ²	Distilled spirits			Beer	Wine
	Domestic	Imported	Total		
1999	2,925.7	758.7	3,684.4	3,374.3	653.5
1998	2,857.4	682.3	3,539.7	3,420.5	634.1
1997	2,927.5	687.2	3,614.7	3,387.9	639.3
1996	2,938.3	668.8	3,607.1	3,355.3	619.9
Percentage change 96/99	-0.4	13.4	2.1	0.6	5.4

¹ Collection figures correspond to tax assessments, and are subject to revision. Totals may differ from statistics in B.A.T.F. Chief Financial Officer Annual Reports.

² Fiscal year Oct. 1-Sept. 31.

Source: Bureau of Alcohol, Tobacco, and Firearms.

Table A-7**Distilled spirits: Major world producers relative magnitude of spirits production¹**

Country	(Thousand hectoliters pure alcohol)	Year
China ²	11,088	1995
Russia ³	5,465	1992
United States ²	5,005	1997
United Kingdom ³	4,876	1996
Brazil ²	3,880	1994
Japan ³	3,024	1997
Ukraine ³	2,660	1997
Germany ³	1,829	1996
France ²	1,443	1995
Canada ³	1,257	1993/94
Italy ²	1,000	1995
Hungary ³	986	1995
Czech Republic ³	900	1995
Spain ³	802	1994
Mexico ²	659	1995
Poland ³	603	1996
Netherlands ³	311	1997
Argentina ³	270	1995
Australia ³	246	1995/96
Greece ²	215	1993
Chile ³	207	1996
Cuba ³	206	1995
Slovak Republic ³	168	1997
Finland ³	166	1997
Denmark ³	142	1996
Switzerland ²	124	1995
Belgium ²	116	1998
Latvia ³	85	1998
Republic of Ireland ²	82	1990
Romania ³	80	1996
Portugal ³	80	1990

¹ Detailed annual statistics on production of spirits in most countries are not available. Rankings compiled by World Drink Trends 1999, display the relative magnitude of major world producers of spirits and are based on production data, or, if not available, sales estimates are used to approximate production. These estimates are derived from the latest available annual data as denoted in the table.

² Sales estimate.

³ Production estimate.

Source: NTC Publications Ltd., Productschap voor Gedistilleerde Dranken, *World Drink Trends 1999*, p. 142.

Table A-8**Alcoholic beverages: U.S. domestic per capita consumption and total consumption, 1993-97**

Item	1993	1994	1995	1996	1997	Percentage change
						1993/1997
	Gallons					
Per capita	1.31	1.28	1.24	1.25	1.23	-6.11
Adult per capita ¹	1.88	1.84	1.78	1.78	1.76	-6.38
Total (million)	342.70	334.50	326.70	330.50	329.90	-3.74

¹ Consumers over 21 years old.

Source: Adams Business Media, *Liquor Handbook, 1998*.

A-5

**Table A-9
Distilled spirits: Conversion factors**

1 Wine gallon = Tax gallon = 128 fluid ounces regardless of alcohol content

1 Wine gallon = 3.785 liters; one 9-liter case = 2.378 gallons

Proof is 2x the percentage amount of alcohol by volume. For example, an 80 proof bourbon is 40 percent alcohol by volume

1 Proof gallon = 128 fluid ounces containing 50 percent ethyl alcohol by volume (100 proof)

Metric conversions for distilled spirits

Metric measures	Ounces	Bottles per case	Liters per case	9-liter case conversion factor ¹
1.75 liters (L)	59.2	6	10.5	1.17
1 liter (L)	33.8	12	12.0	1.33
750 milliliters (ml)	25.4	12	9.0	1.00

Distilled spirits: Proof gallon conversion factors to wine gallon and 9-liter cases²

Spirit category (1 proof gallon)	To wine gallons	To 9-liter cases
Straight whiskey	0.823	1.956
Blended whiskey	0.805	1.913
Canadian whiskey	0.800	1.902
Scotch whiskey	0.817	1.941
Irish whiskey	0.800	1.902
Gin	0.826	1.963
Vodka	0.810	1.926
Rum	0.798	1.896
Tequila	0.800	1.902
Brandy	0.799	1.898
Liqueurs and cordials	0.542	1.289
Prepared cocktails	0.139	0.329

¹ Indicates number of 9-liter cases per actual case.

² To convert from proof gallons to wine gallons or 9-liter cases, divide by the conversion factor. To convert from wine gallons or 9-liter cases to proof gallons multiply by the conversion factor.

Source: Adams Business Media, BATF, DISCUS.

Table A-10**Distilled spirits: U.S. domestic consumption by category and type, 1995-98**

Item	1995	1996	1997	1998	Percentage
					change
	(Million 9 liter cases)				1995/1998
Whiskey:					
Canadian	16.0	15.9	15.6	15.1	-5.6
Bourbon	13.4	13.1	12.9	13.0	-3.0
Scotch	8.9	8.8	8.6	8.3	-6.7
American blended	7.1	6.8	6.5	6.2	-12.7
Irish	0.3	0.3	0.3	0.3	0.0
Total	45.6	44.8	43.7	42.7	-6.4
White spirits:					
Vodka	34.6	34.6	34.7	35.1	1.4
Rum	11.4	11.7	12.2	13.0	14.0
Gin	11.6	11.3	11.0	10.8	-6.9
Tequila	5.2	5.7	6.1	6.5	25.0
Total	62.8	63.3	63.9	65.3	4.0
Cordials and liqueurs	16.4	16.6	16.9	17.3	5.5
Brandy/Cognac	7.9	8.3	8.6	8.9	12.7
Cocktails and mixed drinks	3.1	3.6	3.9	4.0	29.0
Total specialty spirits	27.4	28.5	29.3	30.1	9.9
Total distilled spirits	135.8	136.6	136.9	138.1	1.7

Source: M. Shanken Communications Inc., *Impact*, vol. 29, Aug. 15 1999, p. 10. Consumption data may differ from table A-16 (U.S.-produced and imported spirits consumption), as data originates from different sources. Figures may not add to totals shown due to rounding.

Table A-11**Distilled spirits: U.S. domestic consumption of spirits and all alcoholic beverages by gender, 1998**

Gender	(Percentage)	
	Distilled spirits	All alcoholic beverages
Male	62.6	79.5
Female	37.4	20.5
Total	100.0	100.0

Source: M. Shanken Communications Inc., *Impact*, vol. 29, Sept. 1, 1999, p. 16.

Table A-12**Distilled spirits: U.S. domestic consumption of spirits and all alcoholic beverages by age, 1998**

Age group	(Percentage)	
	Distilled spirits	All alcoholic beverages
Under 20	0.1	0.2
20-29	7.3	16.3
30-39	27.9	29.2
40-49	18.4	25.5
50-59	12.9	13.2
60 and over	33.4	15.6
Total	100.0	100.0

Source: M. Shanken Communications Inc., *Impact*, vol. 29, Sept. 1, 1999, p. 16.

A-7

Table A-13**Distilled spirits: U.S. domestic consumption of spirits and all alcoholic beverages by category and age, 1998**

(Percentage)

Category/age	20-29	30-39	40-49	50-59	60 and over	Total
Distilled spirits	7.3	27.9	18.4	12.9	33.4	100.0
Bourbon	12.2	19.5	24.3	12.3	31.7	100.0
Scotch	-	1.6	12.1	4.8	81.4	100.0
Vodka	4.8	40.4	12.6	17.4	24.8	100.0
Gin	2.1	31.7	21.3	9.7	35.2	100.0
Tequila	14.3	44.2	15.2	17.8	8.5	100.0
Beer	18.1	30.0	26.9	12.1	12.7	100.0
Regular beer	14.6	29.1	30.8	10.3	15.0	100.0
Light beer	22.1	31.0	22.4	14.3	10.1	100.0
Ale/malt liquor	12.4	53.9	10.2	16.1	7.1	100.0
Wine	8.8	18.3	24.2	20.2	27.9	100.0
Red	0.9	19.5	32.1	16.5	30.7	100.0
White	14.8	11.9	31.6	20.6	20.9	100.0
Blush	5.0	22.3	15.2	25.0	32.4	100.0

Source: M. Shanken Communications Inc., *Impact*, vol. 29, Sept. 1, 1999, p. 17. Figures may not add to totals shown due to rounding.

Table A-14**Distilled spirits: U.S. domestic consumption of spirits and all alcoholic beverages by region, 1998**

(Percentage)

Region	Distilled spirits	All alcoholic beverages
Northeast	17.5	29.7
North Central	20.9	20.3
South	29.1	30.4
West	32.5	19.6
Total	100.0	100.0

Source: M. Shanken Communications Inc., *Impact*, vol. 29, Sept. 1, 1999, p. 18.

Table A-15**Distilled spirits: U.S. domestic consumption of spirits and all alcoholic beverages by household income, 1998**

(Percentage)

Household income	Distilled spirits	All alcoholic beverages
Under \$15,000	8.7	11.5
\$15,000 - \$24,999	11.8	10.7
\$25,000 - \$34,999	12.3	7.3
\$35,000 - \$44,999	21.2	21.2
\$45,000 - \$59,999	14.0	24.1
\$60,000 and over	32.0	25.2
Total	100.0	100.0

Source: M. Shanken Communications Inc., *Impact*, vol. 29, Sept. 1, 1999, p. 20.

Table A-16

Distilled spirits: U.S. consumption of U.S.-produced and imported spirits by category, 1996-98

Category	1996	1997	1998	Percentage
				change 1996-98 ¹
	Million 9-liter cases			
Whiskey:				
Straight	13.1	13.0	13.2	0.8
Blended	6.6	6.3	6.0	-9.1
Total American whiskey	19.7	19.3	19.2	-2.5
Canadian bulk	10.3	10.0	9.7	-5.8
Canadian bottled	6.1	6.0	6.1	0.0
Total Canadian	16.4	16.0	15.8	-3.7
Scotch bulk	3.7	3.5	3.3	-10.8
Scotch blends bottled	5.7	5.6	5.5	-3.5
Scotch single malts	0.5	0.6	0.6	20.0
Total Scotch	9.9	9.7	9.4	-5.1
Irish and other	0.3	0.3	0.3	0.0
Total imported whiskey	26.5	26.0	25.6	-3.4
Total American whiskey	19.7	19.3	19.2	-2.5
Total whiskey	46.2	45.3	44.9	-2.8
Vodka:				
Domestic	27.9	27.2	28.0	0.4
Imported	5.1	5.7	6.0	17.6
Total	33.0	32.9	34.1	3.3
Gin:				
Domestic	(²)	8.8	8.5	-3.4
Imported	(²)	2.6	2.6	0.0
Total	11.7	11.4	11.2	-4.3
Brandy & Cognac:				
Domestic brandy	4.7	4.9	4.9	4.2
Imported brandy	0.8	0.6	0.7	-12.5
Cognac	2.0	2.2	2.4	20.0
Total	7.5	7.7	8.0	6.7
Cordials & Liqueurs:				
Domestic	(²)	8.9	9.1	2.2
Imported	(²)	7.1	7.0	-1.4
Total	16.0	16.0	16.2	1.3
Rum:				
Total	13.0	13.5	14.0	7.7
Tequila:				
Total	5.6	6.0	6.3	12.5
Prepared cocktails:				
Total	5.8	5.9	5.9	1.7
Total non-whiskey	92.6	93.4	95.7	3.3
Total domestic spirits	(²)	87.5	88.8	1.5
Total imported spirits	(²)	51.2	51.8	1.2
Total distilled spirits	138.8	138.7	140.6	1.3

¹ Where 1996 not comparable, percentage change 1997-98.

² Data not comparable for 1996-98.

Source: Adams Business Media, *Liquor Handbook, 1998 and 1999*. Consumption data may differ from table A-10 (U.S. consumption of domestic spirits), as data originates from different sources. Figures may not add to totals shown due to rounding.

Table A-17
Distilled spirits: Value of product shipments and selected inputs¹

(Million dollars)

Item	1987	1992	1997
Distilleries primary products ²	3,187.8	3,255.5	3,391.2
Deflated value ³	3,010.2	2,411.5	2,231.0
Bottled liquor	2,664.8	2,584.0	2,621.7
Deflated value ³	2,516.3	1,914.1	1,724.8
Inputs:			
Corn	(⁴)	41.1	37.3
Other grains (rye, barley, etc.)	(⁴)	(⁴)	9.5
Malt	(⁴)	8.0	8.4
Cooperage	(⁴)	39.1	46.3
Paperboard boxes and containers, etc	(⁴)	23.5	23.4
Plastic containers	(⁴)	26.5	63.0
Glass containers	(⁴)	313.3	337.6

¹ Except brandy.

² NAICS used for distilled spirits in 1997 directly corresponds to SIC used in previous years.

³ Nominal prices deflated using Producer Price Index for "Distilled and blended liquors," base date, June 1983.
 Department of Labor Statistics data, found at <http://146.142.4.24/cgi-bin/dsrv>, retrieved Apr. 14, 2000.

⁴ Not available or not comparable.

Source: DOC, *Census of Manufactures 1997*.

Table A-18
Distilled spirits: U.S. domestic production of selected bottled spirits

Item	1987			1992			1997		
	Quantity Million gallons	Value Million dollars	Deflated value ¹	Quantity Million gallons	Value Million dollars	Deflated value ¹	Quantity Million gallons	Value Million dollars	Deflated value ¹
Whiskies:									
Unprocessed whisky	23.3	364.7	344.4	27.4	342.7	253.9	46.0	650.9	428.2
Blends without neutral spirits ...	18.2	176.6	166.8	23.7	222.2	164.6	4.4	110.7	72.8
Blends with neutral spirits	9.3	76.2	72.0	8.0	70.4	52.1	6.5	47.9	31.5
Other whiskey	47.9	514.7	486.0	36.4	419.9	311.0	27.7	309.6	203.7
Total whiskey	98.7	1,132.2	1,069.2	95.5	1,055.2	781.6	84.6	1,119.1	736.2
Gin	25.8	155.0	146.4	33.9	182.5	135.2	13.2	67.7	44.5
Cordials, liqueurs	38.5	429.5	405.6	39.8	407.5	301.9	28.4	431.6	283.9
Vodka	71.0	341.0	322.0	81.7	351.7	260.5	33.6	382.8	251.8
Other bottled liquors:²									
Rum	9.0	55.6	52.5	9.9	55.8	41.3	(³)	95.3	62.7
Other-excluding bottled in bond ..	13.5	119.3	112.7	11.8	113.5	84.1	14.3	142.1	93.5
Other-bottled in bond	(³)	307.2	290.1	(⁴)	(⁴)	(⁴)	(³)	147.6	97.1

¹ Nominal prices deflated using Producer Price Index for "Distilled and blended liquors," base date, June 1983. Bureau of Labor Statistics data, found at <http://146.142.4.24/cgi-bin/dsr>, retrieved Apr. 14, 2000.

² Except brandy.

³ Not available.

⁴ Withheld to avoid disclosing data of individual companies.

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

Table A-19
Distilled spirits: Production by volume¹, 1993-96

(Million proof gallons)

Item	1993	1994	1995	1996 ²
Whiskey 160 proof and under	54.6	55.2	64.3	50.0
Whiskey over 160 proof	4.5	3.5	4.8	0.0
Brandy 170 proof and under	10.6	9.2	2.0	7.9
Brandy over 170 proof	2.2	2.9	2.2	2.1
Rum	1.8	1.7	1.2	0.7
Gin	13.3	13.5	14.7	9.7
Vodka	4.0	0.9	(³)	(³)
Alcohol and spirits 190 proof and over	1,313.8	1,388.3	1,447.4	1,000.3
Alcohol and spirits under 190 proof	12.7	12.7	12.4	8.4
Total	1,417.9	1,487.1	1,548.8	1,079.2

¹ Fiscal year Oct. 1 - Sept. 30.

² Nine months ending June 1996.

³ Vodka included in Alcohol and spirits category after 1995.

Source: U.S. Treasury Department, Bureau of Alcohol, Tobacco, and Firearms, statistical releases. Figures may not add to totals shown due to rounding.

Table A-20
Distilled spirits: Grains used in production¹, 1993-96

(Million pounds)

Item	1993	1994	1995	1996 ²
Corn and corn products	7,341.2	8,617.1	7,208.3	6,393.4
Rye and rye products	72.1	69.1	80.9	80.0
Malt and malt products	63.4	70.4	80.5	61.5
Wheat and wheat products	345.6	548.1	316.4	148.8
Sorghum grain & sorghum grain products ...	247.5	256.9	196.5	325.5
Other grain products	88.7	1.5	4.4	3.9
Total grain products	8,158.5	9,564.2	7,886.9	7,013.2

¹ Fiscal years Oct. 1 - Sept. 30.

² Nine months ending June 1996.

Source: U.S. Treasury Department, Bureau of Alcohol, Tobacco, and Firearms, statistical releases. Figures may not add to totals shown due to rounding.

Table A-21**Distilled spirits: Percent production capacity utilization rates for selected beverage industries, 1993-98**

Type	(Percent utilization)					
	1993	1994	1995	1996	1997	1998
Distilled and blended liquors	81	76	66	65	65	63
Malt beverages	75	79	76	76	75	82
Wines, brandy and brandy spirits	56	57	75	73	80	79
Bottled and canned soft drinks	72	74	70	71	67	60
All beverages	73	76	71	70	66	68

Source: U.S. Census Bureau.

Table A-22**Distilled spirits: Distillery establishment size by number of employees, 1997**

Employee range	No. of establishments	Employees
1 to 4	8	13
5 to 9	7	41
10 to 19	3	50
20 to 49	9	265
50 to 99	6	384
100 to 249	18	2,743
250 to 499	8	(¹)
500 to 999	1	(¹)
Total	60	6,545

¹ Withheld to avoid disclosing data of individual companies, data included in totals.Source: Department of Commerce, *Census of Manufactures 1992, 1997*.**Table A-23****Distilled spirits: Geographic distribution of spirits production by State, 1996¹**

State	(Million proof gallons)					Total
	Whiskey	Gin	Brandy	Rum	Other ²	
California	-	-	9.1	-	17.6	26.6
Florida	(³)	-	2.1	0.8	4.5	7.4
Illinois	-	1.9	-	-	748.3	750.1
Indiana	1.7	7.4	-	-	14.9	24.1
Iowa	-	1.4	-	-	393.6	395.0
Kentucky	42.2	-	-	-	0.5	42.7
Michigan	-	-	-	-	0.6	0.6
Minnesota	-	-	-	-	5.1	5.1
Ohio	-	-	-	-	1.0	1.0
Tennessee	13.4	-	-	-	66.5	79.9
Texas	-	-	-	-	43.8	43.8
Virginia	(³)	-	-	-	0.8	0.8
All other	-	1.8	(³)	-	78.8	80.6
Total	57.4	12.5	11.2	0.8	1,375.9	1,457.8

¹ Twelve months ending June 1996.² Includes ethyl alcohol, vodka, and spirits used for nonbeverage purposes.³ Less than 500,000 proof gallons.Source: Adams Business Media, *Liquor Handbook 1999*, compiled from statistics of the Bureau of Alcohol, Tobacco, and Firearms. Figures may not add to totals shown due to rounding.

Table A-24

Distilled spirits: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1995-99¹

Market	1995	1996	1997	1998	1999	Percentage
						change
	<i>Million dollars</i>					1995/1999
U.S. exports of domestic merchandise:						
United Kingdom	38.0	39.8	35.5	30.5	35.5	-6.6
France	13.9	16.7	12.9	15.4	22.9	64.7
Canada	28.9	34.1	43.3	39.9	38.5	33.2
Mexico	5.6	5.3	3.8	16.0	13.1	133.9
Sweden	1.4	1.7	1.3	1.0	1.5	7.1
Ireland	0.6	1.0	1.0	1.3	1.4	133.3
Japan	93.7	75.1	72.4	84.5	77.5	-17.3
Germany	48.7	53.6	57.5	50.2	70.3	44.4
Italy	8.7	9.8	10.8	11.5	13.9	59.8
Russia	15.5	7.0	1.0	0.5	0.1	-99.4
All other	135.3	147.9	150.8	144.4	165.6	22.4
Total	390.3	392.0	390.3	395.2	440.3	12.8
OECD	324.8	331.1	335.8	345.7	385.1	18.6
EU-15	148.1	159.6	156.1	147.4	190.5	28.6
Eastern Europe	2.8	4.3	5.5	5.9	7.0	150.0
Latin America	28.2	28.8	26.7	39.8	38.8	37.6
Asia	114.0	94.7	90.8	98.1	94.4	-17.2
U.S. imports for consumption:						
United Kingdom	477.3	514.4	530.4	560.4	604.8	26.7
France	312.9	368.0	401.5	460.5	522.5	67.0
Canada	307.4	340.8	343.6	332.3	378.4	23.1
Mexico	113.0	135.2	154.0	161.5	210.0	85.8
Sweden	119.4	136.8	146.9	164.3	189.4	58.6
Ireland	99.3	121.1	134.7	131.7	145.9	46.9
Japan	0.5	1.0	1.0	1.0	1.0	100.0
Germany	34.4	35.7	31.7	32.6	38.0	10.5
Italy	50.3	56.8	59.2	62.7	62.6	24.5
Russia	36.8	46.5	57.5	55.1	73.0	98.4
All other	78.1	86.9	107.8	123.7	157.3	101.4
Total	1,629.4	1,843.2	1,968.3	2,085.8	2,382.9	46.2
OECD	1,571.1	1,775.6	1,883.7	2,004.0	2,274.3	44.8
EU-15	1,132.9	1,280.9	1,365.0	1,483.3	1,653.2	45.9
Eastern Europe	2.0	4.6	11.6	15.8	23.1	1055.0
Latin America	129.9	151.8	175.9	183.2	241.2	85.7
Asia	4.5	4.7	4.7	5.2	5.4	20.0
U.S. merchandise trade balance:						
United Kingdom	-439.3	-474.6	-494.9	-529.9	-569.3	29.6
France	-299.0	-351.3	-388.6	-445.1	-499.6	67.1
Canada	-278.5	-306.7	-300.3	-292.4	-339.9	22.0
Mexico	-107.4	-129.9	-150.2	-145.5	-196.9	83.3
Sweden	-118.0	-135.1	-145.6	-163.3	-187.9	59.2
Ireland	-98.7	-120.1	-133.7	-130.4	-144.5	46.4
Japan	93.2	74.1	71.4	83.5	76.5	-17.9
Germany	14.3	17.9	25.8	17.6	32.3	125.9
Italy	-41.6	-47.0	-48.4	-51.2	-48.7	17.1
Russia	-21.3	-39.5	-56.5	-54.6	-72.9	242.3
All other	57.2	61.0	43.0	10.7	8.3	-85.5
Total	-1239.1	-1451.2	-1578.0	-1700.6	-1942.6	56.8
OECD	-1246.3	-1444.5	-1547.9	-1658.3	-1889.2	51.6
EU-15	-984.8	-1121.3	-1208.9	-1335.9	-1462.7	48.5
Eastern Europe	1.0	-0.3	-6.1	-9.9	-16.1	-1710.0
Latin America	-101.7	-123.0	-149.2	-143.4	-202.4	99.0
Asia	109.5	90.0	86.1	92.9	89.0	-18.7

¹ Import values are based on customs value; export values are based on f.a.s. value, U.S. ports of export.

Source: Compiled from official statistics of the U.S. Department of Commerce. Figures may not add to totals shown due to rounding.

Table A-25
Distilled spirits: World imports by selected countries and country groups¹
Value (million dollars)

Market	1995	1996	1997	1998
North America:				
United States	1,935.0	2,160.1	2,301.8	2,406.4
Canada	190.2	184.0	215.7	203.2
Mexico	65.8	71.9	75.7	71.3
Subtotal	2,191.0	2,416.0	2,593.2	2,680.9
EU-15²:				
Spain	755.5	789.5	845.6	775.0
Germany	709.7	668.7	684.2	636.4
United Kingdom	411.2	468.1	497.2	537.3
France	522.2	524.1	465.4	510.6
Italy	⁽³⁾	263.1	229.0	⁽³⁾
Greece	221.2	227.0	194.7	218.7
Belgium	228.6	178.9	214.2	213.7
Netherlands	206.7	208.3	155.5	146.3
Portugal	121.0	122.5	132.0	139.3
Sweden	68.2	93.4	82.4	⁽³⁾
Denmark	62.7	65.5	77.3	77.8
Ireland	48.0	54.3	61.1	61.3
Austria	62.5	58.6	61.3	59.1
Finland	56.4	58.1	59.9	68.0
Subtotal	3,474.2	3,780.2	3,759.9	3,766.1
Asia:				
Japan	1,173.1	1,016.1	896.0	824.1
Singapore	427.0	381.4	382.2	237.0
Hong Kong	474.4	356.4	398.5	233.6
Republic of Korea	132.3	205.3	207.6	114.9
Thailand	139.5	146.8	109.6	⁽³⁾
China	25.9	10.9	10.6	10.6
India	7.9	4.2	4.8	⁽³⁾
Subtotal	2,380.1	2,121.1	2,009.3	⁽³⁾
Oceania:				
Australia	173.9	188.5	193.2	⁽³⁾
New Zealand	48.6	47.8	⁽³⁾	44.9
Subtotal	222.5	236.3	193.2	⁽³⁾
Middle East:				
Turkey	12.2	11.4	8.5	9.0
Israel	7.2	7.5	8.7	8.9
Subtotal	19.4	18.9	17.2	17.9
Eastern Europe:				
Czech Republic	34.8	50.4	49.9	31.7
Hungary	14.8	11.7	10.9	9.2
Poland	8.1	16.6	16.9	⁽³⁾
Slovakia	11.2	8.5	15.7	15.5
Croatia	8.2	7.7	9.3	12.0
Subtotal	77.1	94.9	102.7	68.4
Russian Federation	⁽³⁾	209.6	192.7	⁽³⁾
Ukraine	147.2	84.2	24.6	27.7
Subtotal	⁽³⁾	293.8	217.3	⁽³⁾
South America:				
Brazil	47.0	50.3	90.9	70.6
Argentina	17.7	23.0	32.6	33.8
Chile	21.4	22.8	23.2	22.0
Peru	19.1	18.2	18.9	15.9
Uruguay	9.7	12.7	13.5	13.4
Subtotal	114.9	127.0	179.1	155.7

¹ Includes HTS categories 2208.10 - Compound alcoholic preparations; 2208.20 - Grape brandy; 2208.30 - Whiskies; 2208.40 - Rum and Tafia; 2208.50 - Gin and Geneva; 2208.90 - Other alcoholic liqueurs nes. (Including vodka, liqueurs, etc.).

² Includes intra-EU trade.

³ Not available.

Source: FAS database using data from the United Nations Statistical Office. Figures may not add to totals shown due to rounding.

Table A-26
Distilled spirits: World exports by selected countries and country groups¹ 1995-98
 Value (million dollars)

Countries and groups	1995	1996	1997	1998
North America:				
United States	390.3	385.5	385.3	385.0
Canada	362.0	403.5	395.1	394.1
Mexico	179.9	197.7	216.1	242.5
Subtotal	932.2	986.7	996.5	1,021.6
EU-15²:				
United Kingdom	4,096.2	4,083.9	4,530.1	3,944.9
France	2,417.7	2,316.6	2,095.3	1,843.4
Ireland	422.2	477.6	492.6	484.0
Germany	498.0	399.1	289.3	309.0
Italy	(³)	326.8	300.9	(³)
Spain	119.1	174.8	294.6	214.9
Netherlands	268.3	271.5	176.6	204.0
Sweden	173.0	207.9	207.7	(³)
Belgium	201.8	135.3	117.5	112.7
Finland	52.1	71.5	57.7	(³)
Denmark	49.4	41.6	46.0	47.2
Greece	87.2	94.1	55.7	45.5
Portugal	17.9	16.0	19.1	17.2
Austria	50.8	24.2	18.6	16.7
Subtotal	8,453.7	8,640.9	8,701.7	7,239.5
Asia:				
Singapore	421.2	406.4	376.3	246.6
Korea	33.9	52.7	58.6	64.0
Japan	28.2	34.1	51.6	47.7
China	60.4	49.6	55.5	46.9
Malaysia	34.4	34.5	29.8	(³)
India	8.6	9.2	6.2	(³)
Thailand	3.5	5.4	6.2	(³)
Subtotal	590.2	591.9	584.2	(³)
Oceania:				
New Zealand	6.3	10.1	15.0	15.4
Australia	5.5	4.5	7.9	(³)
Subtotal	11.8	14.6	22.9	(³)
Middle East				
Turkey	6.8	6.9	5.8	4.8
Israel	24.8	14.5	4.4	1.3
Subtotal	31.6	21.4	10.2	6.1
Eastern Europe:				
Poland	51.4	39.6	25.8	(³)
Croatia	19.2	22.6	19.1	19.6
Czech Republic	20.0	14.4	8.3	12.0
Hungary	113.0	61.7	6.9	(³)
Subtotal	203.6	138.3	60.1	(³)
Russian Federation	(³)	143.6	74.7	(³)
Ukraine	1.8	64.6	4.9	5.4
Subtotal	(³)	208.2	79.6	(³)
South America				
Brazil	23.4	29.9	11.4	11.0
Argentina	7.4	6.1	6.6	3.8
Chile	2.4	1.6	1.5	2.0
Subtotal	33.2	37.6	19.5	16.8

¹ Includes HTS categories 2208.10 - Compound alcoholic preparations; 220820 - Grape brandy; 2208.30 - Whiskies; 2208.40 - Rum and Tafia; 2208.50 - Gin and Geneva; 2208.90 - Other alcoholic liqueurs nes.

² Includes intra-EU trade.

³ Not available.

Source: FAS database using data from the United Nations Statistical Office. Figures may not add to totals shown due to rounding.

Table A-27

Distilled spirits: Composition of U.S. imports for consumption, 1995-99

Item	1995	1996	1997	1998	1999	Percentage
						change 1995/1999 ¹
Value (million dollars)						
Scotch and Irish whiskies (bottled) ²	314.4	358.7	381.0	405.0	438.4	39.4
Scotch and Irish whiskies (bulk) ³	62.0	57.3	59.3	48.8	55.7	-10.2
Other whiskey ⁴	293.8	326.6	328.8	317.9	362.3	23.3
Subtotal whiskey	670.2	742.6	769.0	771.8	856.4	27.8
Liqueurs and cordials	(⁵)	366.0	383.0	397.1	432.1	18.1
Vodka	(⁵)	225.1	258.1	286.0	366.7	62.9
Brandy ⁶	203.4	247.0	268.8	313.0	345.3	69.8
Other distilled spirits	(⁵)	168.1	190.2	197.7	246.9	46.9
Gin	79.6	83.0	83.8	103.2	111.8	40.5
Rum	10.9	10.7	12.5	14.6	22.6	107.3
Total	1,629.1	1,842.5	1,965.6	2,083.4	2,381.9	46.2
Quantity (million proof liters)						
Scotch and Irish whiskies (bottled) ²	38.9	40.5	41.2	40.1	39.9	2.6
Scotch and Irish whiskies (bulk) ³	26.7	27.6	28.3	23.6	23.3	-12.7
Other whiskey ⁴	109.8	114.6	109.6	107.9	109.6	-0.2
Subtotal whiskey	175.4	182.7	179.0	171.6	172.8	-1.5
Liqueurs and cordials	(⁵)	39.4	41.2	42.8	46.5	18.0
Vodka	(⁵)	40.0	42.3	45.0	54.1	35.3
Brandy ⁶	19.0	19.7	19.5	22.6	23.9	25.8
Other distilled spirits	(⁵)	56.8	63.1	62.1	71.8	26.4
Gin	17.8	18.4	19.5	20.9	21.2	19.1
Rum	5.5	4.9	5.1	4.9	9.3	69.1
Total	339.7	362.0	369.8	369.9	399.6	17.6
Unit value (dollars per proof liter)						
Scotch and Irish whiskies (bottled) ²	8.1	8.9	9.2	10.1	11.0	35.8
Scotch and Irish whiskies (bulk) ³	2.3	2.1	2.1	2.1	2.4	4.3
Other whiskey ⁴	2.7	2.8	3.0	2.9	3.3	22.2
Subtotal whiskey	3.8	4.1	4.3	4.5	5.0	31.6
Liqueurs and cordials	(⁵)	9.3	9.3	9.3	9.3	0.0
Vodka	(⁵)	5.6	6.1	6.4	6.8	21.4
Brandy ⁶	10.7	12.5	13.8	13.8	14.4	34.6
Other distilled spirits	(⁵)	3.0	3.0	3.2	3.4	13.3
Gin	4.5	4.5	4.3	4.9	5.3	17.8
Rum	2.0	2.2	2.5	3.0	2.4	20.0

¹ For items broken out of "Other" category after 1995, percentage change will be 1996/99.

² In containers holding not over 4 liters.

³ In containers over 4 liters.

⁴ Other than Scotch and Irish whiskey, includes bottled and bulk products.

⁵ Items broken out from "Other" category after 1995.

⁶ Grape brandy.

Source: Compiled from official statistics of the U.S. Department of Commerce. Figures may not add to totals shown due to rounding.

Table A-28

Distilled spirits: U.S. imports for consumption of selected spirits by major supplier countries, 1995-99

Item	Value (million dollars)					Percentage change 1995/1999 ¹
	1995	1996	1997	1998	1999	
Whiskies:						
United Kingdom	365.8	403.3	420.5	431.7	465.0	27.1
Canada	293.6	326.4	329.6	318.2	362.6	23.5
Ireland	10.5	12.7	17.9	19.2	25.3	141.0
All other	(²)	(²)	1.0	2.7	3.6	(³)
Total	670.2	742.6	769.0	771.8	856.4	15.3
Liqueurs and cordials:						
France	(⁴)	96.2	104.4	116.8	138.7	44.2
Ireland	(⁴)	105.6	116.6	112.3	119.0	12.7
Italy	(⁴)	51.2	52.4	57.4	57.3	11.9
Germany	(⁴)	32.1	30.0	30.7	35.6	10.9
United Kingdom	(⁴)	22.5	21.3	19.9	22.3	-0.9
Mexico	(⁴)	14.9	15.2	13.6	15.9	6.7
Canada	(⁴)	12.3	11.6	11.2	14.1	14.6
Netherlands	(⁴)	4.9	10.0	9.0	6.1	24.5
Switzerland	(⁴)	11.4	8.2	9.2	5.9	-48.2
Spain	(⁴)	2.9	3.6	7.8	4.5	55.2
All other	(⁴)	11.9	9.8	8.9	12.1	1.7
Total	(⁴)	354.1	373.2	388.2	419.9	18.6
Vodka:						
Sweden	(⁴)	136.4	146.3	163.2	188.4	38.1
Russia	(⁴)	46.2	56.9	54.3	72.0	55.8
Netherlands	(⁴)	7.5	12.7	17.5	36.9	392.0
Finland	(⁴)	15.3	16.9	21.9	25.3	65.4
Poland	(⁴)	3.8	10.8	15.0	21.7	471.1
France	(⁴)	1.0	1.8	3.3	6.9	590.0
United Kingdom	(⁴)	5.2	4.7	4.0	5.8	11.5
Denmark	(⁴)	4.6	4.9	3.3	3.3	-28.3
All other	(⁴)	5.2	3.1	3.5	6.4	23.1
Total	(⁴)	225.1	258.1	286.0	366.7	62.9
Brandy⁵:						
France	186.6	233.2	255.8	297.6	329.7	76.7
Mexico	8.8	6.6	6.2	6.7	6.4	-27.3
Spain	1.8	2.0	2.1	2.7	3.1	72.2
Italy	3.0	2.9	2.7	2.8	3.0	0.0
All other	3.2	2.3	2.0	3.2	3.1	-3.1
Total	203.4	246.9	268.8	313.0	345.3	69.8
Gin:						
United Kingdom	79.0	82.6	82.6	102.4	108.7	37.6
All other	1.0	(²)	1.2	1.0	3.2	220.0
Total	79.6	83.0	83.8	103.2	111.8	40.5

¹ Percentage change 1996/99 for spirit categories broken out after 1995.

² Less than \$500,000.

³ Not applicable.

⁴ Items broken out from "Other" category after 1995.

⁵ Grape brandy.

Source: Compiled from official statistics of the U.S. Department of Commerce. Figures may not add to totals shown due to rounding.

Table 29
Distilled spirits: U.S. imports for consumption by major source countries, 1995-99¹

Market	1995	1996	1997	1998	1999	Percentage
						change
	Value (million dollars)					1995/1999
United Kingdom	477.5	514.4	530.4	560.4	604.8	26.7
France	312.9	368.0	401.4	460.5	522.4	67.0
Canada	307.3	340.6	343.5	331.3	378.1	23.0
Mexico	113.0	135.1	153.6	161.4	210.0	85.8
Sweden	119.3	136.8	146.9	164.3	189.4	58.8
Ireland	99.3	121.1	134.7	131.7	145.9	46.9
Russia	36.8	46.5	57.5	55.1	73.0	98.4
Italy	50.3	56.8	57.8	62.5	62.6	24.5
Netherlands	8.6	13.8	25.8	27.7	45.1	424.4
Germany	34.4	35.7	31.7	32.6	38.0	10.5
All other	69.8	73.8	82.6	96.5	112.7	61.5
Total	1,629.1	1,842.8	1,966.0	2,084.1	2,382.1	46.2
	Quantity (million proof liters)					
United Kingdom	84.8	87.7	88.8	84.3	83.8	-1.2
France	20.8	24.0	26.0	30.0	32.8	57.7
Canada	116.2	121.6	115.5	113.4	116.2	0.0
Mexico	52.6	59.3	67.2	66.8	77.3	47.0
Sweden	21.4	23.6	24.2	26.5	30.2	41.1
Ireland	5.7	6.4	6.7	6.6	7.4	29.8
Russia	6.3	7.0	8.4	7.7	9.6	52.4
Italy	8.9	8.3	7.4	7.5	8.6	-3.4
Netherlands	1.4	2.4	4.5	4.7	6.2	342.9
Germany	4.7	5.6	5.0	5.3	5.8	23.4
All other	16.9	16.1	16.1	17.1	21.7	28.4
Total	339.7	362.0	369.8	369.9	399.6	17.6
	Unit value (dollars per proof liter)					
United Kingdom	5.6	5.9	6.0	6.6	7.2	28.6
France	15.0	15.3	15.4	15.4	15.9	6.0
Canada	2.6	2.8	3.0	2.9	3.3	26.9
Mexico	2.1	2.3	2.3	2.4	2.7	28.6
Sweden	5.6	5.8	6.1	6.2	6.3	12.5
Ireland	17.4	18.9	20.1	20.0	19.7	13.2
Russia	5.8	6.6	6.8	7.2	7.6	31.0
Italy	5.7	6.8	7.8	8.3	7.3	28.1
Netherlands	6.1	5.8	5.7	5.9	7.3	19.7
Germany	7.3	6.4	6.3	6.2	6.6	-9.6
All other	4.1	4.6	5.1	5.6	5.2	26.8
Total	4.8	5.1	5.3	5.6	6.0	25.0

¹ Not including ethyl alcohol for beverage purposes.

Source: Compiled from official statistics of the U.S. Department of Commerce. Figures may not add to totals shown due to rounding.

**Table A-30
Distilled spirits: Harmonized Tariff Schedule subheadings; description; U.S. col. 1 rate of duty as of Jan. 1, 2000; U.S. exports, 1999; and U.S. imports, 1999**

HTS subheading	Description	Col. 1 rate of duty as of Jan. 1, 1997		U.S. exports 1999	U.S. imports 1999
		General	Special ¹		
2106.90.12	Compound alcoholic preparations of an alcoholic strength by volume exceeding 0.5% vol., of a kind used for the manufacture of beverages, containing not over 20 percent of alcohol by weight	4.2¢/kg + 1.9% ²	Free(A,CA,E,IL, J, MX) ²	(⁶)	(⁵)
2106.90.15	Compound alcoholic preparations of alcoholic strength by volume exceeding 0.5% vol., of a kind used for the manufacture of beverages, containing over 20 percent but not over 50 percent of alcohol by weight	8.4¢/kg + 1.9% ²	Free(A,CA,E,IL,J,MX) ²	(⁶)	(⁵)
2106.90.18	Compound alcoholic preparations for alcoholic strength by volume exceeding 0.5% vol., of a kind used for the manufacture of beverages, containing over 50 percent of alcohol by weight	17¢/kg + 1.9% ²	Free(A,CA,E,IL,J,MX) ²	(⁶)	(⁵)
2207.10.30	Undenatured ethyl alcohol of an alcoholic strength by volume of 80 percent vol. or higher, for beverage purposes	18.9¢/pf. liter ³		40	1.0
2208.20.10	Pisco and singani	Free ³		0	(⁶)
2208.20.20	Grape brandy, excluding Pisco and singani, in containers not over 4 liters, not over \$2.38/liter	Free ³		(⁷)	(⁶)
2208.20.30	Grape brandy, excluding Pisco and singani, in containers not over 4 liters, valued over \$2.38 but not over \$3.43/liter	Free ³		(⁷)	3.9
2208.20.40	Grape brandy, excluding Pisco and singani, in containers not over 4 liters, valued over \$3.43/liter	Free ³		(⁷)	335.5
2208.20.50	Grape brandy, excluding Pisco and singani, in containers over 4 liters, not over \$2.38/liter	Free ³		(⁷)	3.9
2208.20.60	Grape brandy, excluding Pisco and singani, in containers over 4 liters, valued over \$2.38/liter	Free ³		(⁷)	1.7
2208.30.30	Irish and Scotch whiskies	Free ⁴		0	494.1
2208.30.60	Whiskies, other than Irish and Scotch whiskies	Free ⁴		327.0	362.3
2208.40.20	Rum and tafia: In containers each holding not over 4 liters, valued not over \$3 per proof liter	23.7¢/pf. liter ⁴	Free(A+,CA,E,IL) ⁴ 11.1¢/pf. liter (MX) ⁴	(⁶)	1.6
2208.40.40	Rum and tafia: In containers each holding not over 4 liters, valued over \$3 per proof liter	13¢/pf. liter ⁴	Free (A+,CA,E,IL) ⁴ 11.1¢/pf. liter (MX) ⁴	(⁶)	9.9

See footnotes at end of table.

Table A-30—Continued

Distilled spirits: Harmonized Tariff Schedule subheadings; description; U.S. col. 1 rate of duty as of Jan. 1, 2000; U.S. exports, 1999; and U.S. imports, 1999

HTS subheading	Description	Col. 1 rate of duty as of Jan. 1, 1997		U.S. exports 1999	U.S. imports 1999
		General	Special ¹		
2208.40.60	Rum and tafia: In containers each holding over 4 liters, valued not over 69¢ per proof liter	23.7¢/pf. liter ⁴	Free (A+, CA, E, IL) ⁴ 11.1¢/pf. Liter (MX) ⁴	(⁶)	1.0
2208.40.80	Rum and tafia: In containers each holding over 4 liters, valued over 69¢ per proof liter	13¢/pf. liter ⁴	Free(A+, CA, E, IL) ⁴ 11.1¢/pf. liter (MX) ⁴	(⁶) 3.7	10.3 111.8
2208.50.00	Gin and Geneve	Free ⁴		(¹⁰)	1.5
2208.60.10	Vodka, in containers each holding not over 4 liters, valued not over \$2.05/liter	Free ⁴		(¹⁰)	365.0
2208.60.20	Vodka, in containers each holding not over 4 liters, valued over \$2.05/liter	Free ⁴		(¹⁰)	(⁶)
2208.60.50	Vodka, in containers each holding over 4 liters	Free ⁴		19.5	432.1
2208.70.00	Liqueurs and cordials	Free ⁴		(¹¹)	(⁶)
2208.90.01	Aquavit	Free ⁴		(¹¹)	3.5
2208.90.05	Bitters, not fit for use as beverages	Free ⁴		(¹¹)	(⁶)
2208.90.10	Bitters, fit for use as beverages	Free ⁴		(¹¹)	(⁶)
2208.90.12	Slivovitz brandy, valued not over \$3.43/liter, in containers each holding not over 4 liters	Free ⁴		(¹¹)	(⁶)
2208.90.14	Slivovitz brandy, valued not over \$3.43/liter, in containers each holding over 4 liters	Free ⁴		(¹¹)	1.0
2208.90.15	Slivovitz brandy, valued over \$3.43/liter	Free ⁴		(¹¹)	1.0
2208.90.20	Brandy, except grape brandy and slivovitz, in containers each holding not over 4 liters, valued not over \$2.38/liter	Free ⁴		(¹¹)	1.2
2208.90.25	Brandy, except grape brandy and slivovitz, in containers each holding not over 4 liters, valued over \$2.38 but not over \$3.43/liter	Free ⁴		(¹¹)	45.7
2208.90.30	Brandy, except grape brandy and slivovitz, in containers each holding not over 4 liters, valued over \$3.43/liter	Free ⁴		(¹¹)	1.6
2208.90.35	Brandy, except grape brandy and slivovitz, in containers each holding over 4 liters, valued not over \$2.38/liter	Free ⁴		(¹¹)	

See footnotes at end of table.

Table A-30—Continued
Distilled spirits: Harmonized Tariff Schedule subheadings; description; U.S. col. 1 rate of duty as of Jan. 1, 2000; U.S. exports, 1999; and U.S. imports, 1999

HTS subheading	Description	Col. 1 rate of duty as of Jan. 1, 1997		U.S. exports 1999	U.S. imports 1999
		General	Special ¹		
2208.90.40	Brandy, except grape brandy and slivovitz, in containers each holding over 4 liters, valued over \$2.38/liter	Free ⁴		(¹¹)	(⁶)
2208.90.46	Kirschwasser and ratafia	Free ⁴		(⁶)	(⁶)
2208.90.50	Tequila, in containers each holding not over 4 liters	Free ⁴		(¹¹)	52.9
2208.90.55	Tequila, in containers each holding over 4 liters	Free ⁴		(¹¹)	127.3
2208.90.71	Imitations of brandy and other spirituous beverages	Free ⁴		(¹¹)	(⁶)
2208.90.72	Mescal in containers each holding not over 4 liters	Free ⁴		(¹¹)	1.1
2208.90.75	Spirits nesoi, fit for use as beverages or for beverages purposes	Free ⁴		(¹¹)	10.2
2208.90.80	Undenatured ethyl alcohol of an alcoholic strength by volume of less than 80 percent volume, nesoi	21.1¢/pf. liter ⁴	Free(A,CA,E,I,L,J,MX) ⁴	(¹¹)	1.0

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); United States-Canada Free-Trade Agreement, goods of Canada (C); Mexico (MX); Caribbean Basin Economic Recovery Act (E); United States-Israel Free-Trade Area (IL); and the Andean Trade Preference Act (J). See General notes of the HTS for more details on these programs.

² Imports under this subheading may be subject to Federal Excise Tax (26 U.S.C. 5001 or 26 U.S.C. 5041).

³ Imports under this subheading may be subject to Federal Excise Tax (26 U.S.C. 5001 or 26 U.S.C. 5051).

⁴ Imports under this subheading are subject to Federal Excise Tax (26 U.S.C. 5001).

⁵ Less than \$500,000.

⁶ The value of U.S. exports is not available for this individual HTS subheading. The Schedule B subheading 2106.90.1650 corresponds to HTS subheadings

2106.90.12, 2106.90.15, 2106.90.18. 1999 exports totaled \$9.6 million.

⁷ The value of U.S. exports is not available for this individual HTS subheading. The Schedule B subheading 2208.20.00 corresponds to HTS subheadings 2208.20.20, 2208.20.30, 2208.20.40, 2208.20.50, 2208.20.60. 1999 exports totaled \$7.4 million.

⁸ The value of U.S. exports is not available for this individual HTS subheading. The Schedule B subheading 2208.40.00.30 corresponds to HTS subheadings

2208.40.20, 2208.40.40. 1999 exports totaled \$10.7 million.

⁹ The value of U.S. exports is not available for this individual HTS subheading. The Schedule B subheading 2208.40.00.50 corresponds to HTS subheadings

2208.40.60, 2208.40.80. 1999 exports totaled \$18.3 million.

¹⁰ The value of U.S. exports is not available for this individual HTS subheading. The Schedule B subheading 2208.60.00 corresponds to HTS subheadings 2208.60.10, 2208.60.20, 2208.60.50. 1999 exports totaled \$7.9 million.

¹¹ The value of U.S. exports is not available for this individual HTS subheading. The Schedule B subheading 2208.90.90.00 corresponds to HTS subheadings

2208.90.01-2208.90.80, except for 2208.90.46. 1999 exports totaled \$36.0 million.

Source: Compiled from official statistics of the U.S. Department of Commerce and USITC, *Harmonized Tariff Schedule of the United States (2000)*, USITC publication 3249, 1999.

Table 31
Distilled spirits: Composition of U.S. domestic exports¹, 1995-99

Item	1995	1996	1997	1998	1999	Percentage
						change
	Value (million dollars)					1995/1999 ²
Bourbon (bottled) ³	214.7	217.5	234.0	229.2	261.1	21.6
Bourbon (bulk) ⁴	43.2	41.2	43.7	40.1	40.9	-5.3
Other whiskey (bottled) ³	15.7	17.4	10.8	16.0	19.2	22.3
Other whiskey (bulk) ⁴	4.1	2.0	1.5	3.5	5.7	39.0
Subtotal whiskey	277.7	278.1	290.0	288.8	326.9	17.7
Rum (bottled) ³	7.5	8.7	9.7	10.4	10.7	42.7
Rum (bulk) ⁴	5.5	10.5	22.2	22.1	18.3	232.7
Subtotal rum	13.0	19.2	31.9	32.5	29.0	123.1
Other distilled spirits	(⁵)	40.9	28.0	29.3	36.4	-11.0
Liqueurs and cordials	(⁵)	16.8	14.6	16.4	19.5	16.1
Brandy ⁶	9.3	8.4	6.8	9.8	7.4	-20.4
Vodka	(⁵)	19.2	12.2	6.3	7.9	-58.9
Gin	2.6	2.9	1.7	1.9	3.7	42.3
Total	302.6	385.5	385.3	385.0	430.8	42.4
	Quantity (million proof liters)					
Bourbon (bottled) ³	28.5	30.1	34.1	36.5	38.0	33.3
Bourbon (bulk) ⁴	20.2	18.9	21.2	19.9	21.4	5.9
Other whiskey (bottled) ³	4.7	5.2	3.4	4.9	6.1	29.8
Other whiskey (bulk) ⁴	2.5	1.1	1.0	2.9	3.5	40.0
Subtotal whiskey	55.9	55.3	59.7	64.2	69.0	23.4
Rum (bottled) ³	2.8	5.1	5.3	6.2	6.0	114.3
Rum (bulk) ⁴	3.9	4.8	10.1	13.8	19.7	405.1
Subtotal rum	6.7	9.9	15.4	20.0	25.7	283.6
Other distilled spirits	(⁵)	14.2	12.2	11.8	14.3	0.7
Liqueurs and cordials	(⁵)	3.1	2.2	2.8	3.1	0.0
Brandy ⁶	2.8	2.2	1.6	2.3	1.7	-39.3
Vodka	(⁵)	15.1	7.2	4.6	4.2	-72.2
Gin	1.2	1.6	1.0	1.2	2.9	141.7
Total	106.2	101.4	99.3	106.9	120.9	13.8
	Unit value (dollars per proof liter)					
Bourbon (bottled) ³	7.5	7.2	6.9	6.3	6.9	-8.0
Bourbon (bulk) ⁴	2.1	2.2	2.1	2.0	1.9	-9.5
Other whiskey (bottled) ³	3.3	3.3	3.2	3.3	3.1	-6.1
Other whiskey (bulk) ⁴	1.6	1.8	1.5	1.2	1.6	0.0
Subtotal whiskey	4.1	5.0	4.9	4.5	4.7	14.6
Rum (bottled) ³	2.6	1.7	1.8	1.7	1.8	-55.0
Rum (bulk) ⁴	1.4	2.2	2.2	1.6	0.9	-35.7
Subtotal rum	1.9	1.9	2.1	1.6	1.1	-42.1
Other distilled spirits	(⁵)	2.9	2.3	2.5	2.5	-13.8
Liqueurs and cordials	(⁵)	5.4	6.6	5.9	6.3	16.7
Brandy ⁶	3.3	3.8	4.3	4.3	4.4	33.3
Vodka	(⁵)	1.3	1.7	1.4	1.9	46.2
Gin	2.2	1.8	1.7	1.6	1.3	-40.9

¹ Does not include alcoholic preparations.

² For items broken out of "Other" category after 1995, percentage change is for 1996/99.

³ In containers not over 4 liters.

⁴ In containers over 4 liters.

⁵ Items broken out from "Other" category after 1995.

⁶ Grape brandy.

Source: Compiled from official statistics of the U.S. Department of Commerce. Figures may not add to totals shown due to rounding.

Table A-32

Distilled spirits: U.S. exports of domestic merchandise by principal markets, 1995-99¹

Market	1995	1996	1997	1998	1999	Percentage
						change
	Value (million dollars)					1995/1999
Japan	93.7	75.1	72.4	84.5	77.5	-17.3
Germany	48.7	53.6	57.5	50.2	70.3	44.4
Australia	34.6	38.5	42.8	42.8	45.5	31.5
Canada	28.9	34.1	43.3	39.9	38.5	33.2
United Kingdom	38.0	39.8	35.5	30.5	35.5	-6.6
France	13.9	16.7	12.9	15.4	22.9	64.7
Spain	9.6	10.7	13.8	12.1	17.8	85.4
Italy	8.7	9.8	10.8	11.5	13.9	59.8
Mexico	5.6	5.3	3.8	16.0	13.1	133.9
Netherlands	9.5	8.7	9.9	10.9	10.8	13.7
All other	99.2	99.5	87.4	81.3	94.4	-4.8
Total	390.3	392.0	390.3	395.2	440.3	12.8
	Quantity (million proof liters)					
Japan	20.2	17.6	16.5	19.0	17.9	-11.4
Germany	10.6	11.1	11.4	11.2	17.0	60.4
Australia	11.1	11.9	13.7	12.3	15.2	36.9
Canada	4.4	5.0	8.2	8.1	9.2	109.1
United Kingdom	8.5	7.8	7.6	9.3	10.4	22.4
France	2.8	3.8	2.9	4.2	4.1	46.4
Spain	1.3	1.7	2.1	2.0	2.6	100.0
Italy	1.2	1.5	1.4	1.7	2.5	108.3
Mexico	1.8	2.4	1.3	4.9	4.2	133.3
Netherlands	3.0	3.3	3.9	4.4	4.5	50.0
All other	41.3	35.3	30.3	29.8	33.3	-19.4
Total	106.2	101.4	99.3	106.9	120.9	13.8
	Unit value (dollars per proof liter)					
Japan	4.6	4.3	4.4	4.4	4.3	-6.5
Germany	4.6	4.8	5.0	4.5	4.1	-10.9
Australia	3.1	3.2	3.1	3.5	3.0	-3.2
Canada	6.6	6.8	5.3	4.9	4.2	-36.4
United Kingdom	4.5	5.1	4.7	3.3	3.4	-24.4
France	5.0	4.4	4.4	3.7	5.6	12.0
Spain	7.4	6.3	6.6	6.1	6.8	-8.1
Italy	7.3	6.5	7.7	6.8	5.6	-23.3
Mexico	3.1	2.2	2.9	3.3	3.1	0.0
Netherlands	3.2	2.6	2.5	2.5	2.4	-25.0
All other	2.4	2.8	2.9	2.7	2.8	16.7

¹ Not including ethyl alcohol for beverage purposes.

Source: Compiled from official statistics of the U.S. Department of Commerce. Figures may not add to totals shown due to rounding.

Table A-33

Distilled spirits: U.S. domestic exports of whiskey to major market countries and country groups, 1995-99

Item	1995	1996	1997	1998	1999	Percentage change 1995/1999
	Value (million dollars)					
Bottled:						
Germany	42.2	45.1	50.5	43.7	57.0	35.1
Japan	69.6	54.5	56.3	66.1	56.5	-18.8
United Kingdom	23.8	28.3	25.2	18.4	22.5	-5.5
Australia	14.9	17.0	18.7	22.6	22.1	48.3
France	10.5	12.3	9.2	11.3	19.2	82.9
Spain	9.2	9.7	12.6	9.0	15.4	67.4
Italy	8.5	9.2	10.5	10.7	12.6	48.2
Mexico	1.0	1.0	1.3	6.8	8.6	760.0
Canada	4.6	5.7	6.2	6.0	7.3	58.7
New Zealand	4.5	8.8	8.9	6.2	7.2	60.0
Greece	3.5	4.6	5.0	5.5	5.3	51.4
Singapore	1.9	2.5	1.5	2.7	3.7	94.7
Netherlands	4.3	3.2	3.8	3.8	3.4	-20.9
Belgium	2.4	1.8	1.5	1.6	2.7	12.5
Switzerland	2.0	1.7	1.3	1.1	2.7	35.0
All other	27.7	29.3	32.0	29.6	34.0	22.7
Total	230.4	234.9	244.7	245.2	280.4	21.7
OECD	207.5	210.5	220.4	222.1	255.5	23.1
EU - 15	107.5	117.8	122.9	108.4	145.0	34.9
Asia	80.5	64.8	65.0	73.4	66.3	-17.6
Latin America	7.5	7.5	7.9	12.9	14.5	93.3
Bulk:						
Australia	18.7	18.6	22.2	18.2	22.3	19.3
Germany	4.1	5.1	4.7	4.1	5.3	29.3
United Kingdom	10.6	8.1	7.2	7.0	5.2	-50.9
France	3.1	4.2	3.4	3.5	2.7	-12.9
Japan	3.6	1.4	1.0	1.1	2.6	-27.8
Belgium	1.1	1.0	1.6	2.2	1.9	72.7
Canada	(¹)	(¹)	1.4	1.1	1.8	??
Netherlands	1.4	1.2	1.6	1.0	1.1	-21.4
All other	4.6	3.3	2.4	5.4	3.5	-23.9
Total	47.3	43.2	45.3	43.7	46.6	-1.5
OECD	46.1	42.5	44.3	42.7	45.2	-2.0
EU - 15	22.1	21.2	19.0	18.7	17.1	-22.6
Asia	4.4	1.9	1.0	1.4	3.2	-27.3
Latin America	1.0	1.0	1.0	2.1	1.1	10.0

¹ Less than \$500,000.

Source: Compiled from official statistics of the U.S. Department of Commerce. Figures may not add to totals shown due to rounding.

Table A-34
Distilled spirits: Applied tariff levels for selected countries, 2000

		Applied tariff levels, 2000						
HTS subheading	Description	EU-15	Japan	Canada	Mexico	Australia	China	
2207.10	Ethyl alcohol 80% alcohol by vol. or greater for beverage purposes ...	19.2 Ecu/hl	Free - 28% or ¥39.22/l	Free	Free	5% plus A\$37.41/l of alc.	40%	
2208.20	Grape brandy	Free	¥170.56/l - ¥201.6/l	Free	Free - 4%	5% plus A\$36.44/l of alc.	65%	
2208.30	Whiskies	Free	7.9% ¹ -10.6% or ¥145.6/l - ¥175.32/l	Free	Free	5% plus A\$36.44/l of alc.	65%	
2208.40	Rum and tafia	0.6 Ecu/%vol./hl plus 0 - 3.2 Ecu/hl	13.5%	Free	Free	5% plus A\$36.44/l of alc.	65%	
2208.50	Gin and geneve	Free	13.1% or ¥57.75/l, whichever is less	Free	Free	5% plus A\$36.44/l of alc.	65%	
2208.60	Vodka	Free	Free - 12%	Free	Free	5% plus A\$36.44/l of alc.	65%	
2208.70	Liqueurs and cordials	Free	¥94.5/l	Free	Free	5% plus A\$36.44/l of alc.	65%	
2208.90	Other spirits	Free	Free - 18.7% or ¥201.6/l	Free	Free	5% plus A\$36.44/l of alc.	65%	

¹Tariff rate for bourbon is 7.9%.

Source: Tariff rates for the EU are from the *Official Journal of the European Communities*, No. L 278 (Oct. 28, 1999). Tariff rates for Japan are for 1999 from the "Customs Tariff Schedules of Japan, 1999," Japan Tariff Association. Tariff rates for Canada are from *Canadian Tariff Schedule 2000*, Canada Customs and Revenue Agency. Tariff rates for Australia are for 1999 from UNCTAD, *Trains 2000 (CDROM)*. Tariff rates for China are from *The International Customs Journal, China 1999-2000*, International Customs Tariffs Bureau, No.13, 7th Ed.

Table A-35
Distilled spirits: Per capita consumption of selected countries by region, 1995-98

(Liters of pure alcohol)

Region/country	1995	1996	1997	1998	Percentage change 1995/1998
North America:					
United States	1.87	1.89	1.87	1.86	-0.5
Canada	1.71	1.71	1.71	1.78	4.1
Mexico	0.70	0.70	0.70	0.70	0.0
EU -15:					
Greece	2.70	2.70	2.70	2.70	0.0
Spain	2.50	2.40	2.60	2.50	0.0
France	2.48	2.53	2.43	2.43	-2.0
Finland	1.95	1.96	2.07	2.23	14.4
Germany	2.20	2.10	2.00	2.00	-9.1
Ireland	1.60	1.80	1.80	1.80	12.5
Netherlands	1.73	1.76	1.72	1.66	-4.0
Luxemburg	1.60	1.60	1.60	1.60	0.0
Portugal	1.60	1.50	1.50	1.50	-6.3
Austria	1.50	1.50	1.50	1.40	-6.7
United Kingdom	1.35	1.39	1.37	1.32	-2.2
Belgium	1.11	1.14	1.21	1.13	1.8
Denmark	1.07	1.11	1.11	1.12	4.7
Sweden	1.33	1.17	1.09	1.05	-21.1
Italy	0.70	0.70	0.70	0.60	-14.3
Other Europe:					
Switzerland	1.49	1.49	1.47	1.43	-4.0
Norway	0.81	0.82	0.87	0.75	-7.4
Eastern Europe:					
Romania	3.96	4.00	4.49	4.77	20.5
Slovak Republic	3.90	4.00	4.00	4.10	5.1
Poland	3.50	3.30	3.40	3.40	-2.9
Hungary	3.42	3.24	3.25	3.05	-10.8
Bulgaria	2.75	2.53	2.46	2.47	-10.2
Czech Republic	1.65	1.65	1.65	1.65	0.0
Former Soviet Union:					
Russia	7.00	5.50	5.50	6.00	-14.3
Latvia	5.09	4.56	4.75	4.94	-2.9
Estonia	2.30	1.70	1.70	1.60	-30.4
Ukraine	1.20	0.70	0.90	0.50	-58.3
Central/ South America:					
Guyana	1.80	2.00	2.00	1.80	0.0
Cuba	1.80	1.80	1.80	1.70	-5.6
Colombia	1.70	1.60	1.60	1.70	0.0
Chile	1.40	1.40	1.50	1.60	14.3
Brazil	1.50	1.50	1.50	1.50	0.0
Venezuela	1.70	1.70	1.40	1.20	-29.4
Uruguay	1.10	1.10	1.00	1.00	-9.1
Argentina	0.20	0.30	0.30	0.30	50.0
Asia:					
Thailand	3.70	3.90	3.70	3.50	-5.4
China	2.90	3.00	3.00	3.00	3.4
Japan	2.20	2.20	2.30	2.30	4.5
Singapore	0.50	0.50	0.50	0.50	0.0
India	0.20	0.20	0.20	0.20	0.0
Malaysia	0.10	0.10	0.10	0.10	0.0
Oceania:					
New Zealand	1.12	1.15	1.03	1.46	30.4
Australia	1.28	1.27	1.22	1.28	0.0
Africa:					
South Africa	1.00	1.00	0.85	0.90	-10.0
Middle East:					
Turkey	0.40	0.30	0.40	0.40	0.0

Source: NTC Publications Ltd., Productschap voor Gedistilleerde Dranken, *World Drink Trends 1999*, p. 13.

A-27

APPENDIX B
EXPLANATION OF TARIFF AND TRADE
AGREEMENT TERMS

TARIFF AND TRADE AGREEMENT TERMS

In the *Harmonized Tariff Schedule of the United States* (HTS), chapters 1 through 97 cover all goods in trade and incorporate in the tariff nomenclature the internationally adopted Harmonized Commodity Description and Coding System through the 6-digit level of product description. Subordinate 8-digit product subdivisions, either enacted by Congress or proclaimed by the President, allow more narrowly applicable duty rates; 10-digit administrative statistical reporting numbers provide data of national interest. Chapters 98 and 99 contain special U.S. classifications and temporary rate provisions, respectively. The HTS replaced the *Tariff Schedules of the United States* (TSUS) effective January 1, 1989.

Duty rates in the *general* subcolumn of HTS column 1 are normal trade relations 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 listed in HTS general note 3(b) (Afghanistan, Cuba, Laos, North Korea, and Vietnam) plus Serbia and Montenegro, which are subject to the statutory rates set forth in *column 2*. Specified goods from designated general-rate 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 rate of duty 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 several times thereafter, applies to merchandise imported on or after January 1, 1976 and before the close of September 30, 2001. Indicated by the symbol "A", "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 free rates of duty in the special subcolumn followed by the symbol "CA" are applicable to eligible goods of Canada, and rates 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 and implemented effective January 1, 1994 by Presidential Proclamation 6641 of December 15, 1993. Goods must originate in the NAFTA region under rules set forth in general note 12(t) and meet other requirements of the note and applicable regulations.

Other special tariff treatment applies to particular *products of insular possessions* (general note 3(a)(iv)), *products of the West Bank and Gaza Strip* (general note 3(a)(v)), goods covered by the *Automotive Products Trade Act* (APTA) (general note 5) and the *Agreement on Trade in Civil Aircraft* (ATCA) (general note 6), *articles imported from freely associated states* (general note 10), *pharmaceutical products* (general note 13), and *intermediate chemicals for dyes* (general note 14).

The *General Agreement on Tariffs and Trade 1994* (GATT 1994), pursuant to the Agreement Establishing the World Trade Organization, is based upon the earlier 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 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. Pursuant to the **Agreement on Textiles and Clothing** (ATC) of the GATT 1994, member countries are phasing out restrictions on imports under the prior "Arrangement Regarding International Trade in Textiles" (known as the **Multifiber Arrangement** (MFA)). Under the MFA, which was a departure from GATT 1947 provisions, importing and exporting countries negotiated bilateral agreements limiting textile and apparel shipments, and importing countries could take unilateral action in the absence or violation of an agreement. Quantitative limits had been established on imported textiles and apparel of cotton, other vegetable fibers, wool, man-made fibers or silk blends in an effort to prevent or limit market disruption in the importing countries. The ATC establishes notification and safeguard procedures, along with other rules concerning the customs treatment of textile and apparel shipments, and calls for the eventual complete integration of this sector into the GATT 1994 over a ten-year period, or by Jan. 1, 2005.

