

# Industry & Trade Summary

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Hides, Skins, and  
Leather

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



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*This report was prepared principally by*

Rose Steller

Agriculture and Forest Products Division  
Animal and Forest Products Branch

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

# PREFACE

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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.<sup>1</sup>

This report on hides, skins, and leather covers the period 1991 through 1995 and represents one of approximately 250 to 300 individual reports to be produced in this series. Listed below are the individual summary reports published to date on the agricultural and forest products sector.

<i>USITC 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
2524	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

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

# PREFACE-Continued

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<i>USITC publication number</i>	<i>Publication date</i>	<i>Title and Products</i>
2749	March 1994 . . . . .	Paper Boxes and Bags
2762	April 1994 . . . . .	Coffee and Tea
2865	April 1995 . . . . .	Malt Beverages
2859	May 1995 . . . . .	Seeds
2875	May 1995 . . . . .	Certain Fresh Deciduous Fruits
2898	June 1995 . . . . .	Certain Miscellaneous Vegetable Substances
2917	October 1995 . . . . .	Lumber, Flooring, and Siding
2918	August 1995 . . . . .	Printed Matter
2928	November 1995 . . . . .	Processed Vegetables
3015	February 1997 . . . . .	Hides, Skins, and Leather

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# ABSTRACT

This report addresses trade and industry conditions for the hide, skin, and leather industry for the period 1991 through 1995.

- U.S. producers of hides, skins, and leather appear to be competitive in foreign markets on the basis of cattlehide prices and quality. The United States is the world's largest producer and exporter of cattlehides. In addition, the U.S. leather sector employs state-of-the-art technology to produce high-quality leather. However, certain countries benefit from lower labor costs (e.g., China), and some (e.g., Argentina) restrict hide exports thus encouraging growth of their own industries.
- U.S. leather shipments, which incorporate the value of hide and skin production, averaged approximately \$3 billion annually during 1991-95. U.S. imports are equivalent to about 30 percent of U.S. shipments. Argentina and Italy are the major U.S. suppliers of leather imports. Major foreign leather producing countries include Argentina, Italy, and Korea. China's leather industry is growing and significant potential exists for further expansion. Hong Kong, Mexico, and the Dominican Republic are the primary export markets for U.S. leather.
- The U.S. rate of duty for all hides and skins covered in this report is free. Duties on imports of leather range from free to 5 percent. The aggregate trade-weighted average rate of duty for all products was 1.7 percent ad valorem in 1995. Certain leathers from Japan are subject to an additional 40 percent tariff.
- The footwear industry is the primary consumer of leather, however, in recent years demand for upholstery leather has increased significantly. Other uses include handbag and personal leather goods and glove and garment leather.



# INTRODUCTION

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This summary on the hide, skin, and leather industry provides information on the structure of the U.S. and major foreign industries, domestic and foreign tariffs, and the competitiveness of U.S. and foreign producers. The report generally covers the period 1991 through 1995.

The industry covered in this summary produces hides, skins, and leather generally derived from the slaughter of animals for the meat-packing industry. The term “hide” refers to the skin of large, full-grown animals such as cows, and the term “skin” refers to the skin of smaller or immature animals such as calves and sheep.<sup>1</sup> “Tanning” is the processing of perishable raw hides and skins into leather.

Hide and skin supplies generally reflect demand for meat, dairy products, and wool. Such supplies are not affected directly by demand for leather because most hides and skins are byproducts of other industries. During 1991-95, leather produced from cattlehides accounted for over 80 percent of total U.S. leather production, reflecting in part the demand for beef and dairy products in the United States. The quantity of cattlehides derived from U.S. commercial slaughter totaled 35.6 million<sup>2</sup> in 1995. The United States is the largest exporter of cattlehides, and such exports were equivalent to 56 percent<sup>3</sup> of U.S. production (by quantity) in 1995. Imports of cattlehides supplied 10 percent<sup>4</sup> of U.S. consumption (by quantity) in 1995. Remaining U.S. leather production is principally from hides and skins of calves, goats, fish, sheep, horses, and reptiles.<sup>5</sup> The U.S. industry processes both domestic and imported hides and skins. It has generally remained competitive in U.S. and world markets largely because of ample supplies of quality domestic hides and the efficient use of processing technology. In 1995, U.S. leather shipments, which incorporate the value of hide and skin production, amounted to an estimated \$3.4 billion.<sup>6</sup> U.S. hide and skin imports were valued at \$140 million in 1995 whereas such exports were valued at \$1.6 billion.<sup>7</sup> U.S. exports of leather were valued at \$698 million, and imports were valued at \$955 million.<sup>8</sup>

Tanners procure raw or cured hides and convert them into semifinished or finished leather. However, there are many stages involved in the processing of leather, and a tanner may perform the total process or just a segment of the processing. Finishers and processors generally convert

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<sup>1</sup> USDA, Dictionary of Terms Used in the Hides, Skins, and Leather Trade, Apr. 1974, pp. 36, 60.

<sup>2</sup> USDA, National Agricultural Statistics Service (NASS), *Livestock Slaughter*, 1995 Summary (Mt An 1-2-1(96)), Mar. 1996.

<sup>3</sup> U.S. Department of Commerce (Commerce) official statistics.

<sup>4</sup> Ibid.

<sup>5</sup> Commerce, *Industrial Outlook, 1994*, (*Industrial Outlook*), Other Consumer Nondurables, Jan. 1994, p. 34-2.

<sup>6</sup> James E. Byron, Office of Consumer Goods, Commerce, telephone interview with USITC staff, Apr. 16, 1996. Value equals product shipments—value of products classified in the leather-tanning and-finishing industry produced by all industries.

<sup>7</sup> Commerce official statistics.

<sup>8</sup> Ibid.

semifinished leather into finished leather, which is then used by leather product manufacturers in the production of footwear, wearing apparel, and other products. Hide, skin, and leather processors are the major importers and exporters of hides and skins.

The U.S. footwear industry is the primary consumer of domestic leather and annually consumed about one-half (by value) of U.S. production (shipments) during 1991-95. Domestic production of upholstery leather (automotive and furniture) increased during the period and accounted for approximately 40 percent of U.S. production in 1995.<sup>9</sup> Other markets for leather include manufacturers of handbags, personal goods, gloves, and garments.

Major leather-producing countries include countries that produce hides and skins (such as the United States) as well as countries that rely heavily on imports to meet their leather tanning needs, such as Korea, Taiwan, Japan, and Thailand. These countries rely on imports of hides and skins because their tanning capacity often exceeds domestic supplies of raw materials.<sup>10</sup> The use of export controls is an important factor influencing the availability of processed hides and skins for leather production. For example, India, a major producer of goat and kid skins, restricts such exports to encourage the growth of their own tanning and leather products industry. Worldwide, the bulk of leather production goes into the manufacture of shoes. However, leather consumption for upholstery and garment use has been increasing at a faster rate than that for the shoe industry.<sup>11</sup>

## U.S. INDUSTRY PROFILE

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### Industry Structure

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The structure of the hide, skin, and leather industry in the United States is illustrated in figure 1. The Standard Industrial Classification (SIC) categories applicable to the products in this summary are Meat Packing Plants (2011 in part) and Leather Tanning and Finishing (3111).

The U.S. industry has available supplies of high quality hides and skins, suppliers of chemicals, and modern and efficient production techniques to support its leather production. As discussed, cattlehide supplies generally reflect demand for beef; thus, production of hides fluctuates with slaughter levels. Most large tanneries are equipped with modern tanning equipment, processing technology, and treatment plants to remove effluents and to meet environmental requirements. Computer systems are often used by many tanneries to assist in quality and product control, and research is constantly developing new finishes and colors. There is generally little integration between the hide sector and the leather sector.

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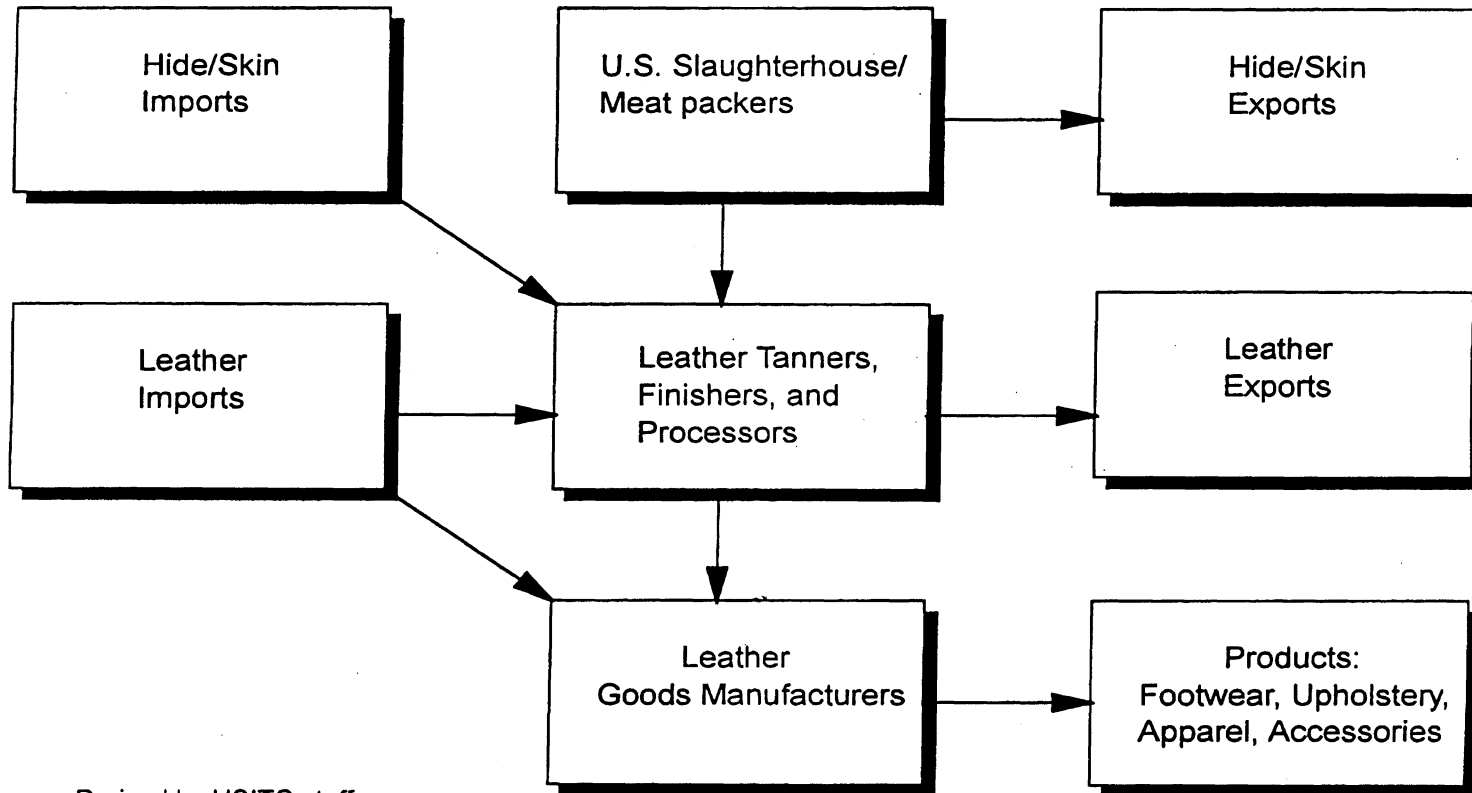
<sup>9</sup> Byron, Apr. 16, 1996.

<sup>10</sup> *Industrial Outlook*, Jan. 1994, p. 34-4.

<sup>11</sup> *Leather*, The International Journal, "Marketing: Upholstery," (Benn Pub Ltd., Kent, UK), Jan. 1995, p. 16.

Figure 1  
Hides, skins, and leather: Structure of the U.S. industry

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Source: Derived by USITC staff.

Chemicals are essential to the hide, skin, and leather industry. Hides and skins are treated with chemicals to preserve them for leather-making operations. Chemicals are also used in the tanning process and to aid in producing fine finishes to make leather more attractive and serviceable. Acids, chromium sulfate, and sulfur dioxide are chemicals commonly used in the leather-making process.<sup>12</sup>

The principal consumers of leather are manufacturers of leather goods, such as footwear, upholstery, leather apparel, and accessories such as handbags and wallets. Factors affecting demand for leather include the price of leather, the price of substitute material (e.g., vinyl and cotton), changes in disposable income, and fashion trends.

## Production Processes

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### *Hides and Skins*

Virtually all U.S. production of hides and skins results from the slaughtering of animals by the meatpacking industry. The animals are usually slaughtered by meat packers near where they are raised.

Hides and skins are cured in salt to prevent decomposition during shipment from meatpackers to tanners. One method of curing involves placing salt on the flesh side of a hide. A hide is placed on a plank and salted, and then another hide is placed on top of it, hair side down, with the process continuing. Another method, known as brine-curing, involves placing washed hides in large vats called raceways and adding a concentrated salt solution. The hides are agitated in the vats, thereby allowing the salt solution to penetrate the hides. This latter method is preferred by large meat packers and hide processors since it reduces labor requirements.<sup>13</sup> The cured hides are fleshed, dehaired, and placed in a pickle solution. Pickling is the process of adding salt and acids to the hides to prepare them for tanning. Pickling also preserves hides and skins, and some skins, especially sheepskins are sold in the pickle, and tanned elsewhere.<sup>14</sup>

Alternatively, hides and skins may be preserved through the application of chrome salts in a process referred to as wet blueing, which yields hides and skins called wet blues. The chrome salts impart a characteristic blue color, hence the name.

Almost all cattlehides and calf skins are processed into leather. Some pigskins are converted into leather; however, others are used for food (e.g., pork rinds) and some are not removed

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<sup>12</sup> USDA, *Dictionary of Terms in the Hides, Skins, and Leather Trade*, Apr. 1974, pp. 12-13.

<sup>13</sup> Edward A. Whitney, *Hides and Skins*, 3d ed., Burnet, TX.: Education Committee National Hide Association, Eakin Press, 1979, pp. 47-49.

<sup>14</sup> See appendix A: "The Individual Stages of Leather Production," submitted by the Leather Industries of America, Inc. for Harmonized Rules of Origin study.

during meat processing stages such as skin-on hams and ham hocks. Other uses for animal hides and skins include glue and gelatin.

## ***Leather***

U.S.-made leather is processed by tanners and finishers and/or processors. There are four basic stages in the tanning process: pretanning, tanning, retanning, and finishing.<sup>15</sup> Pretanning is a reversible process employed to temporarily stabilize the protein material in a hide or skin and is seldom used by the industry. In the tanning stage, a tanning agent<sup>16</sup> is applied to the raw fibers of the hide to convert it to a product that is no longer susceptible to rotting. Retanning is an optional stage of processing during which additional tanning agents are applied to enhance the durability and esthetics of the leather. Finishing is the stage at which color, embossing, surface coating and other treatments are applied. Finished leather is used by leather product manufacturers to manufacture shoes, upholstery, wearing apparel, and handbags.

## **Number of Firms and Geographic Distribution**

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### ***Hides and Skins***

In 1995, there were 836 Federally inspected cattle-slaughtering plants and 343 Federally inspected calf-slaughtering plants located throughout the United States. Plants in Kansas, Nebraska, and Texas accounted for about 58 percent of the cattle slaughtered in 1995. The major calf-slaughtering States were New York, California, Wisconsin, and Pennsylvania.<sup>17</sup> In 1995, the number of Federally inspected hog-slaughtering plants in the United States totaled 802. Major hog-slaughtering States included Iowa, Illinois, North Carolina, Minnesota, and South Dakota. Sheep and lambs were slaughtered in 617 Federally inspected plants in 1995; slaughtering was concentrated in the States of Texas,<sup>18</sup> Colorado, and California.

U.S. production of hides and skins from animals other than cattle, sheep, and hogs is insignificant. However, there are some producers of specialized skins such as deer, ostrich, and alligator.

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<sup>15</sup> Submission by Collier, Shannon, Rill & Scott on behalf of Leather Industries of America, Inc. (LIA), Feb. 15, 1996.

<sup>16</sup> Various tanning agents can be used including minerals such as chromium salts, vegetable materials such as tree bark, and synthetic materials.

<sup>17</sup> USDA, NASS, *Livestock Slaughter 1995 Summary*, pp. 84 and 85.

<sup>18</sup> A large lamb-slaughtering plant located in San Angelo, Texas, and owned by Monfort, Inc. closed May 31, 1995.

## *Leather*

The number of U.S. tanning establishments has been in decline for many years. In part, this decline has resulted from an unwillingness to retrofit plants to meet strict environmental standards, lack of access to certain raw material (such as goat skins), and the relocation of many manufacturing facilities to countries with low-cost labor.<sup>19</sup> During 1982-95, the number of large U.S. tanning plants declined from 384 to about 110. Major leather-producing States include New York, Massachusetts, California, Wisconsin, Pennsylvania, New Jersey, and Texas.

## **Employment and Wage Rates**

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Data on employment in the U.S. hide and skin industry are not available. However, the number of production workers in meatpacking plants totaled 115,500 in 1993, down from 117,300 in 1991.<sup>20</sup> About 6,000 of these workers were employed in hide removal and curing in recent years. In 1993, wage rates for meat-packing employees averaged \$9.26 per hour, up from \$8.92 in 1991.<sup>21</sup>

Employment in the leather-tanning and-finishing industry fluctuated during 1991-95, as shown in the following tabulation:

Year	Production workers	Total workers
	(1,000)	
1991 <sup>1</sup> .....	9.8	11.5
1992 <sup>1</sup> .....	10.2	12.1
1993 <sup>1</sup> .....	10.0	11.9
1994 <sup>2</sup> .....	10.2	12.1
1995 <sup>2</sup> .....	9.1	11.2

<sup>1</sup> *Industrial Outlook*, 1994, ch. 34, p. 34-2.

<sup>2</sup> Phone interview with Commerce officials, May 23, 1996.

During 1991-94, the average hourly earnings of production workers in this industry increased from \$10.62 in 1991 to \$12.69 in 1994.<sup>22</sup>

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<sup>19</sup> *Industrial Outlook*, 1994, Other Consumer Nondurables, Jan. 1994, pp. 34-1 through 34-8.

<sup>20</sup> American Meat Institute, *Meat & Poultry Facts*, 1992 and 1994, pp. 30 and 32.

<sup>21</sup> Ibid.

<sup>22</sup> *Industrial Outlook*, 1994, ch. 34, Jan. 1994, p. 34-2.



## Labor Intensity and Level of Automation

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Hides and skins can be removed with hand-skinning knives (manual, or air or electrically operated) or by mechanical devices, such as hide strippers. Hide strippers offer several advantages over knives, including quicker hide removal, use of less manpower, and fewer cuts. Hide strippers also produce better quality hides, and increase carcass yields, because less fat and flesh are taken from the carcass. Most large-volume packers use hide strippers whereas many small-volume packers use skinning knives. A greater degree of skill and experience is required when using skinning knives so as not to cut and damage the hides or skins.<sup>23</sup>

Once the hides or skins are removed from the carcasses, they are immediately cured at the slaughter plant to preserve them, or in some cases go directly to a tanning facility for curing and/or tanning. The processing of hides is relatively highly automated, especially for large-volume meat packers and hide processors. The hides are moved by conveyors to the washers, then to the fleshing machines, and then into and out of the brine tanks.

In recent years, large-volume hide packers have processed hides through the wet-blue stage<sup>24</sup>—a process traditionally performed by tanneries. Wet blueing eliminates the brine curing and fleshing processes and reduces transportation costs because wet-blue hides weigh less than cured hides. Many small-volume tanneries find it more cost-effective to purchase wet blues from packing houses. Per unit costs are lower for large-volume slaughter plants producing this semitanned leather.

## Marketing Methods

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Hides originating from large-volume meat packers generally are sold directly to leather tanners, exporters, or brokers and agents. Hides and skins produced by small-volume packers, on the other hand, generally pass through one or more middlemen. For example, a trader may purchase hides from several small-volume packers, group them according to quality, size, and so forth; and then sell them to a middleman, who then sells them to tanners, exporters, or brokers.

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<sup>23</sup> Whitney, *Hides and Skins*, 3rd ed., 1979, pp. 11-14.

<sup>24</sup> Method of tanning with a mineral agent. The process employs one or more salts of the metal chromium, principally chrome sulphate and bichromate of potash or soda.

## Pricing

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U.S. cattlehide prices<sup>25</sup> increased irregularly from an average of \$78.90 per hundred weight (cwt) in 1991 to \$87.60 per cwt in 1995. Major factors influencing the price of cattlehides include hide supply, which is dependent on the number of cattle slaughtered, and supply/demand for leather in both domestic and foreign markets. Tanners often minimize their purchases when cattlehide prices are relatively high, and increase their purchases when prices decline.

## Research and Development

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The United States Hide, Skin and Leather Association (USHSLA) is an industry trade association. Its membership includes meat packers and brokers, processors, dealers, and exporters of hides and skins. USHSLA's Leather Testing Laboratory provides research and technical assistance to the hide, skin, and leather industry, including chemical testing, and research into the causes of damage to hides and mechanical defects in hide and leather machinery.

## Special Considerations

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Packers, hide processors, and leather tanneries generate considerable waste in day-to-day operations. Packing plant waste includes protein, fat, manure, and dirt. Hide processors discharge the above mentioned waste as well as saturated brine. Although tanners reportedly are able to comply with Federal regulations, local and State regulations are reported to be more rigid; stricter State and local requirements have caused some tanners to close or to limit their production to the processing of wet-blue or crust leather.<sup>26, 27</sup>

The hide, skin, and leather industry must adhere to environmental regulations administered by the U.S. Environmental Protection Agency (EPA). The EPA establishes effluent limit guidelines and standards for the pretreatment of the liquid wastes that tanners discharge indirectly to publicly owned waste treatment facilities. These standards require control of sulfides, chromium, and acidity.<sup>28</sup>

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<sup>25</sup> Leather Industries of America (LIA), *U.S. Leather Industries Statistics*, 1995 ed., "Cattlehide Prices, Chicago Packer Hides, Heavy Native Steers," p. 29.

<sup>26</sup> *Industrial Outlook*, 1993, Ch. 33, p. 33-3.

<sup>27</sup> Crust leather is generally defined as leather which has been tanned, but not finished. In addition, it generally refers to vegetable-tanned versus chrome-tanned cattlehide leather.

<sup>28</sup> U.S. Environmental Protection Agency (EPA), Office of Water, *Development Document for Effluent Limitations Guidelines and Standards for the Leather Tanning and Finishing*, Washington, DC, Nov. 1982, p. 5.

# U.S. MARKET

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## Consumption

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U.S. consumption of cattlehides increased from 14.4 million hides in 1991 to 18.0 million hides in 1994, then fell slightly to 17.4 million hides in 1995 as shown in appendix B, table B-1, and figure 2. Cattlehide imports as a share of total consumption averaged 10 percent during the period. More than half of U.S. cattlehide production is exported; however, the share of production exported declined from 61 percent in 1991 to 56 percent in 1995.

## Production

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Production of cattlehides in the United States rose steadily from 32.9 million hides in 1991 to 35.6 million hides in 1995. The supply of cattlehides is directly related to the demand for beef because cattlehides are a byproduct of the meat-packing industry.

The following tabulation shows product shipments of the leather tanning and finishing industry:

Year	Shipments (Billion dollars)
1991 <sup>1</sup>	2.2
1992 <sup>1</sup>	2.3
1993 <sup>2</sup>	3.2
1994 <sup>2</sup>	3.1
1995 <sup>2</sup>	3.2

<sup>1</sup> *Industrial Outlook*, 1994, ch. 34, p. 34-2.

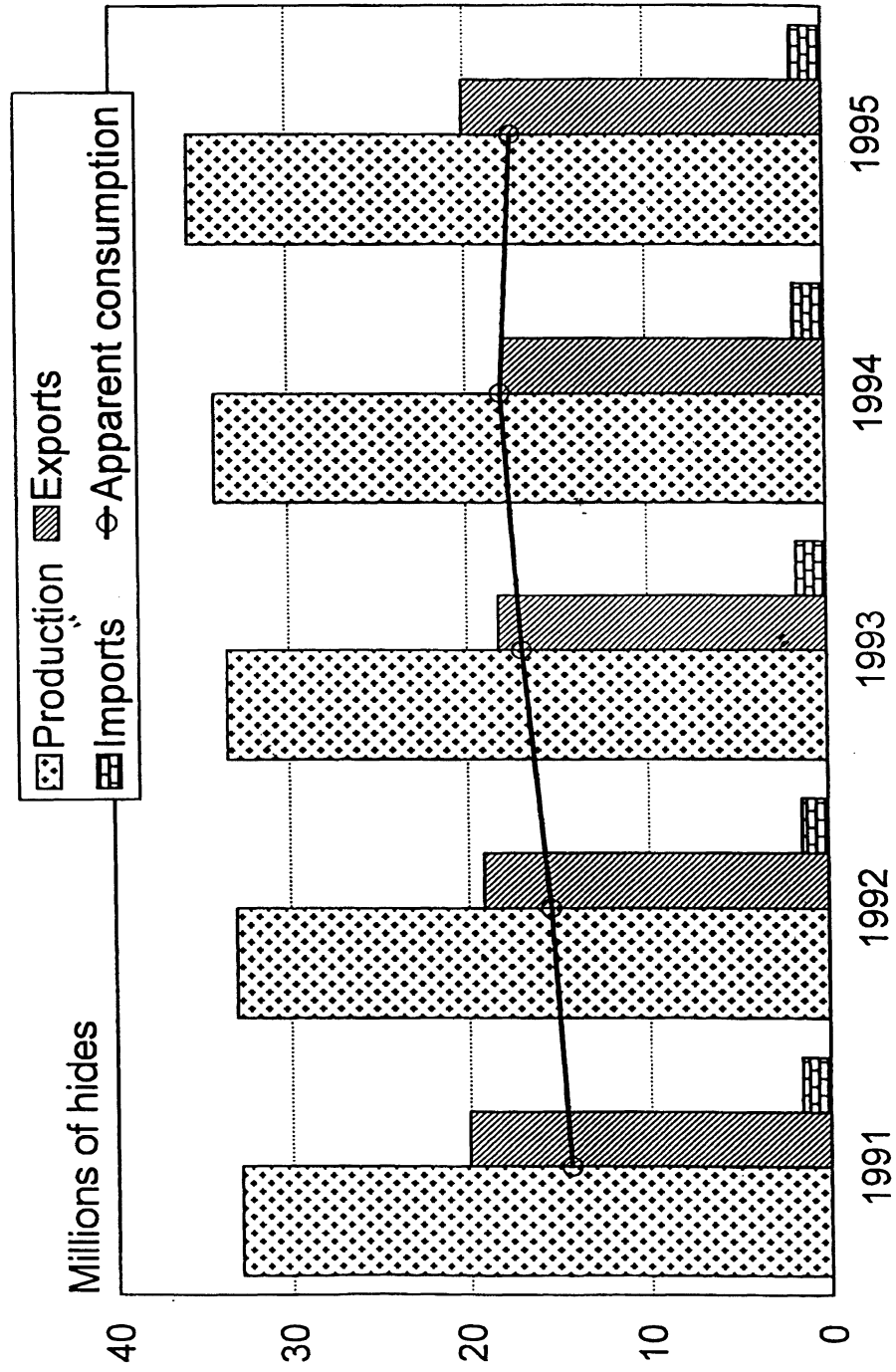
<sup>2</sup> Phone interview with Commerce officials, May 23, 1996.

Product shipments fluctuated upward from \$2.2 billion in 1991 to an estimated \$3.2 billion in 1995. In recent years, about 80-90 percent of U.S. leather shipments consisted of cattlehide leather. The remaining leather was produced from skins and hides of other animals such as calves, goats, pigs, sheeps, horses, and reptiles.<sup>29</sup>

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<sup>29</sup> *Industrial Outlook*, 1994, pp. 34-1 and 34-2.

Figure 2  
Cattlehides: U.S. production, exports, imports, and apparent consumption, 1991-95



Source: Compiled from official statistics of USDA and Commerce.

# U.S. TRADE

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## Overview

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The United States maintained a positive trade balance for hides, skins, and leather in every year during 1991-95 (table B-2). Imports and exports both increased during the period; however, the change in imports was more significant--from \$693 million to \$1.1 billion. During 1991-95, the U.S. trade surplus in hides and skins was significant (table B-3). During 1991-93, a positive trade balance was posted for leather; however, trade deficits were registered in 1994 and 1995 (table B-4). In 1995, U.S. imports of leather exceeded U.S. leather exports by \$257 million, and total U.S. trade in hides, skins, and leather exceeded \$3.4 billion.

## U.S. Imports

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### *Principal Suppliers and Import Levels*

#### *Hides and skins*

During 1991-95, U.S. hide and skin imports increased from \$109 million to \$140 million, or by 28 percent (table B-5). Imports of hides and skins from bovine<sup>30</sup> animals accounted for much of the increase, rising from \$83 million in 1991 to \$103 million in 1995 (table B-6). All U.S. hide and skin imports enter duty free. While the United States is the world's leading producer and exporter of cattlehides, processors also import to supplement U.S. production of bovine hides. In addition, U.S. manufacturers rely on imports to meet domestic demand for certain skins, since some skins, such as hair sheep skins, are not known to be produced in the United States.

Canada was the leading U.S. supplier of hides and skins during 1991-95 (table B-5). Canada supplied over 65 percent of the value of U.S. hide and skin imports in 1995; Mexico and the Republic of South Africa each accounted for 6 percent.

Hides and skins of bovine animals accounted for nearly 75 percent of the value of U.S. hide and skin imports in 1995 (table B-6). Sheep or lamb skins accounted for 19 percent, and other hides

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<sup>30</sup> Most bovine hides are cattlehides. The publication, *Introductory Animal Science* (The Macmillan Co., NY, 1963) reports that cattle are classified in the family *Bovidae*. *Bovidae* are ruminants which have hollow horns and hoofs with an even number of toes. Other members of the *bovidae* family include ox, bison, and yak.

and skins (including, but not limited to, goat, reptile, pig, and deer skins) accounted for the remainder.

Most bovine hide and skin imports enter the United States classified as whole cattlehides (*HTS* subheading 4101.21.0020). In 1995, whole cattlehides accounted for 59 percent of the value (\$82 million) of all hide and skin imports. Canada was by far the largest U.S. import supplier of whole cattlehides, accounting for nearly 90 percent of the quantity and value in 1995 (table B-7).

Sheepskins<sup>31</sup> were the second-leading type of hides imported during 1991-95 (table B-6). Such imports fluctuated during the period, from a low of \$16 million in 1991 to a high of \$26 million in 1995, and accounted for 19 percent of the value of all hide and skin imports that year. Pickled sheepskins account for the bulk of U.S. sheepskin imports, and in 1995, totaled about 2.5 million skins, valued at \$19 million. The skins are tanned primarily for producing grain or suede garment leather and exported to the Far East for manufacturing into finished goods.<sup>32</sup> The Republic of South Africa, Australia, and the United Kingdom were the leading U.S. suppliers of sheepskins during 1995.

Hide, skin, and leather processors are the major importers of hides and skins. Many of these processors are in New York, Massachusetts, California, and Wisconsin.

### *Leather*

U.S. leather imports rose steadily from \$583 million in 1991 to \$955 million in 1995, or by 64 percent (table B-8). Bovine leather imports rose from \$440 million in 1991 to \$791 million in 1995, and accounted for over 80 percent of all U.S. leather imports in that year. U.S. demand for upholstery leather and shoe upper leather contributed to the increase in bovine leather imports during the period. Upholstery leather imports increased by over 200 percent during 1991-95, and totaled \$372 million in 1995; they accounted for 47 percent of the value of U.S. cattlehide leather imports and 39 percent of the value of all leather imports in 1995. Upper<sup>33</sup> bovine leather imports rose from \$39 million in 1991 to \$63 million in 1995. Sheepskin leather accounted for about 4 percent of all U.S. leather imports in 1995, and goatskin leather made up about 3 percent. Swine, reptile, and other miscellaneous leather accounted for the remainder.

Argentina and Italy were the leading U.S. suppliers of leather imports during 1991-95; each accounted for 17 percent of total U.S. leather imports in 1995 (table B-4). U.S. leather imports from Argentina consisted primarily of cattlehide leathers. Such cattlehide leather imports rose steadily from \$89 million in 1992 to \$165 million in 1995. U.S. leather imports from Italy consisted primarily of cattlehide upholstery leather (86 percent by value in 1995). Such imports increased from \$76 million in 1991 to \$142 million in 1995, reflecting, in part, the devaluation of the lira during 1993-95. Other important leather suppliers included the United Kingdom,

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<sup>31</sup> Includes lambskins.

<sup>32</sup> *Industrial Outlook*, 1994, p. 34-3.

<sup>33</sup> Upper bovine leather is a shoe leather derived from cattlehides used for the upper portions of the shoe.

Mexico, and Brazil. Almost all types of leather imported from Argentina are subject to U.S. countervailing duties averaging 15 percent.<sup>34</sup>

U.S. imports of sheepskin leather rose steadily from \$31 million in 1991 to \$41 million in 1995 (table B-8). Italy was the major U.S. supplier, accounting for 42 percent of imports. Other major U.S. sheepskin leather suppliers included Spain, the United Kingdom, and New Zealand, accounting for 15, 11, and 10 percent of imports by value, respectively, in 1995. U.S. imports of goat and kid leather averaged \$25 million annually during 1991-95 (table B-8). Pakistan and India were the leading U.S. suppliers during the period.

During 1991-95, the value of U.S. imports of other articles of leather increased from \$89 million in 1991 to \$110 million in 1994, then declined to \$97 million in 1995 (table B-8). The following tabulation shows major types of leather within this grouping for 1995 (compiled from official statistics of Commerce):

Type	Value
	<i>Million dollars</i>
Swine . . . . .	22
Reptile . . . . .	15
Chamois <sup>1</sup> . . . . .	16
Composition <sup>2</sup> . . . . .	11
Other . . . . .	33
<b>Total</b> . . . . .	<b>97</b>

<sup>1</sup> A soft leather generally tanned from sheepskin or lambskin splits used primarily for cleaning and polishing and in the manufacture of gloves and garments.

<sup>2</sup> Refers to articles with a basis of leather or leather fiber, in slabs, sheets or strip, whether or not in rolls.

U.S. imports of swine leather fluctuated from a high of \$28 million in 1992 to a low of \$22 million in 1995. Taiwan was the leading U.S. supplier in 1995. During 1991-95, the value of U.S. imports of reptilian leather increased from \$13 million in 1991 to \$20 million in 1993, then declined steadily to \$15 million in 1995. Indonesia was the leading U.S. supplier, accounting for 25 percent of the value in 1995.

## ***U.S. Trade Measures***

### ***Tariff measures***

Table B-9 shows the column 1 rates of duty, as of January 1, 1996, for the articles included in this summary (including both general and special rates of duty) and U.S. exports and imports

<sup>34</sup> See section on U.S. Government Trade-Related Investigations.

for 1995.<sup>35</sup> An explanation of tariff and trade agreement terms is set forth in appendix C. The aggregate trade-weighted average rate of duty for all products included in this summary was 1.7 percent ad valorem in 1995 and the aggregate trade-weighted average rate of duty for dutiable products was 3.6 percent ad valorem. U.S. tariff rates on leather items are to be reduced in stages under the Uruguay Round Agreements.

### *Nontariff measures*

The importation of hides, skins, and leather derived from endangered species is prohibited under the Endangered Species Act (ESA) of 1973.<sup>36</sup> The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) was established to govern the importation and exportation of endangered species and their products and was codified as part of the ESA on December 28, 1973. The United States and 114 other countries ascribe to CITES, virtually eliminating international trade in endangered species.

Regulations issued by the Secretary of Commerce pursuant to the Marine Mammal Protection Act<sup>37</sup> prohibit almost all commerce in seal, whale, and other marine mammal products. Alaskan natives, however, are exempted for “cottage industry” handicrafts.<sup>38</sup>

Certain health and sanitary regulations that apply to U.S. imports of untanned hides and skins are administered by the U.S. Department of Agriculture (USDA). Under these regulations, imports of untanned hides and skins are generally limited to those from countries that have been declared free of rinderpest and foot-and-mouth diseases<sup>39</sup> by the U.S. Secretary of Agriculture.

### *U.S. government trade-related investigations*

On February 9, 1990, a coalition of U.S. leather tanners filed a petition with Commerce alleging that leather producers in Argentina receive certain benefits that constitute bounties or grants within the meaning of section 303 of the Tariff Act of 1930. Commerce determined in September 1990 that benefits that constitute bounties or grants within the meaning of the countervailing duty law are being provided to manufacturers, producers, or exporters in Argentina of leather, and directed the Customs Service to levy countervailing duties (CVD) averaging 15 percent on almost all types of leather imported from Argentina.<sup>40</sup>

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<sup>35</sup> U.S. imports of leather motor vehicle seat components, cut to shape, are classified under *HTS* subheading 9401.90.1010 and are not included in this summary.

<sup>36</sup> 16 U.S.C. 1531 et seq.

<sup>37</sup> 16 U.S.C. 1361 et seq.

<sup>38</sup> 16 U.S.C. 1371(b).

<sup>39</sup> Rinderpest and foot-and-mouth diseases are highly contagious, infectious diseases that can afflict cloven-footed animals (such as cattle, sheep, swine, and deer). They may be transmitted through imports of meat and hides of infected animals as well as through imports of infected live animals. The diseases do not present a direct threat to human health.

<sup>40</sup> See 55 F.R. 40212, Oct. 2, 1990, “Final Affirmative Countervailing Duty Determination and Countervailing Duty Order; Leather From Argentina.”



No injury determination was made by the U.S. International Trade Commission (Commission) at the time the original CVD order was issued in 1990. However, because of changes made to the U.S. countervailing duty law to implement U.S. obligations under the new WTO Agreement on Subsidies and Countervailing Measures, a Commission injury determination is now required--by January 1, 1999--if the order is to remain in effect. The provisions relating to such injury investigations are set forth in section 753 of the Tariff Act of 1930 (19 U.S.C. § 1675b).

As provided for in section 753, domestic parties interested in having the countervailing duty order on leather from Argentina continue in effect filed a request with the Commission for a section 753 injury investigation in June 1995.<sup>41</sup> Under section 753, the Commission must determine whether an industry in the United States is likely to be materially injured by reason of imports of the subject merchandise if the order is revoked. If the Commission makes a negative injury determination, Commerce is required to revoke the countervailing duty order. The Commission has discretion to decide when to initiate a section 753 investigation, but generally must complete the investigation within 1 year of initiation and no later than January 1, 1999. As of February 1997, the Commission had not yet initiated a section 753 investigation of Argentine leather.

On April 2, 1996, Commerce initiated a changed circumstances review under section 751(b) of the Tariff Act of the countervailing duty order on Argentine leather. In that review, Commerce is considering whether a ruling by the Court of Appeals for the Federal Circuit in another case requires Commerce to revoke the order effective September 20, 1991, the date on which Argentina became a "country under the agreement" entitled to injury investigations in countervailing duty cases. A Commerce determination to revoke the order could obviate the need for the Commission to undertake a section 753 investigation of Argentine leather. Commerce's final determination in the changed circumstances review is due to be issued in early 1997. In the event that the countervailing duty order on Argentine leather remains in effect after Commerce's changed circumstances review and a Commission section 753 investigation, it would then be subject to "sunset" review under new section 751(c) of the Tariff Act.

On August 19, 1996, the Coalition Against Australian Leather Subsidies filed a petition with the United States Trade Representative (USTR) under section 302(a) of the Trade Act of 1974. The petition alleged that certain subsidy programs of the Government of Australia constitute acts, policies, and practices that violate or are inconsistent with and otherwise deny benefits to the United States under GATT 1994 and the Subsidies and Countervailing Measures Agreement (SCM Agreement) negotiated during the Uruguay Round.<sup>42</sup> USTR initiated an investigation on October 3, 1996, to determine whether certain acts, policies, or practices of the Government of Australia regarding subsidies available to leather under the Textile, Clothing, and Footwear Import Credit Scheme and other subsidies to leather granted or maintained in Australia which are prohibited under Article 3 of the SCM Agreement are actionable under section 301. The United States and Australia reached a settlement of the dispute over automotive leather on November 25, 1996. Australia agreed to excise automotive leather from

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<sup>41</sup> Submission of Collier, Shannon, Rill & Scott on behalf of the Coalition of U.S. Leather Tanners, June 22, 1995.

<sup>42</sup> USTR Press Release, "USTR Announces New Trade Enforcement Actions," Oct. 1, 1996.

eligibility under its Import Credit Scheme and the Export Facilitation Scheme by April 1, 1997.<sup>43</sup>

## U.S. Exports

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### *Principal Markets and Export Levels*

#### *Hides and skins*

Hide, skin, and leather processors are the major exporters of hides, skins, and leather. During 1991-95, U.S. hide and skin exports increased irregularly, declining from \$1.3 billion in 1991 to \$1.2 billion in 1993 and then rising to \$1.6 billion in 1995 (table B-3). Korea, Japan, and Taiwan accounted for over 70 percent of the value of U.S. hide and skin exports in 1995. Exports to China, the fourth-largest U.S. market in 1995, rose from \$7 million in 1991 to \$99 million in 1995. Other significant export markets included Mexico, Italy, Canada, Thailand, and Hong Kong.

The following tabulation shows U.S. hide and skin exports by major types for 1995 (compiled from official statistics of Commerce):

Type	Value
	<i>Million dollars</i>
Bovine .....	1,498
Sheep .....	30
Other .....	22
Total .....	1,620

Raw hides and skins of bovine animals (primarily whole cattlehides) accounted for 92 percent of U.S. hide exports annually during 1991-95. U.S. exports of whole cattlehides declined steadily in quantity terms from 20.0 million hides in 1991 to 17.9 million in 1994, and then rose back to 20.0 million in 1995 (table B-10). In terms of value, U.S. exports of whole cattlehides declined from \$1.1 billion in 1991 to \$1.0 billion in 1993, then rose to \$1.2 billion in 1995.

Exports of cattlehides as a share of U.S. production declined from 61 percent in 1991 to 52 percent in 1994, then increased to 56 percent in 1995. The decrease in exports as a share of U.S. production reflects, in part, an increase in hide usage by domestic tanners as an abundant supply of cattlehides resulted in lower hide prices. In addition, exports of wet-blue cattlehides

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<sup>43</sup> USTR Press Release, "U.S. and Australia Reach Settlement on Leather Products Trade Dispute," Nov. 25, 1996.

(cattlehides which have been processed in the first stage of tanning) have replaced some exports of raw hides.

Korea was the leading market for U.S. hide and skin exports, accounting for 41 percent of the value in 1995. Such exports declined from \$584 million in 1991 to \$517 million in 1993, then rose to \$670 million in 1995 (table B-3). Korea, was also the largest export market for U.S. whole cattlehides,<sup>44</sup> accounting for 41 percent of the quantity and value in 1995. Such exports declined from 9.3 million hides, valued at \$517 million in 1991 to 8.3 million hides, valued at \$511 million in 1995. The decline in whole cattlehide exports reflects a continuation of the long-term decline of the Korean leather shoe and garment industries as the Korean leather industry continues to move offshore, especially to China and other lower cost locations, such as Vietnam.<sup>45</sup> In addition, in recent years, U.S. cattlehide exports to Korea have lost market share to the European Union (EU).<sup>46</sup>

During 1991-95, U.S. exports of hides and skins to Japan, the second-largest U.S. market, ranged from \$283 million in 1992 to \$229 million in 1994. Such exports totaled \$267 million in 1995 (table B-3). Whole cattlehides accounted for 83 percent (by value) of total U.S. hide and skin exports to Japan in 1995. Such exports declined from 4.7 million hides valued at \$251 million in 1991, to 3.2 million hides, valued at \$222 million in 1995 (table B-10). The general decline in U.S. hide exports to Japan reflects, at least partly, a weak Japanese economy, and high world prices that have suppressed consumer demand in Japan for leather products.<sup>47</sup> In addition, Japanese tanners and leather manufacturers have had to compete with lower labor cost countries, such as Taiwan and more importantly, China.<sup>48</sup>

Taiwan accounted for 14 percent of the value of U.S. hide and skin exports in 1995. Bovine leather, primarily cattlehides, accounted for over 90 percent of the value of U.S. hide and skin exports to Taiwan in 1995. Import demand for hides in Taiwan is dictated by the international competitiveness of its finished products. Although U.S. exports to Taiwan have increased in recent years, Taiwan's export-oriented shoe industry faces rising labor costs and increased competition from countries such as China, Indonesia, and Thailand.<sup>49</sup>

In 1995, China became the fourth-largest export market for U.S. hides. Exports of U.S. hides to China increased significantly from \$7 million in 1991 to \$99 million in 1995 (table B-3). Exports of cattlehides (which account for about 80 percent of all U.S. hide and skin exports) to China increased from \$7 million in 1991 to \$79 million in 1995 (table B-10). China's hides and skin production has not kept pace with its processing capacity; thus, leather tanners in China

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<sup>44</sup> Schedule B Subheading 4101.21.0020.

<sup>45</sup> USDA, FAS, Agricultural Trade Highlights, "Country Spotlight: South Korea," ATH3 94, Mar. 1994, p. 5.

<sup>46</sup> Ibid., p. 14.

<sup>47</sup> U.S. Hide, Skin and Leather Association, *Letter to the Membership*, Apr. 1993.

<sup>48</sup> Ibid.

<sup>49</sup> USDA, ERS, *Outlook*, U.S. Agricultural Exports, AES-1, Feb. 25, 1994, p. 13.

must rely on cattlehide imports to meet their tanning needs.<sup>50</sup> With the continuing development of the Chinese leather industry, the United States is expected to remain a major supplier of hides and skins to China.

During 1991-95, U.S. exports of hides and skins to Mexico declined from \$137 million in 1991 to \$63 million in 1995 (table B-3). Whole cattlehides accounted for about 85 percent of the value of such exports. Drought in northern regions of Mexico during 1994 resulted in an increase in the number of cattle slaughtered in Mexico and thus lessened the demand for imported hides.<sup>51</sup> In addition, in recent years, increasing quantities of U.S. live cattle have been exported to Mexico for slaughter.

### *Leather*

U.S. exports of leather rose from \$696 million in 1991 to \$789 million in 1993, then declined steadily to \$698 million in 1995 (table B-4). Bovine leather accounted for about 83 percent of the value of U.S. leather exports in 1995. Changes in exchange rates and changes in demand for leather products contributed to the decline in leather exports.

Table B-11 shows U.S. leather exports by major markets for 1991-95. Hong Kong was the leading export market in 1994 and 1995, accounting for 20 percent of the value during the latter year. U.S. leather exports to Hong Kong increased steadily from \$42 million in 1991 to \$138 million in 1995 (table B-11). However, the Hong Kong leather-manufacturing industry has generally relocated its processing facilities to China to take advantage of lower labor costs. Consequently, the majority of U.S. leather (and hides) exported to Hong Kong are subsequently transhipped to Chinese processing facilities.<sup>52</sup> Japan was the leading U.S. leather export market in 1991-93, but dropped to the tenth-largest export market in 1995. In value terms, U.S. leather exports to Japan declined from \$192 million in 1991 to \$24 million in 1995. The bulk of leather exports to Japan consists of automotive upholstery leather, which is exempt from the global tariff-rate quota Japan imposes on other leather imports.<sup>53</sup> U.S. exports of upholstery leather to Japan declined from \$165 million in 1991 to less than \$2 million in 1995, partly reflecting a U.S./Japanese trade dispute over U.S. access to the Japanese auto and automotive parts markets.<sup>54</sup>

Mexico was the second-leading U.S. market for leather in 1995. U.S. leather exports to Mexico increased from \$28 million in 1991 to \$110 million in 1995, despite the fact that many small and mid-sized Mexican tanneries were exiting the industry or operating at reduced production

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<sup>50</sup> USDA, FAS, *Livestock and Poultry: World Markets and Trade, Hides and Skins*, FL&P 1-95, Apr. 1995, p. 29.

<sup>51</sup> Ibid., p. 28.

<sup>52</sup> Ibid., p. 15.

<sup>53</sup> *Industrial Outlook*, 1994, p. 34-3.

<sup>54</sup> *Leather*, The International Journal, "World News," (Benn Pub Ltd., Kent, UK), Aug. 1995, p. 36.

capacity.<sup>55</sup> Stricter pollution controls and the devaluation of the peso contributed to the closures.<sup>56</sup> The increase in leather exports in 1995 may reflect in part the implementation of NAFTA. Under NAFTA, tariffs on about 72 percent of all U.S. leather exports to Mexico were eliminated immediately.<sup>57</sup> According to USDA, Mexican tanneries that supply leather products to export markets have fared better than tanneries supplying leather to the domestic market.

U.S. exports of leather to the Dominican Republic, the third-largest market, rose from \$50 million in 1991 to \$80 million in 1994, then declined to \$65 million in 1995 (table B-11). The bulk of U.S. exports to the Dominican Republic consists of shoe uppers and sole leather, reflecting demand by leather footwear manufacturers. U.S. exports of upper and sole leather to the Dominican Republic totaled \$41 million in 1995, and accounted for 63 percent of U.S. leather exports to the Dominican Republic.

Other significant export markets include Korea, Italy, Canada, Thailand, Indonesia, and Taiwan. Table B-12 shows U.S. cattlehide leather exports by major types. Upper and sole leather accounted for 32 percent of the value of cattlehide leather exports in 1995. Other major export types include wet-blue leather and upholstery leather, accounting for 30 and 17 percent, respectively, in 1995.

## ***Foreign Trade Measures***

### ***Tariff measures***

Most countries impose no duties on imports of hides and skins. However, Korea imposes a 3-percent tariff on imported hides and skins and a 5-percent tariff on leather.<sup>58</sup> Many of the developing countries including Argentina and India restrict exports of domestically produced hides and skins.<sup>59</sup> In addition, India bans the export of raw and part-processed leathers to encourage growth of its own tanning and leather products industries.<sup>60</sup>

In March 1986, the United States and Japan settled a trade dispute relating to Japanese import quotas on leather and leather footwear products.<sup>61</sup> As part of the settlement, the United States increased its tariff to 40 percent ad valorem on certain imports of leather and footwear from Japan. Also, as part of the agreement, Japan replaced its import quota with a 5-year tariff-rate quota scheme that expired in March 1991. Japan imposes a global tariff-rate quota on imports of bovine leather. In 1993, the quota was 570,000 square meters, accounting for only 1 percent

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<sup>55</sup> USDA, FAS, *Livestock, Annual Report*, MX9552A, p. 16.

<sup>56</sup> *Ibid.*

<sup>57</sup> *Industrial Outlook*, 1994, p. 34-4.

<sup>58</sup> USDA, FAS, *Livestock Annual Report*, 1995, KS5041, Aug. 14, 1995, p. 45.

<sup>59</sup> *Leather*, "Hide Supply," Jan. 1995, pp. 51-55.

<sup>60</sup> *Ibid.*

<sup>61</sup> See 51 F.R. 9435, Mar. 19, 1988, Proclamation 5448 of Mar. 16, 1986, *Increase in the Rates of Duty on Certain Articles from Japan*.

of Japan's total bovine leather market.<sup>62</sup> Japan offered no further liberalization of the quota on leather during Uruguay Round negotiations; however, it reduced the tariff from 20 percent to 13 percent in the tariff category that includes crust leather, and from 20 percent to 16 percent on other leather over an 8-year period.<sup>63</sup>

### *Nontariff measures*

In May 1992, Argentina lifted its embargo on exports of cattlehides and replaced it with an export tax with an effective rate of 30 percent, thus discouraging hide exports.<sup>64</sup> The tax was reduced to 15 percent in January 1995;<sup>65</sup> however, exports of Argentine hides are still insignificant.

## FOREIGN INDUSTRY PROFILE

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In terms of quantity and value, global production of and trade in bovine hides far exceeds production and trade of hides derived from sheep, goats, pigs, and other animals. Production data relating to hides and skins from animals other than cattle are limited. Consequently, the following discussion on foreign industries is generally limited to bovine hides, skins, and leather.

During 1991-95, world production of bovine hides and skins<sup>66</sup> as reported by USDA, remained within a range of 4.0-4.2 million metric tons (tons) (table B-13). Major world producers of bovine hides are also the major producers of beef and include the United States, the EU, Brazil, the Russian Federation, Argentina, and China.<sup>67</sup> Important world leather-producing countries include the aforementioned countries as well as Japan, Hong Kong, Korea, Taiwan, Italy, and Thailand, which rely primarily on imports to meet their tanning requirements. Profiles of these hide, skin, and leather industries are provided below.

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<sup>62</sup> *Industrial Outlook*, 1994, p. 34-4.

<sup>63</sup> Bryon, May 23, 1996.

<sup>64</sup> USDA, FAS, *Annual Livestock Report*, Buenos Aires, Argentina, AR5046, July 19, 1995, p. 25.

<sup>65</sup> Embassy of the Argentine Republic, Commercial Office, facsimile of the Resolution of the Ministry of Economy Nr. 722/95, July 24, 1996.

<sup>66</sup> Because of differences in animal size and processing ability, international data on hides and skins are reported in metric tons.

<sup>67</sup> USDA, FAS, *World Markets and Trade*, (FL&P 1-95), Apr. 1995, p. 51.

## European Union

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Bovine hide production in the EU decreased irregularly from 881,000 tons in 1991 to 715,000 tons in 1995. Most of the decline in hide production was attributed to the liquidation of the German livestock inventory immediately after reunification. Germany and France are the largest EU producers, each accounting for 22 percent of production in 1995.<sup>68</sup>

Hide utilization in the EU declined during 1991-93. However, as the economies of Spain, Italy, and Portugal improved in 1994, demand for leather goods increased and resulted in increased hide utilization. In addition, the devaluation of the lira, peseta, and escudo during 1992-94 created strong foreign demand for leather goods from these EU countries. Hide imports (excluding EU intra-trade) fluctuated from a low of 289,000 tons in 1992 to a high of 472,000 tons in 1994 to meet tanners' demands. Italy, Spain, and the Netherlands are the largest importers of hides and skins among the EU countries. EU hide imports from the United States totaled \$103 million in 1995, up from \$55 million in 1993. Italy, France, Spain, and Portugal collectively accounted for over 90 percent of the value of U.S. hide and skin exports to the EU in 1995.<sup>69</sup>

During 1991-95, EU hide and skin exports (including EU intra-trade) declined from a peak of 685,000 tons in 1991 to 617,000 tons in 1995. France, the Netherlands, and Germany were the leading export countries, accounting for 65 percent of total EU exports in 1995. Nearly 80 percent of EU exports consists of trade among EU countries. Exports to non-EU countries declined from a high of 198,000 tons in 1991 to 130,000 tons in 1995, reflecting, in part, strong demand for EU hides from Spanish and Italian leather processors and high internal prices for hides.<sup>70</sup>

Italy, the world's largest producer of bovine leather, is renowned for its production of high-quality, high-fashion leather and leather goods. In 1994, there were 2,100 tanneries in Italy, employing 23,000.<sup>71</sup> Leather production increased from 139.5 million square meters (m<sup>2</sup>) in 1992 to 161 m<sup>2</sup> in 1994, reflecting a gradual upswing in the economy following several years of recession, as well as a decline in the value of the lira, which resulted in increased export demand for Italian leather and leather products.<sup>72</sup>

Italy, however, depends heavily on imports of bovine hides to meet its demands for leather. Imports of bovine hides and skins totaled 480,000 tons in 1995, and supplied over 80 percent of Italy's bovine hide and skin consumption in recent years. In 1994, over 45 percent of Italy's hide and skin imports were supplied by other EU countries, primarily France, Germany, the Netherlands, and the United Kingdom. Other important suppliers included Russia, Australia,

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<sup>68</sup> USDA, *Livestock and Poultry: World Markets and Trade*, Apr. 1995 and Mar. 1996, except as noted.

<sup>69</sup> Based on data compiled from official statistics of Commerce.

<sup>70</sup> Op. cit.

<sup>71</sup> *Leather*, "Survey: Italy, May 1995, pp. 28-32.

<sup>72</sup> Ibid.

and the United States. Imports of hides and skins increased as the Italian leather industry has remained competitive, due in part to the quality reputation associated with Italian leather products. In recent years, Italian tanners are processing more finished and semifinished leathers because of tight supplies of bovine hides. About 50 percent of the hide supply is consumed by the domestic shoe industry, with the remainder consumed by other leather manufacturers (i.e., upholstery and garment) or exported after processing.<sup>73</sup>

## Brazil

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During 1991-95, production of bovine hides and skins in Brazil generally increased from 448,000 tons in 1991 to 475,000 tons in 1995 (table B-13). The bulk of Brazil's beef production is consumed domestically; thus, production of hides reflects domestic demand for beef.<sup>74</sup> Bovine hides produced in Brazil are generally of poor quality, with only 15-20 percent of Brazilian hides reported to be of good quality. Factors which contribute to poor hide quality include use of barbed wire on farms and exposure of cattle to ticks and other parasites. A national hide quality program was recently initiated to improve hide quality.<sup>75</sup>

Exports of Brazilian bovine hides increased from 60,000 tons in 1991 to an estimated 148,000 tons in 1995.<sup>76</sup> Increased domestic hide production, coupled with a weak demand from the shoe industry, contributed to the increase in exports during 1991-95. Leading export markets in 1995 included the EU (about 65 percent) and Asia, primarily Hong Kong (9 percent).<sup>77</sup>

Imports of bovine hides into Brazil rose from 8,000 tons in 1991 to 25,000 tons in 1995.<sup>78</sup> Major suppliers included Argentina and Uruguay in 1995. With the inception of Mercosur,<sup>79</sup> it is expected that imports of hides by Brazil from Mercosur member countries will increase at the expense of other suppliers including the United States.<sup>80</sup>

There are approximately 600 tanneries in Brazil.<sup>81</sup> Many of them have been built in the past 20 years and incorporate modern tanning technology. Many tanners operate at less than capacity, owing to a shortage of raw materials. In addition, leather demand from the Brazilian shoe industry declined because of the overvalued real vis-a-vis the U.S. dollar<sup>82</sup> and because of competition from low-cost Asian producers.

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<sup>73</sup> USDA, FAS, *Livestock Annual Report, 1995*, Rome IT5040, Aug. 1, 1995, pp. 12-13.

<sup>74</sup> *World Markets and Trade*, Apr. 1995.

<sup>75</sup> USDA, FAS, *Livestock Annual Report*, Brasilia, Aug. 1, 1995, p. 21.

<sup>76</sup> USDA, *World Markets & Trade*, FL&P 1-96, Mar. 1996, p. 105.

<sup>77</sup> *Ibid.*, p. 105.

<sup>78</sup> *Ibid.*, p. 104.

<sup>79</sup> The Southern Common Market (Mercosur) was formed by Argentina, Brazil, Paraguay, and Uruguay and became effective in January 1995.

<sup>80</sup> *Livestock Annual Report 1995*, Rome IT5040, Aug. 1, 1995, pp. 12-13.

<sup>81</sup> *Leather*, Survey Brazil "Potential and Possibilities," July 1993, pp. 17-18.

<sup>82</sup> USDA, FAS, *Livestock Annual Report*, Brasilia, Aug. 1, 1995, p. 20.



## Russian Federation

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During 1991-95, bovine hide production in the Russian Federation declined steadily from 502,000 tons in 1991 to 310,000 tons in 1995.<sup>83</sup> The decline in hide production reflects reduced cattle stocks in 1992 owing to feed and veterinary supply shortages throughout most of the former republics.<sup>84</sup> Cattle slaughter declined from 21.1 million animals in 1991 to 15.9 million in 1995.<sup>85</sup> Domestic consumption of bovine hides declined from 480,000 tons in 1991 to 125,000 tons in 1995.<sup>86</sup> Conversely, hide exports increased from 22,000 tons in 1991 to 216,000 tons in 1994, then declined to 190,000 tons in 1995. As a result, the share of hide production which was exported increased from 4 percent in 1991 to over 60 percent in 1995. Europe (primarily Italy), is the largest export market for Russian hides. Imports of bovine hides are negligible.

## Argentina

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Argentina was the world's fifth-largest bovine hide and skin producer, with production totaling 304,000 tons in 1995.<sup>87</sup> However, the bulk of production is consumed domestically since the Argentine Government imposes a 15-percent export tax<sup>88</sup> on hides to support the Argentine tanning and leather products industries.

There are approximately 300 tanneries in Argentina, with the largest 30 accounting for 50 percent of the market.<sup>89</sup> Nearly 80 percent of total leather output is exported, while the balance is used domestically. Argentine leather exports totaled \$850 million in 1995, up 15 percent from 1994.<sup>90</sup> The United States is a major market for Argentine leather.

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<sup>83</sup> *World Markets and Trade*, Mar. 1996.

<sup>84</sup> USDA, "Former Soviet Union Agricultural Situation/Outlook," AGR No. UR2023, Moscow, Russia, Mar. 15, 1992, p. 6.

<sup>85</sup> *Op. cit.*, p. 104.

<sup>86</sup> *World Markets and Trade*, Mar. 1996, p. 106.

<sup>87</sup> *Ibid.*, p. 103.

<sup>88</sup> USDA, FAS, *Argentina; Livestock Semi-Annual*, AR9652B, Jan. 24, 1996, p. 7.

<sup>89</sup> USDA, FAS, *Annual Livestock Report*, Buenos Aires, July 19, 1995, p. 24.

<sup>90</sup> USDA, FAS, *Argentina; Livestock Semi-Annual*, AR9652B, Jan. 24, 1996, p. 7.

## China

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Bovine hide production totaled 250,000 tons in 1995, up from 180,000 tons in 1992.<sup>91</sup> Prior to 1992, China's leather industry relied mostly on domestic raw materials to meet its tanning needs. Since domestic supplies have not kept pace with China's tanning capacity, imported hides supply an increasing share of China's raw materials. Imports of raw bovine hides totaled about 175,000 tons in 1995. Major suppliers included the United States, Belgium, and Canada.<sup>92</sup>

China's tanning and leather industry, which is dominated by small firms, is expanding and imports are expected to grow despite increases in domestic hide production. There are over 3,000 leather industry enterprises in China. However, China also imports finished leather from Hong Kong and other countries such as Korea since China's leather processing quality does not generally meet high standards.<sup>93</sup> In recent years, many Korean and Hong Kong leather footwear manufacturers have located in China in order to take advantage of lower production costs, thus aiding the growth of China's leather footwear industry. The Chinese leather industry produces finished leather products such as footwear, sporting goods, and handbags.

The Chinese leather tanning industry includes state-owned as well as joint-venture enterprises. China reportedly lacks tanning technology and management skills and is seeking joint-ventures and the transfer of technology to enhance its position in high-quality leather manufacturing.<sup>94</sup> Significant potential exists for China to further expand its production and processing of hides and skins. However, considerable investment in areas such as internal transportation, animal husbandry, and slaughter practices are needed to enhance China's hide, skin, and leather industry.<sup>95</sup>

## Korea

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Korea's tanning industry grew rapidly in the early 1980s and processing peaked in 1991. Hide and skin imports account for over 95 percent of Korea's hide and skin supply. During 1991-95, Korean imports of bovine hides and skins peaked at 392,000 tons in 1991 and then steadily declined, totaling 345,000 tons in 1995.<sup>96</sup>

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<sup>91</sup> The following discussion on the Chinese hide, skin, and leather sectors was adapted from *World Markets and Trade*, Apr. 1995, except as noted.

<sup>92</sup> USDA's FAS, *Annual Report-Livestock*, China, AGR CH5038, Aug. 1, 1995, p. 21.

<sup>93</sup> USDA's FAS, *Annual Report—Taiwan Livestock Annual*, AGR TW5027, July 27, 1995, p. 20, and FAS, *Annual Report—Livestock Annual Report*, Korea, AGR KS5041, Aug. 14, 1995, p. 41, and FAS, *Annual Report*, Hong Kong, AGR HK5050, July 31, 1995, p. 9.

<sup>94</sup> *Leather*, "World News," Jan. 1994, pp. 3-4.

<sup>95</sup> *Op. cit.*, p. 29.

<sup>96</sup> USDA, *Livestock and Poultry: World Markets and Trade*, FL&P 1-95, Apr. 1995.

The United States and the EU are the primary suppliers of bovine hides to Korea's leather tanners. The U.S. market share declined from 76 percent in 1990 to 67 percent in 1993, then increased to 79 percent in 1995. An increase in U.S. hide and skin prices in response to strong demand by U.S. tanners resulted in a decline in U.S. hide exports to Korea during 1991-93. Conversely, the EU market share rose from 6 percent in 1990 to 23 percent in 1993, then declined to 12 percent in 1995 as EU cattle slaughter declined.<sup>97</sup>

Korea will remain a strong but declining market for hides and skins as the leather-manufacturing industry moves offshore to countries such as China, Taiwan, and Thailand where labor costs are less. During 1991-95, utilization of hides in Korea declined from 400,000 tons in 1991 and 1992 to 358,000 tons in 1995. However, Korean finished leather exports totaled \$1.1 billion in 1994 (latest data available) up from \$503 million in 1991,<sup>98</sup> reflecting the changing industry as the tanning industry remains in Korea while the finished leather goods are manufactured offshore. China, Hong Kong, and Indonesia were the principal export markets for Korea's finished leather exports in 1994.

## Taiwan

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Imports account for the bulk of the cattlehide supply in Taiwan. Domestic production accounted for less than 1 percent of the total supply in 1995. Cattlehide imports rose irregularly from 100,000 tons in 1991 to 114,000 tons in 1995.<sup>99</sup> The United States supplied about 71 percent of the quantity of bovine hides in 1995, up from 59 percent in 1993. Imports from Canada, Taiwan's second-largest supplier, declined from 29 percent in 1993 to 21 percent in 1995. The increase in imports from the United States and the corresponding decline from Canada was primarily the result of relatively lower U.S. prices in relation to Canadian prices. Reportedly, Taiwan end users prefer U.S. cattlehides, and they will pay a 5-percent premium for U.S. product.<sup>100</sup>

The bulk of Taiwan's hide imports are made into shoes for the export market. Taiwan's consumption of hides and imports of cattlehides are expected to decline in the long term. Many footwear manufacturers have closed their businesses or moved offshore to lower cost production areas, principally China, Indonesia, Thailand, and Vietnam. These manufacturers purchase Taiwan finished leather. Exports of finished leather increased from 20,187 tons in 1992 to 46,264 tons in 1994. In addition, Taiwan imports of finished leather increased from 45,681 tons in 1990 to 65,144 tons in 1994, reflecting stricter enforcement of tanning regulations on Taiwan tanners. The United States and Australia were the leading import suppliers of finished leather.<sup>101</sup>

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<sup>97</sup> USDA, FAS, *Livestock semi annual report, 1996*, AGR KS6006, Feb. 14, 1996, p. 12.

<sup>98</sup> United Nations statistics for 1991 and FAS, AGR KS6006 statistics for 1994.

<sup>99</sup> USDA, FAS, *Taiwan Livestock Annual 1995*, Taiwan, TW5027, July 27, 1995.

<sup>100</sup> Ibid.

<sup>101</sup> Ibid.

## Thailand

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The bulk of Thailand's consumption of hides is supplied by imports. Imports of raw hides rose from 113,000 tons in 1993 to 130,000 tons in 1995. China was the major supplier, accounting for 38 percent of hide imports. Other significant suppliers included Australia, the United States, and the EU. As China increases its use of domestic hides, its exports are expected to decline and other suppliers such as the United States should gain increased market share to Thailand.<sup>102</sup>

There are approximately 120 leather tanneries in Thailand primarily producing shoe upper and upholstery leather for export to China and Indonesia. Many tanneries closed or shifted to processing wet-blue hides rather than raw hides, because of tightening effluent discharge regulations. Some relocated to China and Indonesia. In 1989, the Royal Thai Government reduced the import tariff to zero on raw hides because of insufficient supplies of domestic hides. Duties of 5 percent are currently imposed on imported wet-blue stock and 10 percent for finished leather.

## Hong Kong

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Hong Kong is an important international market for trading hides and skins, and sponsors the Asia Pacific Leather Fair, the second-largest leather show in the world. Bovine hide production in Hong Kong is extremely small, averaging about 2,400 tons annually during 1991-95.<sup>103</sup> Imports of cattlehides into Hong Kong rose from 67,000 tons in 1991 to 98,000 tons in 1995.<sup>104</sup> China, the leading import supplier during 1991-94, was surpassed by the United States and Italy in 1995 (each accounting for 28 percent of total imports).

Hong Kong leather manufacturers own approximately 100 tanneries in China, and the majority of hide imports into Hong Kong are re-exported without further processing to China. Re-exports are expected to continue to increase as Hong Kong continues to relocate production facilities offshore. Primarily as a result of environmental regulations, labor shortages, and high labor costs, only about 10 tanneries remain in Hong Kong. Strict pollution controls adopted by the Government of Hong Kong restrict tanneries to a small area designated for environmentally undesirable industries. In recent years the Hong Kong leather industry has contracted with workers from China to help relieve the labor shortage. The major export markets for Hong Kong leather goods include the United States, Europe, and Japan.<sup>105</sup>

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<sup>102</sup> USDA, FAS, *Livestock Annual Report*, 1995, Bangkok, Thailand, TH5099, July 25, 1995.

<sup>103</sup> USDA, FAS, *Livestock Annual* 1995, Hong Kong, HK9552A, July 31, 1995, and *Livestock Semi-Annual Report*, HK6009, Jan. 31, 1996.

<sup>104</sup> *World Markets and Trade*, Mar. 1996, p. 104.

<sup>105</sup> Op. cit.

## Mexico

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Production of bovine hides in Mexico increased from 155,000 tons in 1991 to 170,000 tons in 1995; however, the tanning sector contracted.<sup>106</sup> Many small and medium-size tanneries are exiting the industry or operating at reduced capacity due to the weak peso and reduced domestic demand by the leather footwear industry. Competition from synthetic footwear reduced sales of leather to the domestic shoe industry, the largest user of hides and skins.<sup>107</sup>

## Australia

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During 1991-95, bovine hide production in Australia declined from a high of 162,000 tons in 1992 to a low of 149,000 tons in 1995.<sup>108</sup> Cattlehides are the most important byproduct of the Australian livestock industry. Approximately 90 percent of Australia's cattlehides are exported and Japan, Korea, Italy, and China are the major markets. Such exports totaled about \$375 million annually in recent years.<sup>109</sup> Two Australian government programs that provide support to the Australian leather industry under certain conditions include the Export Facilitation Scheme and the Textiles, Clothing, and Footwear Import Credit Scheme.<sup>110</sup> Other Australian programs in which the Australian leather industry may receive support include the Export Market Development Grants Scheme and the International Trade Enhancement Scheme.<sup>111</sup>

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<sup>106</sup> USDA's FAS, DL&P: *World Livestock Situation*, issues FL&P 4-92, Oct. 1992, pp. 26-29 and FL&P 4-93, Oct. 1993, p. 99; and *World Markets and Trade*, Apr. 1995, p. 51.

<sup>107</sup> Ibid.

<sup>108</sup> *World Markets and Trade*, Mar. 1996.

<sup>109</sup> USDA, FAS, *Livestock Annual Report*, 1995, Australia, AS9552A, Aug. 1995.

<sup>110</sup> See Australian Industry Commission, *Meat Processing*, vol. II, Apr. 20, 1994, and USTR, 1995 *National Trade Estimate Report on Foreign Trade Barriers*.

<sup>111</sup> Ibid.



**APPENDIX A**  
**THE INDIVIDUAL STAGES OF**  
**LEATHER PRODUCTION**

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# **The Individual Stages of Leather Production; A typical, simplified process description<sup>1</sup>**

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## ***Preservation***

Unless the hide or skin from an animal is processed within four to eight hours of animal slaughter, it must be preserved to prevent bacterial attack and putrefaction:

### **Brining and Salting**

Common salt (sodium chloride) in the form of brine and / or dried salt is applied to the freshly flayed hides to preserve (cure) and protect them from putrefaction. The salt draws moisture from the hides, preventing bacteria from thriving, and thereby preserving the hides.

The process is only temporary, and is reversed in the presence of excess moisture.

## ***Beamhouse Processing***

***Definition;*** Beamhouse processing removes all the non structural components (including the hair, and often the wool in the case of sheepskins) to leave a collagen fiber network ready for tanning. Beamhouse processing does not alter the putrescible nature of the hide or skin.

### **Soaking**

Soaking is normally the first process stage for both cured and fresh hides, initiating the “opening-up” of the collagen structure. The primary purposes of soaking are to:

- 1.) Rehydrate cured hides
- 2.) Remove salt from cured hides
- 3.) Remove hyaluronic acid (a gel like acidic polysaccharide) and non structural proteins (albumins and globulins) from both fresh and cured hides.

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<sup>1</sup> Reproduced with permission of the Leather Industries of America, Inc.



Soaking sometimes commences at pH 7 (approx.), but is normally raised within the range 9 to 10 using sodium carbonate (a weak alkali).

### **Fleshing**

Dried (cured) hides which have been “soaked-back” may be mechanically fleshed at this stage. Fleshing removes fat and flesh attached to the underside (“flesh-side”) of the hide.

Fresh hides may be fleshed prior to soaking. Alternatively, fleshing often occurs after the hides have been unhaired and limed (see below).

### **Liming**

Having partially removed a barrier to the penetration of process chemicals, the second phase of the “opening-up” process can begin: a solution of calcium hydroxide (commonly referred to as “lime”) is used to chemically degrade and remove dermatan sulphate proteoglycan; a complex polymer chemically attached to the collagen fibrils.

### **Unhairing**

Carried out in conjunction with liming, the hair is either degraded (“hair-burn” process) or merely released from the hide (“hair-save” process) using sodium sulfide and/or sodium hydrosulphide in the presence of calcium hydroxide. The pH of a liming / unhairing liquor is normally in the range 12 to 13.

### **Splitting**

For most upholstery production, hides are normally split to give two layers (the grain split and the split) at this stage using a mechanical splitting machine.

In the shoe leather manufacture, it is normal to split the hides after they have been tanned, giving a firmer leather exhibiting more “stand”.

### **Deliming**

A consequence of the high pH used to “open-up” the collagen hide is a significant swelling of the hide. Deliming is the first stage of the pH reduction which is required to (a) reduce the

swelling and (b) prepare the hide for tanning. Deliming commonly utilizes ammonium sulfate or ammonium chloride, reducing the pH to approximately 8.5. Some processes use carbon dioxide gas, which dissolves in the process liquor to produce carbonic acid, leaving the hides at approximately pH 7.

### **Bating**

Normally carried out in conjunction with deliming, bating utilizes an enzyme (pancreatic or bacterial) to complete the “opening-up” process by removing the final traces of non-structural protein, including hair debris.

### **Pickling**

At this stage, the hides or skins are *still* putrescible. They will be treated with acid (typically sulfuric acid, or a mixture of sulfuric and formic acids) to; (a) render the collagen resistant to bacterial attack (a “storage pickle”) (b) enable the penetration of chromium as part of the chrome tanning stage.

A biocide is normally added at the pickling stage to increase the resistance to molds and yeasts.

For bovine (hide) leather production, it is normal practice to move directly from pickling to tanning. For sheepskin and hair sheep skin production however, it is common practice to sell the pickled skins on to another company for tanning; a “storage pickle” may preserve skin or hide collagen for up to six months, after which time it is essential to tan the material.

**Definition;** the term used to describe a company who removes wool from a sheepskin and sells the skin in the pickled state is “fellmonger”.

### ***Pre-tanning***

In a relatively small number of cases, the pickled material is pre-tanned before tanning. Aluminum is the most widely used pre-tanning agent: because it does not produce strong covalent bonds with collagen, it is washed out easily by water, for which it has a strong affinity. The purpose of aluminum pre-tanning is to enable the material to be shaved *before* tanning rather than after. This has the benefit of producing chromium-free shavings, which are easier to dispose of due to their perceived greater environmental compatibility.

In East India (EI), it is common to pre-tan goat and water buffalo skins using a simple tree bark

(vegetable) tan. This pre-tanned leather is bleached and sold as a commodity, generally for reprocessing overseas. The purpose of the East Indian tannage is to preserve the hides for storage and transport, and to add weight to the material.

*Note:* raw hides and skins are sold by weight, whereas tanned materials is sold by area. Hence the practice of selling EI “tanned” (pre-tanned) material by weight is consistent with the concept that there is a clear dividing line between tanned material and untanned or pre-tanned material (see Tanning below).

**Definition;** Pre-Tanning can be defined as “a non-permanent process employed to temporarily stabilize the protein material (collagen) in a hide or skin in order to allow mechanical processing (mainly shaving) prior to tanning, or storage / shipping prior to sale as a commodity.”

## ***Tanning***

**Definition;** Tanning is the first stage at which the hide or skin becomes stable to putrefaction for an indefinite timescale. It is also the stage at which the fundamental character of the leather is established.

The hide or skin is treated with a solution of tanning agent, which is able to penetrate the collagen matrix. Once the tanning agent has penetrated the substrate, it is able to react with the collagen, crosslinking the polypeptide chains to each other.

This cross-linking effect, brought about by the fixation of the tanning agent, is called tanning; it is the first stage at which the hide or skin is permanently resistant to bacterial attack, and the first stage at which the material can be called leather.

The tanning agent used for approximately 90% of world production is chromium, which yields the best possible shoe, upholstery and garment leather. Most of the remaining 10% is vegetable tanned leather, used for luggage, belts ,sole leather, etc.

## ***Crust Leather Production***

Although chrome tanning produces a leather commonly referred to as “wet-blue”, further processing is necessary to convert this to a product usable by the consumer, a product referred to as “crust leather”.

The individual stages used to convert wet-blue to crust leather are sometimes misleadingly referred to as “finishing”. However, finishing is a distinctly unique process within leather manufacture, and is defined as a separate section below.

Processing to produce “crust” leather involves most (or all) of the following stages:

**Shaving:** at this stage, splitting will have been carried out to provide a “grain split” at approximately the required thickness (“substance”); either the limed material or the wet-blue material will have been split.

However, the material must be fed through a shaving machine in order to achieve the exact thickness required by the customer. Due to the high temperatures generated by the rapidly spinning shaving cylinder, only tanned or pretanned material can be shaved. The shavings produced represent one of the many wastes generated during leather manufacture.

**Washing & Neutralizing;** the leather is washed to removed loose shavings and fibers, and treated with a weak alkali to raise the pH to a suitable level for further processing.

**Retanning;** the leather is treated with natural or synthetic agents which sometimes possess tanning characteristics. These are used to modify the characteristics of the leather in terms of aesthetics (softness, fullness, levelness of color after dyeing, etc.).

**Dyeing;** the leather is dyed to give the required color.

**Fatliquoring;** a modified, emulsified fat (“fatliquor”) is drummed into the leather to provide lubrication for the individual fibers. Lubricating fats, oils and waxes may also be applied directly to leather by roller / conveyor.

**Drying;** Fatliquoring enables the subsequent drying of the leather, whilst maintaining the softness and flexibility that would otherwise be lost.

This dried material is called “crust leather”; it can either be used in this state (especially, if heavily oiled), or “finished” (see below).

### ***Finishing***

Finishing involves the application of a surface coating to the crust leather in order to confer the desired surface characteristics such as color, “feel”, and texture, and provide protection.

**Formulation;** A typical finish may comprise a sprayed surface dye, penetrator (for finish adhesion), pigment (for color), binder, wax (for feel, etc.), matting agent (appearance), and top lacquer.

“Aniline” leather does not have a pigment coating, thereby allowing the natural character of the leather to show through the finish.

**Application;** the individual components / layers comprising the finish are dissolved/suspended (as an emulsion) in water and/or solvent, and are applied by spray, roller, or padding.

***Embossing/Printing;*** a heavy press or roller is used to produce a print on the surface of the leather.

*Dr. N.J. Cory*  
*April 1996*



# **APPENDIX B**

## **STATISTICAL TABLES**

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**Table B-1**

**Cattlehides: U.S. production,<sup>1</sup> exports of domestic merchandise, imports for consumption, and apparent U.S. consumption, 1991-95**

Year	U.S. production	U.S. exports	U.S. imports	Apparent U.S. consumption	Ratio of imports to consumption	Ratio of exports to production
	<i>(1,000 hides)</i>				<i>Percent</i>	
1991 .....	32,885	20,016	1,549	14,418	11	61
1992 .....	33,069	19,098	1,474	15,445	10	58
1993 .....	33,504	18,226	1,654	16,932	10	54
1994 .....	34,196	17,910	1,726	18,012	10	52
1995 .....	35,639	20,044	1,759	17,354	10	56

<sup>1</sup> Commercial cattle slaughter equals cattlehide production.

Note.—HTS subheading 4104.21.0020 was used for imports and exports.

Source: Production compiled from official statistics of the USDA; exports and imports compiled from U.S. Department of Commerce.



Table B-2

Hides, skins, and leather: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1991-95<sup>1</sup>

Item	1991	1992	1993	1994	1995
<i>(Million dollars)</i>					
U.S. exports of domestic merchandise:					
Korea .....	657	610	574	640	729
Japan .....	468	474	421	266	291
Italy .....	87	84	70	106	104
Taiwan .....	189	154	168	219	249
Mexico .....	164	180	173	171	173
Canada .....	85	95	106	125	102
Hong Kong .....	49	83	134	163	182
Argentina .....	1	0	0	0	0
China .....	12	15	23	58	110
United Kingdom .....	14	18	15	23	12
All other .....	242	261	294	336	365
Total .....	1,967	1,974	1,977	2,108	2,319
EU-15 .....	181	183	146	210	200
OPEC .....	18	14	23	34	38
ASEAN .....	49	64	79	92	123
CBERA .....	58	69	86	89	79
Central and Eastern Europe .....	16	8	9	19	15
U.S. imports for consumption:					
Korea .....	6	4	4	4	5
Japan .....	4	4	4	3	1
Italy .....	81	86	120	160	166
Taiwan .....	14	17	15	19	19
Mexico .....	24	29	38	61	77
Canada .....	83	100	103	118	127
Hong Kong .....	1	1	1	1	1
Argentina .....	108	94	112	113	166
China .....	4	5	4	4	5
United Kingdom .....	57	73	75	82	101
All other .....	311	354	392	429	427
Total .....	693	767	868	995	1,095
EU-15 .....	234	251	302	361	392
OPEC .....	4	5	9	8	5
ASEAN .....	34	43	42	39	25
CBERA .....	6	5	7	11	17
Central and Eastern Europe .....	2	4	4	4	4
U.S. merchandise trade balance:					
Korea .....	651	606	570	636	724
Japan .....	464	470	417	263	290
Italy .....	6	-2	-50	-54	-62
Taiwan .....	175	137	153	200	230
Mexico .....	140	151	135	110	96
Canada .....	2	-5	3	7	-25
Hong Kong .....	48	82	133	162	181
Argentina .....	-107	-94	-112	-113	-166
China .....	7	10	19	54	105
United Kingdom .....	-43	-55	-60	-59	-89
All other .....	-69	-93	-98	-92	-62
Total .....	1,272	1,207	1,109	1,113	1,224
EU-15 .....	-53	-68	-156	-151	-192
OPEC .....	14	9	14	26	33
ASEAN .....	15	21	37	53	98
CBERA .....	49	64	80	78	62
Central and Eastern Europe .....	14	4	6	15	12

<sup>1</sup> Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

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

Table B-3

Hides and skins: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1991-95<sup>1</sup>

Item	1991	1992	1993	1994	1995
<i>(Million dollars)</i>					
U.S. exports of domestic merchandise:					
Korea .....	584	556	517	585	670
Japan .....	276	283	258	229	267
Taiwan .....	129	120	125	185	224
China .....	7	8	13	45	99
Mexico .....	137	134	105	103	63
Italy .....	35	33	34	53	57
Canada .....	33	39	49	59	55
Thailand .....	7	10	18	19	46
Hong Kong .....	6	14	20	33	44
Spain .....	3	2	2	12	17
All other .....	53	51	49	69	79
Total .....	1,270	1,250	1,189	1,392	1,620
ANIC .....	722	694	668	805	939
EU-15 .....	64	62	55	93	103
U.S. imports for consumption:					
Korea .....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Japan .....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Taiwan .....	1	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
China .....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Mexico .....	4	6	5	5	9
Italy .....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Canada .....	63	76	80	89	92
Thailand .....	4	7	3	3	2
Hong Kong .....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Spain .....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
All other .....	36	32	31	27	39
Total .....	109	122	120	126	140
ANIC .....	1	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
EU-15 .....	16	16	15	11	12
U.S. merchandise trade balance:					
Korea .....	584	556	517	585	670
Japan .....	276	283	258	229	267
Taiwan .....	129	121	125	185	224
China .....	7	8	13	45	99
Mexico .....	133	127	100	98	55
Italy .....	35	33	34	53	57
Canada .....	-30	-37	-31	-30	-36
Thailand .....	3	3	15	16	44
Hong Kong .....	6	14	20	33	43
Spain .....	3	2	2	12	17
All other .....	17	18	17	41	43
Total .....	1,162	1,128	1,069	1,266	1,480
ANIC .....	721	694	668	805	939
EU-15 .....	48	46	40	83	91

<sup>1</sup> Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>2</sup> Less than \$500,000.

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

Table B-4

**Leather: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1991-95<sup>1</sup>**

Item	1991	1992	1993	1994	1995
<i>(Million dollars)</i>					
U.S. exports of domestic merchandise:					
Argentina .....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Italy .....	52	51	36	54	48
United Kingdom .....	12	16	14	22	10
Mexico .....	28	47	68	68	110
Brazil .....	4	6	3	4	4
Uruguay .....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Germany .....	28	30	22	12	9
Canada .....	52	55	57	65	48
Spain .....	5	7	3	5	5
Republic of South Africa .....	1	2	4	1	2
All other .....	514	510	582	485	462
Total .....	696	724	789	716	698
ANIC .....	177	158	215	221	224
EU-15 .....	117	121	91	117	98
CBERA .....	56	67	85	87	78
LAFT .....	34	58	81	80	120
ASEAN .....	39	47	55	71	71
U.S. imports for consumption:					
Argentina .....	103	93	111	113	166
Italy .....	81	86	120	160	165
United Kingdom .....	55	65	68	75	97
Mexico .....	20	23	33	56	68
Brazil .....	37	52	54	60	59
Uruguay .....	24	36	36	38	44
Germany .....	31	29	33	41	40
Canada .....	20	24	23	30	35
Spain .....	12	13	16	21	27
Republic of South Africa .....	( <sup>2</sup> )	4	16	26	23
All other .....	201	217	238	248	231
Total .....	584	643	748	868	955
ANIC .....	20	23	21	25	26
EU-15 .....	218	235	287	350	380
CBERA .....	5	5	7	11	17
LAFT .....	205	220	255	285	351
ASEAN .....	30	35	39	35	23
U.S. merchandise trade balance:					
Argentina .....	-103	-93	-111	-113	-166
Italy .....	-29	-35	-84	-106	-117
United Kingdom .....	-40	-49	-54	-53	-87
Mexico .....	8	24	35	12	42
Brazil .....	-33	-46	-51	-56	-55
Uruguay .....	-24	-36	-36	-38	-44
Germany .....	-3	1	-11	-29	-31
Canada .....	32	31	34	35	12
Spain .....	-7	-6	-13	-16	-22
Republic of South Africa .....	1	-2	-8	-25	-21
All other .....	313	290	341	237	232
Total .....	112	82	41	-152	-257
ANIC .....	157	135	194	196	198
EU-15 .....	-101	-114	-196	-233	-283
CBERA .....	51	62	79	77	61
LAFT .....	-171	-162	-175	-205	-231
ASEAN .....	9	12	16	36	48

<sup>1</sup> Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

<sup>2</sup> Less than \$500,000.

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

**Table B-5****Hides and skins: U.S. imports for consumption, by principal sources, 1991-95**

Item	1991	1992	1993	1994	1995
<i>(Thousand dollars)</i>					
Canada .....	63,093	76,369	79,641	88,582	91,999
Mexico .....	4,006	6,070	4,835	5,342	8,729
Republic of South Africa .....	221	196	75	2,314	8,022
Australia .....	690	1,185	1,175	1,774	5,591
United Kingdom .....	2,845	7,876	7,315	7,168	4,907
Subtotal .....	70,855	91,696	93,041	105,180	119,248
All other .....	38,389	32,095	26,645	21,155	20,587
Total .....	109,244	123,791	119,686	126,335	139,835

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

**Table B-6****Hides and skins: U.S. imports by type, 1991-95**

Type	1991	1992	1993	1994	1995
<i>Value (1,000 dollars)</i>					
Bovine <sup>1</sup> .....	83,490	91,899	90,206	94,402	103,157
Sheep or lamb .....	15,819	22,928	19,010	21,691	26,004
Other <sup>2</sup> .....	9,936	8,963	10,472	10,241	10,675
Total .....	109,244	123,791	119,686	126,334	139,835
<i>Share accounted for (percent)</i>					
Bovine <sup>1</sup> .....	76	74	75	75	74
Sheep or lamb .....	14	19	16	17	19
Other <sup>2</sup> .....	10	7	9	8	7
Total .....	100	100	100	100	100

<sup>1</sup> Includes hides of equine animals.

<sup>2</sup> Includes goat or kidskin, reptile, deer, pig or hog skins and other skins not elsewhere specified.

Note.—Because of rounding, figures may not add to the totals shown.

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

**Table B-7****Whole cattlehides:<sup>1</sup> U.S. imports from Canada, Mexico, and all other sources, 1991-95**

Source	1991	1992	1993	1994	1995
<i>(1,000 hides)</i>					
Canada .....	976	1,302	1,481	1,635	1,546
Mexico .....	29	65	85	86	160
All other .....	544	107	88	5	53
Total .....	1,549	1,474	1,654	1,726	1,759
<i>(1,000 dollars)</i>					
Canada .....	40,673	56,955	65,449	75,386	73,186
Mexico .....	848	1,910	2,846	2,671	4,883
All other .....	9,053	3,630	4,307	319	3,953
Total .....	50,574	62,495	72,602	78,376	82,022
<i>Value (dollars per hide)</i>					
Canada .....	\$41.67	\$43.74	\$44.19	\$46.10	\$47.34
Mexico .....	29.24	29.38	33.48	31.06	30.52
All other .....	16.64	33.93	48.94	65.80	74.58
Total .....	32.65	42.40	43.98	45.41	46.63

<sup>1</sup> HTS subheading 4101.21.0020.

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

**Table B-8****Leather: U.S. imports by type, 1991-95**

Type	1991	1992	1993	1994	1995
<i>(Million dollars)</i>					
Bovine <sup>1</sup> .....	440	488	585	695	791
Sheep .....	31	35	36	38	41
Goat .....	23	23	29	25	26
Other <sup>2</sup> .....	89	96	98	110	97
Total .....	583	643	748	868	955

<sup>1</sup> Includes cattlehide, calfskin, buffalo, and equine leather.<sup>2</sup> Includes leather of other animals not specified, chamois, patent, waste, and composition leather.

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

Table B-9

Hides, skins, and leather: *Harmonized Tariff Schedule* subheading; description; U.S. col. 1 rate of duty as of Jan. 1, 1996; U.S. exports, 1995; and U.S. imports, 1995

HTS subheading	Brief description	Col.1 rate of duty as of Jan. 1, 1996		U.S. exports 1995	U.S. imports 1995
		General	Special <sup>1</sup>	<i>Thousand dollars</i>	
4101.10.00	Whole hides and skins of immature cattle, fresh or preserved . . . . .	Free		30,884	2,254
4101.21.00	Whole raw hides and skins of bovine animals, fresh or wet-salted, except of immature cattle . . . . .	Free		1,387,609	88,642
4101.22.00	Butts and bends of bovine animals, fresh or wet-salted . . . . .	Free		12,680	11
4101.29.00	Raw hides and skins of bovine animals, fresh or wet-salted except whole hides and skins and butts and bends . . . . .	Free		12,808	1,807
4101.30.00	Raw hides and skins of bovine animals, otherwise preserved (except hides and skins of bovine animals, fresh or wet-salted, and whole hides and skins of immature cattle) . . . . .	Free		51,638	8,327
4101.40.00	Raw hides and skins of equine animals, fresh or preserved, not prepared . . . . .	Free		2,401	2,116
4102.10.00	Raw skins of sheep or lambs, fresh or preserved, but not further prepared, with wool on . . . . .	Free		20,073	6,405
4102.21.00	Raw skins of sheep or lamb, pickled, without wool on . . . . .	Free		2,815	18,723
4102.29.00	Raw skins of sheep or lamb, fresh or preserved (except pickled), without wool on . . . . .	Free		7,432	876
4103.10.00	Raw hides and skins of goats or kids, fresh or preserved, but not prepared, whether or not dehaired or split . . . . .	Free		478	349
4103.20.00	Raw hides and skins of reptiles, fresh or preserved, but not prepared . . . . .	Free		21,350	484
4103.90.00	Other raw hides and skins; of deer, wild pig and hog, and other animals, fresh or preserved, but not prepared, not elsewhere specified . . . . .	Free		70,274	9,842
4104.10.	Whole bovine skin leather, without hair on, of a unit surface area not exceeding 28 square feet:				
20	Upper leather . . . . .	Free		54,719	16,995
40	Lining leather . . . . .	Free		( <sup>2</sup> )	3,524
60	Not fancy, other than upper or lining . . . . .	3.2% ( <sup>3</sup> )	Free (CA,E,IL,J) 2.5% (MX)	( <sup>2</sup> )	2,426
80	Fancy, other than upper or lining . . . . .	4.7% ( <sup>3</sup> )	Free (CA,E,IL,J) 3.8% (MX)	( <sup>2</sup> )	1,230
4104.21.00	Other bovine leather, vegetable pretanned, but not further prepared, whether or not split . . . . .	5% ( <sup>3</sup> )	Free (A*,CA,E,IL,J,MX)	1,945	33,859
4104.22.00	Other bovine leather, otherwise pretanned, but not further prepared, whether or not split . . . . .	4.3% ( <sup>3</sup> )	Free (A*,CA,E,IL,J,MX)	17,218	12,226

See footnotes at end of table.

Table B-9--Continued

Hides, skins, and leather: *Harmonized Tariff Schedule* subheading; description; U.S. col. 1 rate of duty as of Jan. 1, 1996; U.S. exports, 1995; and U.S. imports, 1995

HTS subheading	Brief description	Col.1 rate of duty as of Jan. 1, 1996		U.S.	U.S.
		General	Special <sup>1</sup>	exports 1995	imports 1995
					Thousand dollars
4104.29.	Other bovine leather, except vegetable and otherwise pretanned and equine leather, pretanned, tanned, or retanned, not further prepared, whether or not split:				
30	Buffalo .....	3.2% <sup>(3)</sup>	Free (A*,CA,E,IL,J,MX)	138	1,382
50	Upper leather and sole leather (other than buffalo) .....	5.0% <sup>(3)</sup>	Free (A*,CA,E,IL,J,MX)	2,134	4,686
90	Other .....	4.3% <sup>(3)</sup>	Free (A*,CA,E,IL,J,MX)	194,260	61,880
4104.31.	Other bovine leather and equine leather, parchment dressed or prepared after tanning, full grains and full grain splits:				
20	Buffalo .....	3.2% <sup>(3)</sup>	Free (A*,CA,E,IL,J,MX)	2,223	1,201
40	Upholstery leather (other than buffalo) .....	3.6% <sup>(3)</sup>	Free (A,CA,E,IL,J,MX)	16,623	314,372
50	Upper leather; sole leather (other than buffalo) .....	4.3% <sup>(3)</sup>	Free (A*,CA,E,IL,J,MX)	116,186	42,485
60	Other, not fancy (other than buffalo) .....	5% <sup>(3)</sup>	Free (A*,E,CA,IL,J,MX)	36,545	47,398
80	Other, fancy (other than buffalo) .....	2.4% <sup>(3)</sup>	Free (A*,CA,E,IL,J,MX)	778	118,957
4104.39.	Other bovine leather and equine leather, parchment dressed or prepared after tanning, other than full grains and grain splits:				
20	Buffalo .....	3.2% <sup>(3)</sup>	Free (A,CA,E,IL,J,MX)	416	13,275
40	Upholstery leather (other than buffalo) .....	3.6% <sup>(3)</sup>	Free (A,CA,E,IL,J,MX)	83,804	57,332
50	Upper leather; sole leather (other than buffalo) .....	5% <sup>(3)</sup>	Free (A*,CA,E,IL,J,MX)	15,466	7,854
60	Other, not fancy (other than buffalo) .....	5%	Free (A*,CA,E,IL,J,MX)	28,091	20,722
80	Other, fancy (other than buffalo) .....	2.4% <sup>(3)</sup>	Free (A*,CA,E,IL,J,MX)	4,754	29,664
4105.11.00	Sheep or lamb skin leather, without wool on, vegetable pretanned but not further prepared, whether or not split .....	1.4% <sup>(3)</sup>	Free (A,CA,E,IL,J,MX)	68	592
4105.12.00	Sheep or lamb skin leather, without wool on, otherwise pretanned, but not further prepared, whether or not split .....	3.8% <sup>(3)</sup>	Free (CA,E,IL,J,MX)	12,075	883
4105.19.10	Sheep or lamb skin leather, without wool on, wet blues, but not further prepared, whether or not split .....	3.8% <sup>(3)</sup>	Free (CA,E,IL,J,MX)	<sup>(4)</sup>	456
4105.19.20	Sheep or lamb skin leather, without wool on, except vegetable or otherwise pretanned of wet blue, but not further prepared, whether or not split .....	3.8% <sup>(3)</sup>	Free (CA,E,IL,J,MX)	<sup>(4)</sup>	1,807
4105.20.	Sheep or lamb skin leather, without wool on, parchment-dressed or prepared after tanning:				
30	Not fancy .....	3.8% <sup>(3)</sup>	Free (CA,E,IL,J,MX)	509	7,847
60	Fancy .....	2.2% <sup>(3)</sup>	Free (A*,CA,E,IL,J,MX)	<sup>(5)</sup>	29,282

See footnotes at end of table.

Table B-9--Continued

Hides, skins, and leather: *Harmonized Tariff Schedule* subheading; description; U.S. col. 1 rate of duty as of Jan. 1, 1996; U.S. exports, 1995; and U.S. imports, 1995

		Col.1 rate of duty as of Jan. 1, 1996		U.S.	U.S.
HTS subheading	Brief description	General	Special <sup>1</sup>	exports 1995	imports 1995
Thousand dollars					
4106.11.00	Goat or kidskin leather, vegetable pretanned, but not further prepared, whether or not split	Free <sup>(3)</sup>		73	679
4106.12.00	Goat or kidskin leather, otherwise pretanned, but not further prepared, whether or not split	3.7% <sup>(3)</sup>	Free (A*,CA,E,IL,J,MX)	23	4,937
4106.19.20	Goat or kidskin leather, wet blues, not further prepared, whether or not split	3.2% <sup>(3)</sup>	Free (A*,CA,E,IL,J,MX)	<sup>(6)</sup>	2,770
4106.19.30	Goat or kidskin leather, other, except vegetable or otherwise pretanned and wet blues, not further prepared than tanned or retanned, whether or not split	3.2% <sup>(3)</sup>	Free (A*,CA,E,IL,J,MX)	<sup>(6)</sup>	758
4106.20.30	Goat or kidskin leather, parchment-dressed or prepared after tanning, not fancy	3.2% <sup>(3)</sup>	Free (A*,CA,E,IL,J,MX)	<sup>(7)</sup>	4,261
4106.20.60	Goat or kidskin leather, parchment-dressed or prepared after tanning, fancy	3.6% <sup>(3)</sup>	Free (A*,CA,E,IL,J,MX)	<sup>(7)</sup>	12,929
4107.10.20	Leather of swine, wet blues	4.2%	Free (CA,E,IL,J) 1.6% (J,MX)	<sup>(8)</sup>	5,702
4107.10.30	Leather of swine, other than wet blues	4.2%	Free (CA,E,IL,J) 1.6% (J,MX)	<sup>(8)</sup>	16,124
4107.21.00	Leather of reptiles, vegetable pretanned	5%	Free (A*,CA,E,IL,J,MX)	906	1,054
4107.29.30	Leather of reptiles, not fancy,other than vegetable pretanned	3%	Free (A*,CA,E,IL,J,MX)	<sup>(9)</sup>	7,623
4107.29.60	Leather of reptiles, fancy, other than vegetable pretanned	1.4%	Free (A*,CA,E,IL,J,MX)	<sup>(9)</sup>	6,740
4107.90.30	Leather of other animals, not fancy	4.3%	Free (CA,E,IL,J) 2% (MX)	<sup>(10)</sup>	1,756
4107.90.60	Leather of other animals, fancy	2.1%	Free (A*,CA,E,IL,J,MX)	<sup>(10)</sup>	28,790
4108.00.00	Chamois leather	4.2%	Free (A,CA,E,IL,J,MX)	385	15,513
4109.00.30	Patent leather	3%	Free (CA,E,IL,J) 2.4% (MX)	<sup>(11)</sup>	756
4109.00.40	Patent laminated leather; metallized leather, calf and kip	4.7%	Free (CA,E,IL,J) 3.8% (MX)	<sup>(11)</sup>	350
4109.00.70	Patent laminated leather; metallized leather, other than calf and kip	2.1%	Free (A*,CA,E,IL,J,MX)	<sup>(11)</sup>	405
4110.00.00	Parings and other waste of leather or of composition leather, not suitable for the manufacture of leather articles; leather dust, powder and flour	Free		14,453	1,199
4111.00.00	Composition leather with a basis of leather or leather fiber, in slabs, sheets or strip, whether or not in rolls	1.7%	Free (A,CA,E,IL,J,MX)	25,143	10,507

See footnotes at end of table.



**Table B-9--Continued**

**Hides, skins, and leather: *Harmonized Tariff Schedule* subheading; description; U.S. col. 1 rate of duty as of Jan. 1, 1996; U.S. exports, 1995; and U.S. imports, 1995**

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<sup>1</sup> 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 (CA) and Mexico (MX); Caribbean Basic Economic Recovery Act (E); United States-Israel Free-Trade Area (IL); and the Andean Trade Preference Act (J).

<sup>2</sup> The value of U.S. exports is not available for this individual *HTS* subheading. However, total exports of whole bovine skin leather except upper leather was \$7.3 million in 1995.

<sup>3</sup> Articles the product of Japan are assessed an additional 40 percent duty, (see *HTS* subheading 9903.41.05).

<sup>4</sup> The value of U.S. exports is not available for this individual *HTS* subheading. However, total exports of sheep or lamb skin leather, wet blues, other than vegetable or otherwise pretanned was \$6.5 million in 1995.

<sup>5</sup> The value of U.S. exports is not available for this individual *HTS* subheading. However, total exports of sheep or lamb skin leather, without wool on, parchment-dressed or prepared after tanning, except fancy was \$3.4 million in 1995.

<sup>6</sup> The value of U.S. exports is not available for this individual *HTS* subheading. However, total exports of goat or kidskin leather, wet blue and other, not vegetable or otherwise pretanned was \$530,000 in 1995.

<sup>7</sup> The value of U.S. exports is not available for this individual *HTS* subheading. However, total exports of goat or kidskin leather, parchment dressed or prepared was \$372,000 in 1995.

<sup>8</sup> The value of U.S. exports is not available for this individual *HTS* subheading. However, total exports of swine leather was \$11.8 million in 1995.

<sup>9</sup> The value of U.S. exports is not available for this individual *HTS* subheading. However, total exports of reptile leather, other than vegetable pretanned was \$4.1 million in 1995.

<sup>10</sup> The value of U.S. exports is not available for this individual *HTS* subheading. However, total exports of leather of other animals, not elsewhere specified was \$33.2 million in 1995.

<sup>11</sup> The value of U.S. exports is not available for this individual *HTS* subheading. However, total exports of patent leather, patent laminated and leather; metallized leather was \$2.1 million in 1995.

Source: USITC, *Harmonized Tariff Schedule* of the United States (1996). Exports and imports compiled from official statistics of the U.S. Department of Commerce.

**Table B-10**  
**Whole cattlehides:<sup>1</sup> U.S. exports by principal markets, 1991-95**

Market	1991	1992	1993	1994	1995
<i>Quantity (million hides)</i>					
Korea .....	9,285	8,569	7,851	7,472	8,282
Japan .....	4,661	4,633	4,167	3,132	3,245
Taiwan .....	2,044	1,823	1,908	2,491	3,015
China .....	159	125	207	665	1,372
Mexico .....	2,574	2,524	2,035	1,545	893
All other .....	1,136	1,424	2,031	2,559	3,215
Total .....	20,017	19,098	18,226	17,911	20,044
<i>Value (million dollars)</i>					
Korea .....	517	481	433	449	511
Japan .....	251	258	235	197	222
Taiwan .....	116	105	110	155	199
China .....	7	6	10	38	79
Mexico .....	119	113	92	88	51
All other .....	64	76	96	132	163
Total .....	1,074	1,039	977	1,059	1,225

<sup>1</sup> Includes schedule B subheading 4101.21.0020.

Note--Because of rounding, figures may not add to the totals shown.

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

**Table B-11**  
**Leather: U.S. exports by major markets, 1991-95**

Market	1991	1992	1993	1994	1995
<i>(Million dollars)</i>					
Hong Kong .....	42	69	113	130	138
Mexico .....	28	47	68	68	110
Dominican Republic .....	50	63	80	80	65
Korea .....	73	54	57	55	60
Italy .....	52	51	36	54	48
Canada .....	52	55	57	65	47
Thailand .....	21	23	25	30	32
Indonesia .....	4	9	18	28	30
Taiwan .....	60	33	42	34	25
Japan .....	192	191	162	37	24
All other .....	122	129	130	136	119
Total .....	696	724	789	716	698

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

**Table B-12**  
**Cattlehide leather: U.S. exports by type, 1991-95**

Type	1991	1992	1993	1994	1995
<i>(Thousand dollars)</i>					
Upper/sole <sup>1</sup>	138,395	159,635	177,246	208,681	188,505
Wet Blue <sup>2</sup>	150,588	132,429	146,001	172,758	176,834
Upholstery <sup>3</sup>	183,691	197,853	196,608	78,920	100,427
All other	115,125	109,589	139,669	134,942	116,834
Total	587,799	599,506	659,524	595,302	582,600
<i>(Percent of total)</i>					
Upper/sole <sup>1</sup>	24	27	27	35	32
Wet Blue <sup>2</sup>	26	22	22	29	30
Upholstery <sup>3</sup>	31	33	30	13	17
All other	19	18	21	23	20
Total	100	100	100	100	100

<sup>1</sup> Includes Schedule B subheadings 4104.10.2000, 4104.29.5000, 4104.31.5010, 4104.31.5020, 4104.31.5060, 4104.39.5010, 4104.39.5020, and 4104.39.5050.

<sup>2</sup> Includes Schedule B subheadings 4104.29.9030, 4104.29.9040, and 4104.29.9070.

<sup>3</sup> Includes Schedule B subheadings 4104.31.4000 and 4104.39.4000.

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

**Table B-13**  
**Bovine hides and skins: Production of selected countries or regions, 1991-95**

Country/Region	1991	1992	1993	1994	1995 <sup>1</sup>
<i>(1,000 metric tons)</i>					
United States	1,061	1,073	1,078	1,106	1,153
European Union:					
France	182	180	160	151	154
Germany	251	205	175	158	159
All other	448	446	412	398	402
Subtotal	881	831	747	707	715
Brazil	448	442	455	460	475
Russian Federation	502	466	460	350	310
Argentina	308	298	303	305	304
China	( <sup>2</sup> )	180	210	230	250
Mexico	155	160	161	166	170
Australia	153	162	154	152	149
Other	568	551	534	515	513
Subtotal	2,134	2,259	2,277	2,178	2,171
Total	4,076	4,163	4,102	3,991	4,039

<sup>1</sup> Preliminary.

<sup>2</sup> Not available.

Source: USDA, FAS, *Livestock and Poultry: World Markets and Trade*, FL&P 1-95, Apr. 1995, p. 29, and FL&P 1-96, Mar. 1996, p. 103.



## **APPENDIX C**

# **EXPLANATION OF TARIFF AND TRADE AGREEMENT TERMS**

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# TARIFF AND TRADE AGREEMENT TERMS

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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 most-favored-nation (MFN) rates, many of which have been eliminated or are being reduced as concessions resulting from the Uruguay Round of Multilateral Trade Negotiations. Column 1-general duty rates apply to all countries except those enumerated in HTS general note 3(b) (Afghanistan, Cuba, Laos, North Korea, and Vietnam), which are subject to the statutory rates set forth in *column 2*. Specified goods from designated MFN-eligible countries may be eligible for reduced rates of duty or for duty-free entry under one or more preferential tariff programs. Such tariff treatment is set forth in the *special* subcolumn of HTS 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, applied to merchandise imported on or after January 1, 1976 and before the close of May 31, 1997. Indicated by the symbol "A" or "A\*" in the special subcolumn, the GSP provided duty-free entry to eligible articles the product of and imported directly from designated beneficiary developing countries, as set forth in general note 4 to the HTS.

The *Caribbean Basin Economic Recovery Act* (CBERA) affords nonreciprocal tariff preferences to developing countries in the Caribbean Basin area to aid their economic development and to diversify and expand their production and exports. The CBERA, enacted in title II of Public Law 98-67, implemented by Presidential Proclamation 5133 of November 30, 1983, and amended by the Customs and Trade Act of 1990, applies to merchandise entered, or withdrawn from warehouse for consumption, on or after January 1, 1984. Indicated by the symbol "E" or "E\*" in the special subcolumn, the CBERA provides duty-free entry to eligible articles, and reduced-duty treatment to certain other articles, which are the product of and imported directly from designated countries, as set forth in general note 7 to the HTS.

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

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

Preferential or free rates of duty in the special subcolumn followed by the symbol "CA" are applicable to eligible goods of Canada, and 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), annexed to the Agreement Establishing the World Trade Organization, replaces an earlier agreement (the GATT 1947 [61 Stat. (pt. 5) A58; 8 UST (pt. 2) 1786]) as the primary multilateral system of disciplines and principles governing international trade. Signatories' obligations under both the 1994 and 1947 agreements focus upon most-favored-nation treatment, the maintenance of scheduled concession rates of duty, and national (nondiscriminatory) treatment for imported products; the GATT also provides the legal framework for customs valuation standards, "escape clause" (emergency) actions, antidumping and countervailing duties, dispute settlement, and other measures. The results of the Uruguay Round of multilateral tariff negotiations are set forth by way of separate schedules of concessions for each participating contracting party, with the U.S. schedule designated as Schedule XX.

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.