

Printing and Writing Paper

USITC Publication 2693 October 1993

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

#### UNITED STATES INTERNATIONAL TRADE COMMISSION

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#### **PREFACE**

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

This report on printing and writing paper covers the period 1988 through 1992 and represents one of approximately 250 to 300 individual reports to be produced in this series during the first half of the 1990s. Listed below are the individual summary reports published to date on the agricultural and forest products sector.

| USITC<br>publication<br>number | Publication<br>date | Title  |
|--------------------------------|---------------------|--|
| 2459                           | November 1991       | Live Sheep and Meat of Sheep                           |
| 2462                           | November 1991       | Cigarettes   |
| 2477                           | January 1992        | Dairy Produce  |
| 2478                           | January 1992        | Oilseeds   |
| 2511                           | March 1992          | Live Swine and Fresh, Chilled, or Frozen Pork          |
| 2520                           | June 1992           | Poultry  |
| 2544                           | August 1992         | Fresh or Frozen Fish                                   |
| 2545                           | November 1992       | Natural Sweeteners                                     |
| 2551                           | November 1992       | Newsprint  |
| 2612                           | March 1993          | Wood pulp and waste paper                              |
| 2615                           | March 1993          | Citrus Fruit   |
| 2625                           | April 1993          | Live Cattle and Fresh, Chilled or Frozen Beef and Veal |
| 2631                           | May 1993            | Animal and Vegetable Fats and Oils                     |
| 2635                           | May 1993            | Cocoa, Chocolate, and Confectionery                    |
| 2636                           | May 1993            | Olives   |
| 2639                           | June 1993           | Wine and Certain Fermented Beverages                   |

i

<sup>&</sup>lt;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.

ii

### **CONTENTS**

|  | Page                    |
|--|-------------------------|
| Preface  | i                       |
| Introduction   | 1                       |
| Background   | 1                       |
| Products and production processes  | 1                       |
| U.S. industry profile  | 3                       |
| Industry structure   | 3                       |
| Number of firms, concentration among firms, and geographic distribution Employment, labor intensity and skills, and industry trends                    | 3                       |
| Vertical and horizontal integration  | 4                       |
| Marketing methods and pricing practices  | 4                       |
| Industry profitability Industry development expenditures   | 4<br>5                  |
| Environmental considerations   | 5                       |
| Consumer characteristics and factors affecting demand  | 5                       |
| Foreign industry profile   | 6                       |
| Major world producers  | 6                       |
| Japan  | 6                       |
| Germany Finland  | 6<br>8                  |
|  | _                       |
| U.S. trade measures  | 8                       |
| Tariff and nontariff measures  | 8                       |
| Foreign trade measures   | 8                       |
| U.S. market  | 8                       |
| Consumption  | 8                       |
| Production Imports   | 8<br>9                  |
| -  |                         |
| Foreign markets  | 9                       |
| Foreign market profile U.S. exports  | 9<br>11                 |
| -  |                         |
| U.S. trade balance   | 11                      |
| Appendixes   |                         |
| A. Statistical tables  | A-1<br>B-1              |
| Figures  |                         |
| <ol> <li>Papermaking: The process for chemical-wood-pulp-based paper</li> <li>U.S. paper industry: Principal raw materials, producer types,</li> </ol> | 2                       |
| major products, and principal consumers  | 3                       |
| sources, by share of total, and by tonnage, 1988 and 1991  | 7                       |
| and apparent consumption, 1988-92  | 9                       |
| of total and by tonnage, 1988 and 1992   | 10                      |
| by geographic areas, by share of total and by tonnage, 1991  | 12<br>13 <sub>iii</sub> |

#### INTRODUCTION

#### **Background**

This summary covers printing and writing paper.<sup>1</sup> Information is provided herein on the structures of the U.S. and major foreign industries, domestic and foreign tariffs, and on the performance of U.S. firms in both domestic and foreign markets. The summary generally covers the period 1988 through 1992.

The United States is the world's largest producer and consumer of printing and writing paper. In 1991 about 29 percent of world production estimated at 68 million metric tons was produced in the United States, and about one-third of the world's consumption was marketed in the United States.

The share of U.S. consumption of printing and writing paper supplied by imports increased from about 7 percent in 1988 to 10 percent in 1992. Domestic shipments of these papers increased from 20.0 million metric tons, valued at \$19.7 billion, in 1988 to 20.4 million metric tons, valued at \$19.8 billion, in 1992. Domestic shipments have increased primarily as a result of the increasing number of personal computers in use, along with the greater demand for office copy papers and greater paper use by commercial printers in magazines, catalogs, and other printed matter. Domestic shipments increased only slightly over the period as the U.S. economy experienced slack market conditions.

#### **Products and Production Processes**

Printing and writing paper includes a wide variety of products ranging from low-quality groundwood paper used in paperback books to high rag-content bond used for currency. They also include so-called "white" converting papers such as envelope stock for envelopes and tablets and hanging stock for wallpaper. The major grades of printing and writing papers covered in this summary are as follows:

Coated groundwood paper.—A coated paper with 10 percent or more mechanical pulp, commercially referred to as lightweight coated (LWC). Basis weights<sup>2</sup> for LWC are typically 40 pounds or less. Most coated groundwood paper is coated on two sides and classified as Nos. 4 and 5 in quality and price. Coated groundwood paper represented 56 percent of all coated paper shipments of printing and writing paper in 1990. It is also the leading category of U.S. imports.

Newsprint paper is covered in a separate summary entitled Newsprint. End uses include magazines, Sunday newspaper supplements, catalogs, newspaper inserts, directories, books, and advertising flyers.

Coated freesheet paper.—This paper is similar to coated groundwood in terms of coating, but is composed of a greater proportion of chemically obtained fibers (90 percent or more by weight). It is used primarily for more permanent and higher priced publications, such as premium magazines, gift books, and art reproductions.

Uncoated groundwood paper.—This paper is similar to coated groundwood in composition, but lacks the coating necessary for better graphics (color clarity and print sharpness). It is used primarily for lesser quality drawing and handwriting paper, black and white publications, and relatively short lived color publications, such as most newspaper inserts.

Uncoated freesheet paper.—This paper is similar in composition to coated freesheet paper, but it is not coated. It is used primarily for finer drawing and handwriting paper, commercial correspondence paper, letterhead, carbonizing base, and wallpaper base. This is the largest category of printing and writing paper accounting for over one-half of all production.

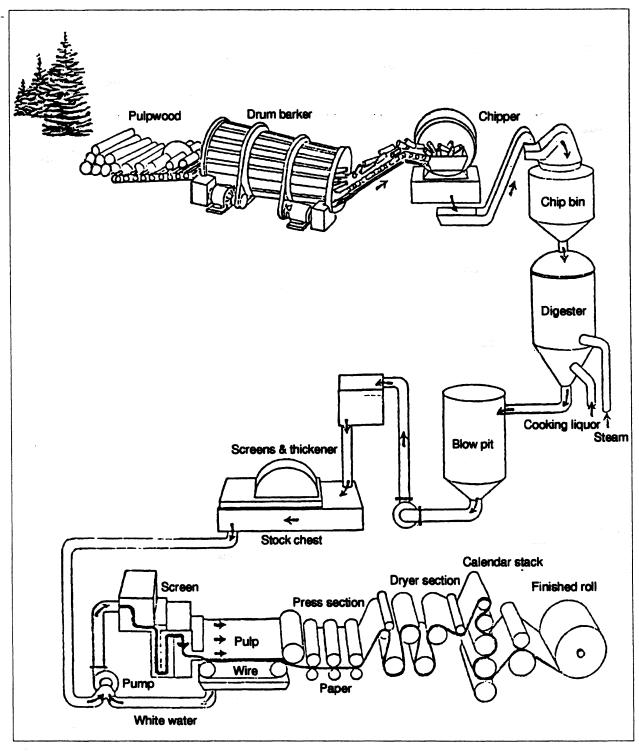
Other writing and related paper.—This group consists of diverse subgroups of products. However, they are among the highest-quality papers and are suitable for pen and ink, pencil, typewriter, or printing (graphics). The types of writing papers include bond, reprographic, cover and text, and such thin papers as those used in the manufacture of bibles. Bleached bristols are a special type of high-quality cardboard used in converting index cards, postcards, and related products.

Papermaking is a scientific process that utilizes highly sophisticated equipment in the manufacture of thousands of varieties of paper and paperboard, including printing and writing paper. A schematic diagram depicting the papermaking process is shown in figure 1. The process for papermaking begins with managed timberlands where trees suitable for pulpwood are harvested, cut into short lengths, and transported to the paper mill. The bark is removed from the pulpwood, and the wood is mechanically shredded or separated (groundwood paper) or chemically separated by pressure cookers called digesters (freesheet paper). The resulting pulp consists of cellulose fibers and other noncellulosic constituents.

After further refining, the cellulose fibers are combined with pigments, dyes, sizings, and resins. This blend, called "furnish," contains more than 99 percent water and less than 1 percent fiber and other solids and is ready to be formed on the paper machine. It flows onto a moving wire screen on which the fibers mat, forming a continuous sheet of paper, with much of the water drawn through the wire into collection tanks for recycling. Water-laden, the web of pulp passes through heavy rollers that press most of the moisture from the sheet. It proceeds over steam-heated cylinders to complete the drying process 1 by evaporation. The paper or paperboard is rewound into smaller rolls or cut into sheets, ready for shipment.

<sup>&</sup>lt;sup>2</sup> Each type of printing paper is classified by grade and basis weight. Grade is largely related to paper "lightness" a measure of the reflectivity of paper under standardized conditions by an instrument designed and calibrated for this purpose. Brightness grades for most printing paper range from a low of No. 5 to a high of No. 1. (A "premium" grade above No. 1 is sometimes available on special order.) Basis weight, a standard unit of measurement in the United States, is the weight of the paper in pounds per ream. For printing paper a ream is equivalent to 500 sheets of paper, each measuring 25" X 38."

Figure 1
Papermaking: The process for chemical-wood-pulp-based paper



Source: The Paper Yearbook, with modifications.

#### U.S. INDUSTRY PROFILE

#### **Industry Structure**

The structure of the paper industry in the United States is illustrated in figure 2. The Standard Industrial Classification (SIC) includes the production of printing and writing paper as part of SIC 2621 "Paper Mills." The Census Bureau collects data on shipments and other factors of production under product class 26212 "Uncoated Groundwood Paper;" 26213 "Clay Coated Printing and Converting Papers;" 26214 "Uncoated Freesheet;" 26215 "Bleached Bristols, Excluding Cotton Fiber Index and Bogus;" and 26216 "Cotton Fiber Paper and Thin Paper."

# Number of Firms, Concentration Among Firms, and Geographic Distribution

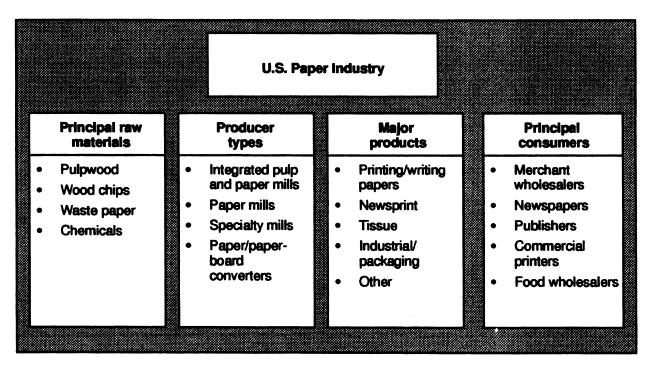
There were an estimated 130 establishments producing printing and writing paper in the United States in 1992—about the same as in 1988. Printing and writing paper is produced in large mills that manufacture various types of these papers. The five leading producers of printing and writing paper accounted for over one-half of U.S. production in 1992; the top ten producers accounted for about four-fifths of the total. Although U.S. production is

distributed throughout the country, production capacity is largely concentrated in Maine and in the North Central States of Wisconsin, Michigan, and Minnesota. Production capacity has also grown rapidly in the South over the past two decades, especially for grades of uncoated freesheet paper, because of the increasing capacity development of Southern-based production facilities, where the supply of wood pulp is plentiful.

# Employment, Labor Intensity and Skills, and Industry Trends

The production of printing and writing paper is capital intensive; it requires an initial capital investment in costly, immense-sized papermaking machinery, which requires enormous areas of space for operation. This industry is highly automated, using such equipment as computers, special sensors, regulators, flow meters, and test equipment. Accordingly, all ongoing maintenance costs associated with the papermaking operations are high. The process also requires highly skilled but transferable labor. including substantial engineering expertise, for working with the specialized machinery and equipment. To increase profits, companies have recently shifted their product mix by converting machines that formerly produced newsprint to production of more marketable low grades of printing and writing papers.

Figure 2 U.S. paper industry: Principal raw materials, producer types, major products, and principal consumers



Source: Derived by the staff of the USITC.

There were 60,600 production workers employed in the U.S. printing and writing paper industry in 1987. and employment in 1992 is believed to have remained at about the same level.

During the period of this report, the development of lower basis weights of paper and the introduction of recycled-content printing and writing paper have reduced industry costs. Plant-labor cost reductions are generated through efforts to reduce process and product variations and by the elimination of lost production time because of mechanical breakdowns and excessive underquality product generation. In order to generate higher productivity, papermakers strive for further cost reductions that are obtainable through product innovation, namely, by such equipment improvements as modified process equipment and new computerized distribution process control systems, and by improved mill staffing and training. For example, some mills have encouraged a closer relationship between their mill staff and their equipment suppliers. This relationship has increased the inhouse knowledge of the latest advances and applications of paper machinery control systems being marketed and has maximized the efficient use of the machinery used to produce the paper.

#### Vertical and Horizontal Integration

The leading enterprises operating U.S. printing and writing paper mills are generally vertically and horizontally integrated. Many of these companies own the forest lands on which the pulp supply is grown and the facilities that pulp the wood. These enterprises are usually large integrated corporations that produce other forest products, such as wood and lumber products, and have extensive holdings in timber for the development of lumber, wood products, pulp, and paper. Such major producers include Boise Cascade, Champion International, Georgia Pacific Westvaco.

Manufacturers of office-copying machines and book and magazine publishers are also affiliated with printing and writing paper producers. For example, NCR, the developer of "Carbonless" paper is affiliated (as a legal subsidiary) with companies specializing in coating printing papers, as are publishers such as Times-Mirror and Chilton.

Corporations producing printing and writing paper are, primarily, privately owned by domestic interests. However, some integration with Canadian mills has occurred. For example, Blandin Paper of Minnesota, a leading U.S. producer of coated groundwood paper, is a subsidiary of Fletcher Challenge Canada Ltd.

#### Marketing Methods and Pricing Practices

Printing and writing paper is generally sold in the U.S. market on both a contract and a spot basis. Most customers fall into two general categories: (1) agents, brokers, and merchants who, not being end users themselves, serve as intermediaries between producers and end users and (2) publishers and printers who use the paper to publish magazines and journals or to print such items as catalogues and newspaper inserts.

Sales based on contracts or sales agreements are frequently made to publishers or to printers and account for the bulk of sales volume of these papers in the U.S. market. Contracts usually stipulate such factors as terms of sale and the quantities to be delivered during a given year. Contracts normally last for 1 to 5 years, with specific terms of agreements subject to annual renegotiation.

Prices for contract sales are usually agreed upon during negotiations between the buyer and seller. According to industry sources the most important factors considered in arriving at prices with contract customers include existing market competition, the volume of the order, the relationship with the customer, production costs, and existing production schedules (if a particular order does not fit well into a domestic or foreign producer's production schedule, a price premium may be included). Most contracts also reportedly contain meet-or-release provisions, also known as "shopping clauses" through which a producer or importer must meet a lower offer quoted to a customer by a competitor or release this customer from any previously arranged purchase requirements.

Spot sales involve smaller quantities and are more commonly made to sales agents, brokers, and merchants. However, in extraordinary circumstances, publishers and printers also deal in spot purchases.

Negotiated prices for spot sales are based primarily on market competition and the volume of any particular sale. Industry sources report that spot market prices do affect prices negotiated in contract sales agreements. Purchasers frequently renegotiate lower contract prices if they receive a better quote in the spot market.

Most producers sell the various printing and writing papers to a national market, and the majority of sales are reportedly made to customers located more than 500 miles from the domestic mills. Sales are usually not made inclusively within any one region of the country.

Printing and writing paper sold in the United States is priced according to its basis weight and brightness grade.<sup>3</sup> Lighter weight papers and lighter grades of paper are usually sold for a premium over paper of heavier basis weights and lower brightness grades. For both domestic and imported grades most of these papers are sold at prices that are quoted on a delivered basis; these prices include inland transportation costs that according to industry sources range between 3 and 8 percent of the total delivery cost to the customer.

#### Industry Profitability

Profitability in the printing and writing paper industry is linked to the volume of production. Larger production and sales result in economies of scale. Table A-1 (see appendix A) compares financial conditions in selected large U.S. public companies in the printing and writing paper industry with those in other selected industries for the period 1988-92.4

definition of basis weight and brightness grade.

4 Forbes, "41st-45th Annual Report on the American Industry," Jan. eds. 1989-93.

<sup>&</sup>lt;sup>3</sup> See footnote 3 under "Introduction," page 1, for

The profitability of the industry trended downward over the period 1988-92. In comparing the median return on stockholders' equity, the printing and writing paper industry in the early years of the period studied (1988-90) exceeded the comparable levels for the other selected industries. Then, in 1991 and 1992, profitability dropped dramatically. The median net profit (after taxes) for the industry also exceeded that for the other industries, except in 1991 and 1992. The profitability decline can be explained somewhat by the general nature of the paper industry. The business cycle affects the timing of profitability in the paper industry somewhat differently than in many other industries. Printing and writing paper, like other commodity paper products, has consistently demonstrated a cyclical nature. This cycle tends to be one of feast or famine. It begins with a robust market and strong operating rates, resulting in high prices and profits. Producers have historically invested the high profits into additional capacity. These additions require long periods of construction time and typically come on-stream in future years when the economy is weakening and the result is low operating rates and minimal profits.

Because of the capital-intensive nature of the industry, operating income and income margins in printing and writing paper are relatively high compared with those of noncapital intensive industries. Integrated ownership of low-cost raw material sources. large investments in new capital equipment, high labor productivity per worker, low overhead, and high levels of capacity utilization are factors that improve cost efficiency and profitability levels in this industry. During the period 1988-92, the profitability of the printing and writing paper industry decreased after reaching a high in 1988. High profitability reflected the favorable business activity in the United States that drove the demand for more printed and published material. Reduced profitability reflected the economic down period in the U.S. economy and the presence of competing imports that eased prices of these papers to competitive levels.

#### Industry Development Expenditures

In the paper industry, capital spending on mill improvements constitutes the major development outlay. Expenditures on research and development are relatively small and account for usually less than 1 percent of annual sales.

Total anticipated capital spending in the paper industry for the 3-year period, 1992-94, was reported at \$13.6 billion.<sup>5</sup> Eighty-six percent of this amount is allocated for production-related expenditures and the balance (14 percent) for environmental concerns.

During 1988-92, the paper industry experienced record increases in capacity expansion. However, during the later years of this period, earnings and capacity utilization fell, forcing a decline in overall capital spending. In 1992, with profits deteriorating and sluggish growth, capacity additions were replaced

with environmental improvements as the driving force behind spending plans. Environmental expenditures, consisting of water pollution (60 percent), air pollution (32 percent) and solid waste (8 percent) in 1992, increased from 6.9 percent of total expenditures in 1989 to 14.1 percent in 1992, and amounted to about \$2 billion in 1992. Most of the environmental spending went toward Environmental Protection Agency (EPA) compliance on stricter regulations covering dioxin formation, odor control, and recycled-fiber content.

#### Environmental Considerations

The paper industry, in the face of increased Federal and State environmental legislation and pressure from environmental groups and customers, is continually developing methods aimed at minimizing the air and water pollution generated by the papermaking processes. Furthermore, the industry is advancing efforts to use more recycled material, thereby reducing the amount of solid waste entering landfills.

Customers, particularly major corporation and government contractors, are increasing their requests for access to quality recycled paper, particularly in the printing and writing grades, which are the paper types most adaptable for recycling to lower quality grade papers. Recycling has increased only slightly over the last decade primarily because of the high costs of processing. The recycling process requires a mill operation designed to substitute used paper for virgin pulp as the pulp base. This process requires additional costs, such as contamination removal and de-inking capabilities costs, in addition to the normal cost of producing paper.

Currently there are about 34 mills producing at least a small amount of printing and writing paper they classify as recycled. However, many of these mills use preconsumer or precommercial waste consisting of high-grade, clean white pulp substitutes, and not used paper containing ink or other contaminants.

Mills that have begun to recycle grades with at least 50 percent wastepaper have introduced products with a lower brightness and at a considerable cost. It remains to be seen how acceptable these new recycled products will be to the consuming public.

# Consumer Characteristics and Factors Affecting Demand

The principal U.S. consumers of printing and writing paper are printers and publishers located throughout the United States. The specific characteristics of the paper determine its use in various printing and publishing activities.

The basic characteristics of the various papers that determine demand, aside from price, are grade and basis weight and, to a lesser extent, machine "runability." Grade is related to paper "brightness," a measure of the reflectivity of paper under standardized conditions by an instrument designed and calibrated for this purpose. Brightness grades for most printing paper range from a low of No. 5 to a high of No. 1. Basis

<sup>&</sup>lt;sup>5</sup> Pulp and Paper Magazine (Mar. 1993).

weight, a standard unit of measurement in the United States, is the weight of the paper in pounds per ream, a ream being equivalent to 500 sheets of paper, each measuring 25" X 38". Basis weight, as described earlier in this report, is related directly to the thickness of the paper. "Runability" considerations are sometimes important to specific printers' equipment that may be sensitive to slight variations in quality.

A wide range of printing and writing paper is available in the United States from both foreign and domestic sources. U.S. producers have been slow to shift to lighter basis weights and higher brightness than have foreign producers. Individual producers may vary in their ability to provide a specific grade or quantity of paper at any one time, and, traditionally, there have been periods when the product in general has been in short supply.

In recent years U.S. consumers (publishers) have shifted from the use of heavier basis weight of paper in the range of 38 to 45 pounds to the light basis weights in the range 28 to 32 pounds. This increase in demand for lighter paper is partly due to increased postal rates. With lower levels of circulation for many magazines and journals and a reduction in the number of advertising pages in many publications, publishers are moving to lighter weight paper as a way of reducing distribution costs.

With a greater availability of supply among grades and in times of lower customer demand, a publisher's shift to alternative papers tends to increase. Publishers, as buyers, find that, under intense competitive conditions, they have more purchase choices among the various printing and writing paper grades. They can buy the more expensive grades at bargain prices or save on costs by downgrading to a lower grade or category of printing or writing paper. The corresponding shift to lower priced paper then causes a demand shift pattern among the various grades of printing and writing paper.

#### FOREIGN INDUSTRY PROFILE

#### **Major World Producers**

Figure 3 depicts the leading producing nations of the world. The top six producers shown account for about two-thirds of the world production of printing and writing paper. In 1991, the United States was the leading producer of printing and writing paper in the world, accounting for 29 percent of the 68 million metric tons of printing and writing paper produced throughout the world, according to paper industry sources. Japan produced about 14 percent of the world production of these papers; West Germany, 8 percent; Finland, 7 percent; Canada, 5 percent; and France, 4 percent (see table A-2a).

World production of printing and writing papers rose about 9 percent between 1988 and 1991 to reach 68 million metric tons in 1991, up from 63 million metric tons in 1988 (table A-2b). The factors affecting

world supply and the increased world production of these papers include growth in business and industry. Price, quality, and availability are determining factors among the various grades. Demand for the higher quality papers tends to diminish as lower quality grades improve their properties.

About one-quarter of world production of printing and writing paper enters the international export markets. Among the ten leading producers, five are net importers—United States, Germany, France, The United Kingdom, and Italy. Many producing countries consume the majority of their own production, and most of the large producing countries are also large consuming countries.

#### Japan

Japan is the world's second largest producer of printing and writing paper. Printing and writing paper is the leading category of paper produced in Japan, accounting for about one-third of total annual paper and paperboard production in terms of tonnage. The bulk of these papers are consumed domestically. In recent years, Japan's industry has experienced steady growth sustained by strong domestic demand from private investment and personal consumption. In 1991, imports accounted for almost 3 percent of domestic consumption, and exports accounted for about 7 percent of production.

Japan has a total forest area that is about one-twelfth the size of that of the United States, with paper industry production at about one-third that of the United States. In order to allocate resources effectively, Japan must protect forest resources and utilize various raw material resources. Municipal solid waste disposal and recycling are well advanced in Japan, with recycled material for the production of paper reaching a content level of 50 percent of the industries raw material supply.

#### Germany

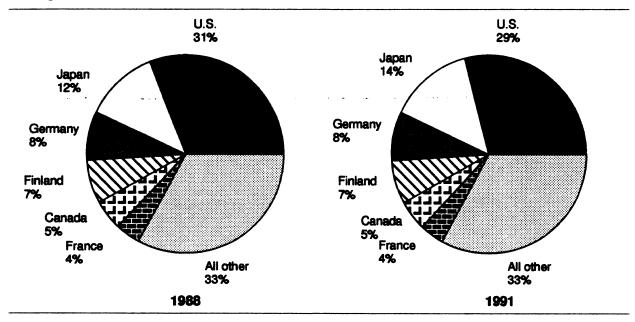
Germany is the world's third largest producer of printing and writing paper. Printing and writing paper is the leading category of paper produced in Germany, accounting for about 40 percent of total annual paper and board production in terms of tonnage in 1991. German imports of 3.0 million metric tons, or about one-half of domestic consumption, exceeded exports of 2.3 million metric tons. Germany remained a net importer of printing and writing paper through 1991. However, Germany was also the world's third largest exporter (44 percent of production) behind Canada and Finland.

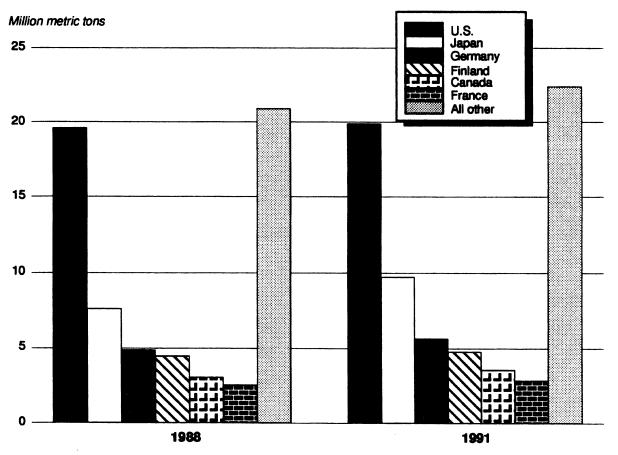
Germany's forest area is not large (about 3 percent as large as that of the United States), and the use of secondary fiber as a source material in paper making is well established in Germany. The wastepaper utilization (recovery) rate was 49 percent in 1991.

The reunification of the two German States has resulted in increased demand for printing and writing papers through 1992. Although the initial rise in demand for these papers has been met, industry sources

<sup>&</sup>lt;sup>6</sup> Pulp and Paper International, Annual Review (July 1992).

Figure 3
Printing and writing paper: World production by leading sources, by share of total, and by tonnage, 1988 and 1991





Note:—Figure 3 corresponds to tables A-2a and A-2b. Source: Official U.S. Department of Commerce trade statistics.

indicate that the new financial burden placed upon the United Germany will initially have an adverse effect on consumption of all paper and board products. However, the low per-capita consumption in the east compared with the west (85 kg/232 kg) would suggest a high potential for growth.

#### **Finland**

Finland is the world's fourth largest producer and the world's largest exporter of printing and writing paper. Printing and writing paper is the leading category of paper produced in Finland and accounts for about one-half of total annual paper and board production in terms of tonnage. Finland exports the bulk of its production, with exports accounting for about 90 percent of production in recent years.

In recent years, the Finnish paper industry has experienced a trend of mergers and acquisitions. In Finland, 25 percent of GNP is derived from exports, and the forest industry alone accounts for half of the country's net foreign exchange earnings. Finland is still attempting to adjust to a free-market economy. Before 1990, the country was largely a closed economy in which the wage price spiral caused a rapid rise in costs and less competition. This situation has affected exports and is expected to result in lower output in the near future.

#### U.S. TRADE MEASURES

#### Tariff and Nontariff Measures

Table A-3 shows the general and special column 1 rates of duty, as of January 1, 1993, for the articles included in this summary and for the 1992 U.S. exports and imports. Appendix B contains an explanation of tariff and trade-agreement terms. The aggregate trade-weighted average rate of duty for all products covered in this summary, based on 1992 imports, was 1.1 percent ad valorem; the average trade-weighted rate of duty for the dutiable products was 2.5 percent ad valorem. About 57 percent of the imports included here are duty free.

There are no known U.S. domestic nontariff import restrictions that significantly affect trade in printing and writing paper as covered in this summary.

# U.S. Government Trade-Related Investigations

On December 28, 1990, a petition was filed with the U.S. International Trade Commission (Commission) and the U.S. Department of Commerce (Commerce) by The Committee of the American Paper Institute To Safeguard the U.S. Coated Groundwood Paper Industry.

The Commission instituted final antidumping investigations effective June 13, 1991, following preliminary determinations by Commerce that imports of coated groundwood paper from Belgium, Finland, France, Germany, and the United Kingdom were being sold at less then fair value (LTFV) within the meaning

of section 733 (b) of the tariff act of 1930.<sup>7</sup> The Commission reported its determinations to Commerce on December 11, that an industry in the United States was not materially injured or threatened with material injury and that the establishment of an industry in the United States was not materially retarded by reason of imports from Belgium, Finland, France, Germany, and the United Kingdom of coated groundwood papers, provided for in subheadings 4810.21.00, 4810.29.00, and 4823.59.40 of the Harmonized Tariff Schedule of the United States, that have been found by the Department of Commerce to be sold in the United States at LTFV.<sup>8</sup>

#### FOREIGN TRADE MEASURES

Historically, Canada and Mexico have been the leading markets for the small quantities of printing and writing paper exported from the United States. In 1992, the Mexican rates of duty on these papers ranged between 10 and 20 percent ad valorem, and the rates of duty on U.S. imports into Canada averaged 4.6 percent ad valorem. There are no known foreign nontariff measures that directly influence trade among the leading markets (primarily Canada and Mexico) for printing and writing paper as covered in this summary.

#### U.S. MARKET

#### Consumption

The apparent U.S. consumption of printing and writing paper rose from 21.7 million metric tons valued at \$21.0 billion in 1988 to reach a peak of 22.5 million metric tons valued at \$22.2 billion in 1990, before decreasing to 22.2 million metric tons valued at \$21.0 billion in 1992 (figure 4 and table A-4). The increased demand during 1988-90 is attributable to overall U.S. economic growth and related demand for printed material. Publishers and printers indicate that, after 1990 advertising demand slackened, subscription rates declined and few new publications entered the market. The result was an excess of supply and an overall decline in price. The share of imports to consumption increased from about 7 percent in 1988 to about 10 percent in 1992.

#### **Production**

U.S. value of shipments (table A-4), as estimated by the U.S. International Trade Commission, increased from 20.0 million metric tons valued at \$19.7 billion in 1988 to peak at 20.3 million metric tons valued at \$20.6 billion in 1990, before declining to 20.4 million metric tons valued at \$19.8 billion in 1992.

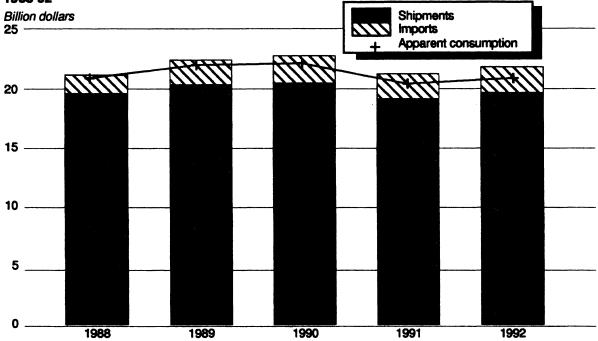
All categories of these papers experienced quantity increases over the period.<sup>9</sup> Figure 5 shows production

<sup>8</sup> U.S. International Trade Commission, investigation Nos. 731-TA-487, 488, 489, 490, and 494 (final), USITC publication 2467, Dec. 1991.

<sup>9</sup> The effect of U.S. producers shifting production to lighter basis weights is more paper—more printable surface area—per ton. In terms of surface area, it is likely that the quantity produced increased somewhat more than the data indicate.

<sup>&</sup>lt;sup>7</sup> The Department of Commerce published affirmative preliminary determinations in the *Federal Register* (56 FR. 27231).

Figure 4
Printing and writing paper: U.S. imports, producers' shipments, and apparent consumption, 1988-92



Note:—Figure 4 corresponds to table A-4.

Source: Prepared by the staff of the USITC.

by type, by share of total, and by tonnage for 1988 and 1992. In 1992, uncoated free sheet paper accounted for about 52.7 percent of the U.S. production of all printing and writing paper; uncoated groundwood paper. 7.2 percent; coated freesheet paper and coated groundwood paper, 33.6 percent; and other printing and writing paper for about 6.5 percent. The gains in printing and writing paper through 1992 reflected the increasing number of personal computers, along with greater demand for office copy papers and rising paper use by commercial printers. A slight downturn occurred in 1991 as the U.S. economy experienced slack market conditions. Industry sources indicate that 1991 U.S. paper industry inventories were at relatively low levels, thereby placing the industry in a strong position to weather an economic downturn.

#### **Imports**

U.S. imports of printing and writing paper increased from 1.9 million metric tons valued at \$1.5 billion in 1988 to 2.8 million metric tons valued at \$2.2 billion in 1992, or about 40 percent in value (tables A-4 and A-5). Canada supplied about 58 percent of U.S. imports in 1992. Other notable U.S. sources were Finland, Germany, Japan, the United Kingdom, France, and Belgium. Purchasers have various sources for obtaining imported paper. Purchases may be made from U.S. sales agents representing (or affiliated with) foreign producers or from independent brokers and merchants serving all sources. The imported product is similar to the

domestic product among the competitive grades of paper.

#### FOREIGN MARKETS

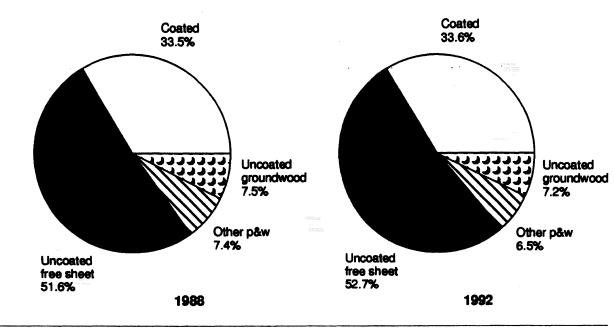
#### Foreign Market Profile

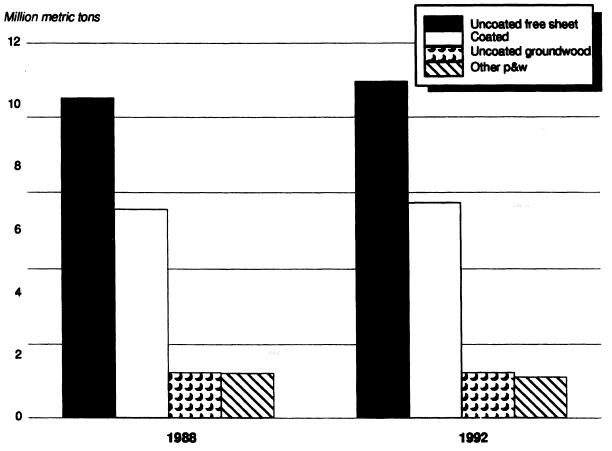
Generally, the principal markets for printing and writing paper are in those countries that have a relatively high level of paper consumption. Although the Latin American nations are developing their paper industries, the low-per-capita consumption level of paper does not currently allow for significant increased imports to the area. Currently, Eastern European countries have a low consumption level of paper and are currently not substantial foreign markets.

Among the Asian markets, Japan, Australia, and Hong Kong are major paper consuming countries. The major EC paper consuming countries include Germany, France, Italy, and the United Kingdom. Finland and Sweden are leading producers, but export most of their production.

The top foreign markets for U.S. exports are Canada and Mexico. Canada is the fifth largest producer in the world, but supplements its paper making by foreign purchases of certain types of printing and writing paper for its domestic market. Mexico is not a significant world producer, but does acquire a considerable amount of these type papers, especially from the United States, in order to supply its domestic market.

Figure 5
Printing and writing paper: U.S. production by types, by share of total and by tonnage, 1988 and 1992





Note.—Figure 5 corresponds to table A-4. Source: Official U.S. Department of Commerce trade statistics.

World consumption of printing and writing paper is estimated to have totaled about 67 million metric tons in 1991 (table A-2a) up from 62 million metric tons in 1988 (table A-2b). North America, Western Europe, and Asia, in that order, were the principal consuming (market) areas in 1991. Western Europe was the leading exporting area, as shown in figure 6.

The principal factors affecting the demand for U.S. produced printing and writing paper in foreign markets are availability and cost. North American producers (Canada and the United States) enjoy an advantage over other world producers in raw material resources. As in the case of Asia, North American producers can supply the finished product in sufficient quantities and at lower prices than those of many competing suppliers (e.g., Japan), who must allocate their limited domestic forest product resources among various products.

Major foreign trade events, such as EC 92<sup>10</sup> and the opening of Eastern Europe, are not likely to significantly affect worldwide trade patterns in printing and writing grades. These papers are usually purchased worldwide for physical characteristics that are satisfactory to local purchasers, based on concern for a continuous supply, at competitive prices, with delivery available upon short notice. These competitive conditions are usually more favorable within continental borders. However, when home markets within a continental region become saturated, there are situations in which producers more readily seek offshore buyers to reduce their own surplus supply.

#### **U.S. Exports**

U.S. exports of printing and writing paper increased from 1 to almost 5 percent of U.S. shipments These exports increased from between 1988-92. 255,000 metric tons valued at \$274 million in 1988 to 996,000 metric tons valued at \$949 million in 1992 (tables A-4 and figure 7). Canada, having been the major U.S. market for many years, was the principal export market also in 1992, accounting for about 43 percent of the value of U.S. exports (table A-6). About three-fifths of all U.S. exports in 1992 consisted of the higher priced free sheet grades of paper, and the Canadian market received about two-thirds of the exported free sheet grades. Mexico, Japan, and Australia are the second-, third-, and fourth-largest U.S. markets accounting for 13 percent, 4 percent, and 3 percent of U.S. exports, respectively, in 1992. U.S. exports to Mexico in 1992 consisted of a distribution of almost equal shares of free sheet and groundwood grades, whereas the exports to Japan consisted almost exclusively of the groundwood grades for graphic use. U.S. exporters of printing and writing paper are mostly large U.S. paper distributors, which consist of paper producer outlets and/or general paper sales merchants located throughout the country.

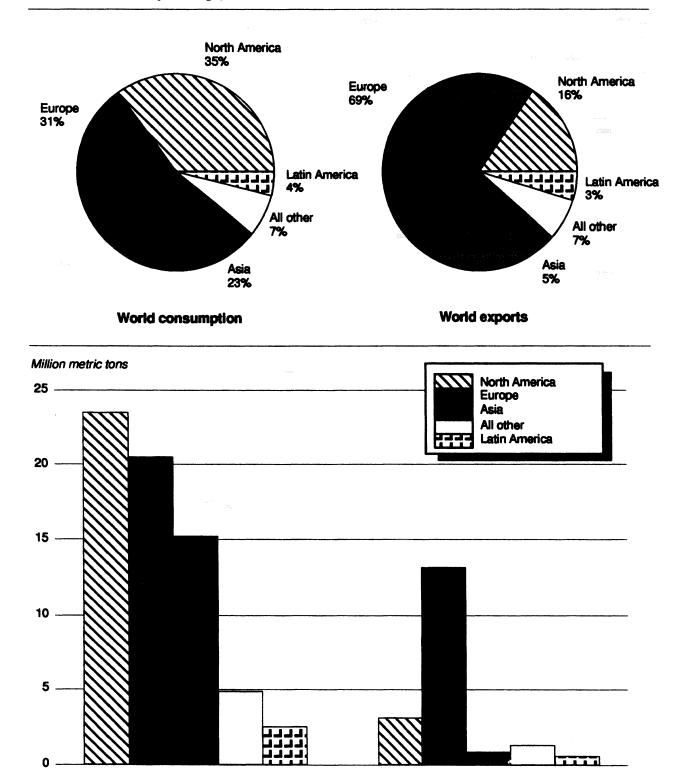
#### U.S. TRADE BALANCE

During 1988-92, U.S. trade (imports plus exports) in printing and writing paper exceeded \$13 billion. However, over the 5-year period the United States posted a trade deficit averaging about \$1.4 billion per year.

During the period, although both exports and imports increased, the export-import gap narrowed from export levels at 18 percent of import levels in 1988, to export levels at 44 percent of import levels in 1992. The size of the trade deficit, however, was about the same in 1992 (\$1.2 billion) as in 1988 (\$1.3 billion) (table A-7). The United States has historically been a large consumer of printing and writing paper, and, although domestic production continues to supply the bulk of increased domestic consumption, imports of various grades have also increased.

<sup>&</sup>lt;sup>10</sup> In June 1985 the EC Commission issued a "White Paper" that set a date of 1992 for the complete elimination of physical, fiscal, and technical barriers to trade in the 12 member states of the European Community. The most recent information pertaining to final implementation of the EC "White Paper" directive by member states is reported in United States International Trade Commission publication 2628 (April 1993).

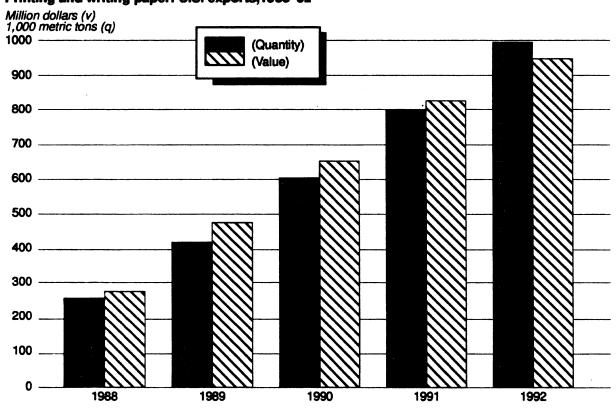
Figure 6
Printing and writing paper: World consumption and world exports, by geographic areas, by share of total, and by tonnage, 1991



Note.—Figure 6 corresponds to table A-2a.

Source: Official U.S. Department of Commerce trade statistics.

Figure 7
Printing and writing paper: U.S. exports,1988–92



# APPENDIX A STATISTICAL TABLES

Table A-1 Financial conditions in the printing and writing paper industry and in other selected industries, 1988-92

#### (Percent)

|      | Printing and writing paper industry        | g                          | Other selected<br>Industries <sup>1</sup> |               |
|------|--|----------------------------|---|---------------|
| Year | Return on stockholders equity <sup>2</sup> | Net<br>profit <sup>3</sup> | Return on stockholders equity             | Net<br>profit |
| 1988 | 17.5                                       | 7.7                        | 14.1                                      | 4.9           |
| 1989 | 17.3                                       | (4)                        | 14.4                                      | (4)           |
| 1990 | 12.7                                       | 5.2                        | 12.1                                      | 4.ó           |
| 1991 | 4.6  | 2.7                        | 9.9                                       | 2.9           |
| 1992 | 1.9  | 1.3                        | 10.7                                      | 3.0           |

<sup>&</sup>lt;sup>1</sup> The selected industries used for comparison are public companies in all economy sectors. They differ for each of the years 1988-92 as follows:

1988 (31 industries; 1,116 companies)

1989 (20 industries; 1,150 companies) 1990 (20 industries; 1,177 companies) 1991 (21 industries; 1,132 companies). 1992 (21 industries; 1,249 companies).

<sup>4</sup> Not available.

Source: Forbes, 41st-45th annual reports on the American industry, January editions of 1989-93.

<sup>&</sup>lt;sup>2</sup> Median return on stockholders' equity. Convertible bonds, convertible preferred stock, warrants, and stock options have been converted into common shares, and stockholders' equity has been created from shares and

<sup>&</sup>lt;sup>3</sup> Median net profit per sale. Net income as a percentage of net sales (profit after taxes).

Table A-2a
Printing and writing paper: World production, exports, imports, and apparent consumption, by major producing countries, 1991

| Country        | Produc-<br>tion | Exports <sup>1</sup> | Imports <sup>1</sup> | Apparent<br>consump-<br>tion <sup>1</sup> | Percent of total world production |
|----------------|-----------------|----------------------|----------------------|---|-----------------------------------|
|                |                 | 1,000 me             | etric tons           |   |                                   |
| Total          | 68,345          | 19,036               | 17,238               | 66,547                                    | 100                               |
| United States  | 19,872          | 763                  | 2.649                | `21,758                                   | 29                                |
| Japan          | 9.730           | 648                  | 236                  | 9,318                                     | 14                                |
| Germany        | 5,228           | 2.285                | 2.968                | 5.911                                     | 8                                 |
| Finland        | 4.705           | 4.243                | 27                   | 489                                       | 7                                 |
| Canada         | 3,575           | 2.583                | 455                  | 1,447                                     | 5                                 |
| France         | 2,824           | 1,204                | 1.651                | 3.271                                     | 4                                 |
| Italy          | 2,235           | 579                  | 920                  | 2.576                                     | 3                                 |
| Sweden         | 1,879           | 1,444                | 117                  | 552                                       | 3                                 |
| United Kingdom | 1,478           | 574                  | 2.056                | 2,960                                     | 2                                 |
| Austria        | 1,447           | 1,227                | 265                  | 485                                       | $\bar{\mathbf{z}}$                |
| All other      | 15,372          | 3,486                | 6,159                | 17,780                                    | 22                                |

<sup>&</sup>lt;sup>1</sup> Estimated.

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

Source: "Pulp and Paper International," (Annual Review; July 1992).

Table A-2b
Printing and writing paper: World production, exports, imports, and apparent consumption, by major producing countries, 1988

| Country        | Produc-<br>tion | Exports <sup>1</sup> | Imports <sup>1</sup> | Apparent<br>consump-<br>tion <sup>1</sup> | Percent of total world production |
|----------------|-----------------|----------------------|----------------------|---|-----------------------------------|
|                |                 | 1,000 me             | etric tons ———       |   |                                   |
| Total          | 62,841          | 15,741               | 15,200               | 62,300                                    | 100                               |
| United States  | 19.574          | 236                  | 2,501                | 21.839                                    | 31                                |
| Japan          | 7.628           | 264                  | 299                  | 7.663                                     | 12                                |
| Germany        | 4,831           | 2.095                | 2,133                | 4,869                                     | 8                                 |
| Finland        | 4.373           | 3,801                | 22                   | 594                                       | 7                                 |
| Canada         | 3.017           | 1,856                | 450                  | 1,611                                     | 5                                 |
| France         | 2,486           | 967                  | 1,362                | 2,881                                     | 4                                 |
| Italy          | 2.208           | 591                  | 626                  | 2,243                                     | 4                                 |
| Sweden         | 1.642           | 1,193                | 113                  | 562                                       | 3                                 |
| United Kingdom | 1,216           | 415                  | 2,140                | 2,941                                     | 2                                 |
| Austria        | 1,204           | 1.031                | 181                  | 354                                       | 2                                 |
| All other      | 14,662          | 3,292                | 5,373                | 16,743                                    | 23                                |

<sup>&</sup>lt;sup>1</sup> Estimated.

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

Source: "Pulp and Paper International", (Annual Review; July 1990).

Table A-3 Printing and writing paper: Harmonized Tariff Schedule subheading; description; U.S. col. 1 rate of duty as of Jan. 1, 1993; U.S. exports, 1992; and U.S. imports, 1992

|            |   | Col. 1 rate of duty | f duty               | U.S.                          | U.S.              |
|------------|---|---------------------|----------------------|-------------------------------|-------------------|
| HTS        | Description1  | General Spec        | Special <sup>2</sup> | exports,<br>1992 <sup>2</sup> | 1992 <sup>2</sup> |
| 4802.30.20 | Carthonizion hase naner weighing out over 15 g/m2   | 2 6%                | Eros(A CA E II I)    | - Millio                      | - Million dollars |
|            |   | 200                 | 196(2,02,1,15,0)     |                               |                   |
| 4802.30.40 | Carbonizing base paper weighing over 15 g/m²  | %                   | Free(A,CA,E,IL,J)    | (3)                           | <b>6</b> 0        |
| 4802.51.10 | Writing paper, less than 40 g/m², containing not over 10 percent fiber content by a mechanical process                          | 2.4%                | Free(A,CA,E,IL,J)    |                               | က                 |
| 4802.51.40 | India and Bible paper, less than 40 g/m², containing not over 10 percent fiber content by a mechanical process                  | 1.8%                | Free(A,CA,E,IL,J)    | (5)                           | F                 |
| 4802.51.90 | Paper and paperboard n.e.s., less than 40 g/m², containing not over 10 percent fiber content by a mechanical process            | Free                | •                    | (5)                           | 16                |
| 4802.52.10 | Writing paper, 40 g/m² to 150 g/m²; containing not over 10 percent fiber content by a mechanical process                        | 2.4%                | Free(A,CA,E,IL,J)    | 46                            | <b>6</b>          |
| 4802.52.15 | Cover paper weighing 40 g/m² to 150 g/m²; containing not over 10 percent fiber content by a mechanical process                  | t<br>2.4%           | Free(A,CA,E,IL,J)    | 17                            | €                 |
| 4802.52.20 | Drawing paper, weighing 40 g/m² to 150 g/m²; containing not over 10 percent fiber content by a mechanical process               | 1.6%                | Free(A,CA,E,IL,J)    | 9                             | 8                 |
| 4802.52.40 | India and Bible paper, weighing 40 g/m² to 150 g/m²; containing not over 10 percent fiber content by a mechanical process       | 1.8%                | Free(A,CA,E,IL,J)    | <b>©</b>                      | 4                 |
| 4802.52.90 | Paper and paperboard n.e.s., weighing 40 g/m² to 150 g/m²; containing not over 10 percent fiber content by a mechanical process | ot<br>Free          |                      | <b>(</b> )                    | 222               |
|            | fiber content by a mechanical process   | 2.4%                | Free(A,CA,E,IL,J)    | (2)                           | €                 |
| 4802.53.15 | Cover paper weighing over 150 g/m²; containing not over 10 percent fiber content by a mechanical process                        | 2.4%                | Free(A,CA,E,IL,J)    | 6                             | €                 |
| 4802.53.20 | Drawing paper, weighing over 150 g/m²; containing not over 10 percent fiber content by a mechanical process                     | 1.6%                | Free(A,CA,E,IL,J)    | (2)                           | -                 |
| 4802.53.90 | Paper and paperboard n.e.s., weighing over 150 g/m²; containing not over 10 percent fiber content by a mechanical process       | 1.6%                | Free(A,CA,E,IL,J)    | (S)                           | 8                 |
|            |   | -                   |                      |                               |                   |

See footnotes at end of table.

Table A-3—Continued Printing paper: Harmonized Tariff Schedule subheading; description; U.S. col. 1 rate of duty as of Jan. 1, 1993; U.S. exports, 1992; and U.S. imports, 1992

|            |   | Col. 1 rate of duty<br>As of Jan. 1, 1993 | of duty<br>1993      | U.S.             | U.S.              |
|------------|---|---|----------------------|------------------|-------------------|
| HTS        | Description1  | General                                   | Special <sup>2</sup> | 19922            | 19922             |
| 400 50 40  |   |   |                      | Millio           | Million dollars — |
| 4602.60.10 | content is by a mechanical process  | 2.4%                                      | Free(A,CA,E,IL,J)    | ω                | 7                 |
| 4802.60.20 | Drawing paper, of which more than 10 percent of fiber content is by a mechanical process                          | 1.6%                                      | Free(A,CA,E,IL,J)    | ო                | 8                 |
| 4802.60.90 | Paper and paperboard n.e.s., of which more than 10 percent of fiber content is by a mechanical process            | Free                                      | ,                    | 72               | 851               |
| 4809.20.20 | Self-copy writing paper in rolls over 36 cm wide or rectangular sheets over 36 cm on side(s)                      | 4.4%                                      | Free(A,CA,E,IL,J)    | ( <sub>6</sub> ) | 4                 |
| 4809.20.40 | Self-copy paper n.e.s. in rolls over 36 cm wide or rectangular sheets over 36 cm on side(s); not writing paper    | Free                                      | •                    | ( <sub>8</sub> ) | €                 |
| 4810.11.30 | India or Bible paper for graphic use, not more than<br>10 percent fiber by a mechanical process, not over 150g/m² | 1.7%                                      | Free(A,CA,E,IL,J)    | 6                | -                 |
| 4810.11.90 | Graphic use paper n.e.s., not more than 10 percent fiber by a mechanical process, not over 150g/m²                | 2.5%                                      | Free(A,CA,E,IL,J)    | 6                | 178               |
| 4810.12.00 | Other printing/writing paper, not over 10 percent, mechanical fibers, over 150 g/m²                               | 2.6%                                      | Free(A,CA,E,IL,J)    | 72               | 116               |
| 4810.21.00 | Light-weight coated papers for graphic use, over 10 percent mechanical fibers, over 150 g/m²                      | 2.5%                                      | Free(A,CA,E,IL,J)    | 77               | 366               |
| 4810.29.00 | Paper and paperboard for graphic uses, other than light-weight, over 10 percent mechanical fiber, over 150 g/m²   | 2.5%                                      | Free(A,CA,E,IL,J)    | 82               | 2                 |
| 4811.39.20 | Printing paper, coated, impregnated, or covered with plastic  | 2.5%                                      | Free(A,CA,E,IL,J)    | 19               | 56                |
| 4811.39.40 | Other unbleached paper and paperboard, coated, impregnated, or covered with plastic                               | Free                                      | •                    | 29               | 148               |
| ,          |   |   |                      |                  |                   |

See footnotes at end of table.

# Printing and writing paper: Harmonized Tariff Schedule subheading; description; U.S. col. 1 rate of duty as of Jan. 1, 1993; U.S. exports, 1992; and U.S. Imports, 1992 Table A-3—Continued

1 All papers are in rolls or sheets.

<sup>2</sup> Programs and the process are indicated in the "Special" symbols for such programs as they are indicated in the "Special" subcolum, are as follows: Generalized System of Preferences (A); Automotive Products Trade Act (B); Agreement on Trade in Civil Aircraft (C); United States-Canada Free-Trade Agreement (CA); Caribbean Basin Economic Recovery Act (E), United States-Israel Free Trade Area (IL); and Andean Trade Preference Act (J).

<sup>3</sup> The value of U.S. exports is not available for this individual HTS subheading. However, total exports of carbonizing base paper was \$28 million for 1992.

4 Less than \$500,000.

<sup>5</sup> The value of U.S. exports is not available for this individual HTS subheading. However, total exports of printing paper weighing less than 40 g/m² was \$77

million for 1992.

<sup>6</sup> The value of U.S. exports is not available for this individual HTS subheading. However, total exports of printing paper weighing 40 g/m² but not more than 150 g/m² was \$128 million for 1992.

The value of U.S. exports is not available for this individual HTS subheading. However, total exports of printing paper weighing over 150 g/m² was \$31 million for 1992,

9 The value of U.S. exports is not available for this individual HTS subheading. However, total exports of other graphic use paper was \$146 million in 1992. 8 The value of U.S. exports is not available for this individual HTS subheading. However, total exports of self-copy paper was \$50 million in 1992.

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

Table A-4
Printing and writing paper: U.S. production, exports of domestic merchandise, imports for consumption, and apparent consumption, 1988-92

| Year | U.S.<br>ship-<br>ments <sup>1</sup> | U.S.<br>exports                 | U.S.<br>imports   | Apparent<br>U.S.<br>consumption                | Ratio of imports to consumption     |
|------|-------------------------------------|---------------------------------|---|--|-------------------------------------|
|      |                                     | 1,000 n                         | netric tons   |  | Percent                             |
| 1988 | 19,827<br>20,295<br>20,094          | 255<br>418<br>603<br>801<br>996 | 1,938<br>2,523<br>2,796<br>2,612<br>2,822                 | 21,674<br>21,932<br>22,488<br>21,905<br>22,237 | 8.9<br>11.5<br>12.4<br>11.9<br>12.7 |
| 1988 | 20,600<br>19,250                    | 274<br>435<br>652<br>827<br>949 | n dollars ——<br>1,547<br>2,063<br>2,274<br>2,099<br>2,171 | 20,985<br>22,075<br>22,222<br>20,522<br>20,972 | 7.4<br>9.3<br>10.2<br>10.2<br>10.4  |

<sup>&</sup>lt;sup>1</sup> Estimated by the staff of the U.S. International Trade Commission, based on statistics derived from the American Paper Institute, and the U.S. Department of Commerce.

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

Table A-5
Printing and writing paper: U.S. imports for consumption, by principal sources, 1988-92

| Source         | 1988           | 1989         | 1990                 | 1991         | 1992         |
|----------------|----------------|--------------|----------------------|--------------|--------------|
| 3              |                | Quai         | ntity (1,000 metric  | tons)        |              |
| Canada         | (1)            | 1,441<br>416 | 1,689<br>427         | 1,728<br>361 | 1,813<br>437 |
| Germany        | (1)            | 204          | 164                  | 116          | 113          |
| Japan          | (;)            | 29           | 62                   | 46           | 28           |
| United Kingdom | <b>S</b> {}    | 22           | 32<br>37             | 34<br>49     | 41<br>54     |
| France         | <b>S</b> {}    | 35<br>77     | 37<br>74             | 49<br>49     | 70           |
| Belgium        | {i}            | 310          | 342                  | 224          | 266          |
| Total          | 1,938          | 2,523        | 2,796                | 2,612        | 2,822        |
|                |                | V            | alue (million dollar | s)           |              |
| Canada         | (!)            | 1,076        | 1,271                | 1,262        | 1,264        |
| Finland        | (1)            | 333          | 340                  | 282          | 335          |
| Germany        | <b>(;</b> )    | 201          | 160                  | 122          | 119          |
| Japan          | Ω.             | 53           | 81                   | 77           | 75<br>50     |
| United Kingdom | <b>S</b> ;₹    | 28           | 40                   | 53<br>57     | 58<br>55     |
| France         | Si{            | 38<br>61     | 44<br>58             | 36           | 43           |
| Belgium        | <del>[i]</del> | 273          | 295                  | 201          | 222          |
| Total          | 1,547          | 2,063        | 2,274                | 2,099        | 2,171        |
|                |                | Unit va      | lue (dollars per me  | etric ton)   |              |
| Canada         | (¹)            | \$750        | \$750                | \$730        | \$700        |
| Finland        | (1)            | 800          | 800                  | 780          | 770          |
| Germany        | (!)            | 990          | 970                  | 1,050        | 1,050        |
| Japan          | (;)            | 1,820        | 1,320                | 1,660        | 2,720        |
| United Kingdom | (1)            | 1,260        | 1,260                | 1,550        | 1,430        |
| France         | <u> </u>       | 1,080        | 1,190                | 1,150        | 1,030        |
| Belgium        | <u> </u>       | 790          | 780                  | 730          | 620<br>770   |
| All other      | (,)            | 880          | 840                  | 890          | 770          |
| Average        | 800            | 820          | 810                  | 800          | 770          |

<sup>&</sup>lt;sup>1</sup> Country-level detail is provided only for years in which there are actual trade data under the Harmonized Tariff Schedule of the United States (HTS) and the new Schedule B (based on the HTS).

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

Table A-6
Printing and writing paper: U.S. exports of domestic merchandise, by principal markets, 1988-92

| Source         | 1988                         | 1989                                    | 1990                               | 1991                             | 1992                         |  |
|----------------|------------------------------|---|------------------------------------|----------------------------------|------------------------------|--|
|                | Quantity (1,000 metric tons) |   |                                    |                                  |                              |  |
| Canada         | (1)                          | 198<br>34                               | 342<br>51                          | 362<br>80                        | 394<br>132                   |  |
| Japan          | (†)<br>{†}                   | 11<br>9<br>4                            | 13<br>10<br>-5                     | 26<br>18<br>7                    | 42<br>35<br>24               |  |
| United Kingdom | (1)<br>(1)<br>(2)            | 12<br>8<br>142                          | 11<br>15<br>156                    | 11<br>23<br>274                  | 21<br>25<br>323              |  |
| Total          | 255                          | 418                                     | 603                                | 801                              | 996                          |  |
|                |                              | ,                                       | /alue (million dolla               | rs)                              |                              |  |
| Canada         | (†)<br>(†)<br>(†)<br>(†)     | 201<br>38<br>13<br>16                   | 362<br>58<br>16<br>20              | 416<br>80<br>23<br>25            | 412<br>127<br>34<br>33       |  |
| Netherlands    | (1)<br>(1)<br>(1)<br>(1)     | 5<br>16<br>9<br>137                     | 7<br>16<br>15<br>158               | 10<br>16<br>19<br>238            | 28<br>25<br>18<br>272        |  |
| Total          | 274                          | 435                                     | 652                                | 827                              | 949                          |  |
|                |                              | Uni                                     | it value (per metric               | ton)                             |                              |  |
| Canada         | (†)<br>(†)<br>(†)            | \$1,020<br>1,120<br>1,160<br>1,750      | \$1,060<br>1,120<br>1,230<br>1,900 | \$1,150<br>1,000<br>880<br>1,410 | \$1,040<br>960<br>820<br>970 |  |
| Hong Kong      | \1\\<br>(1\\<br>1\\<br>(1\)  | 1,750<br>1,290<br>1,380<br>1,060<br>950 | 1,410<br>1,430<br>1,020<br>980     | 1,390<br>1,470<br>840<br>840     | 1,140<br>1,210<br>740<br>800 |  |
| Average        | 1,090                        | 1,040                                   | 1,080                              | 1,030                            | 950                          |  |

<sup>&</sup>lt;sup>1</sup> Country-level detail is provided only for years in which there are actual trade data under the Harmonized Tariff Schedule of the United States (HTS) and the new Schedule B (based on the HTS).

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

Table A-7
Printing and writing paper: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries, 1988-92

(Million dollars)

| item                                  | 1988         | 1989                    | 1990     | 1991                    | 1992                    |
|---------------------------------------|--------------|-------------------------|----------|-------------------------|-------------------------|
| U.S. exports of domestic merchandise: |              |                         |          |                         | 9 JN 31                 |
| Canada                                | <b>\{\}</b>  | 201<br>( <sup>2</sup> ) | 362<br>1 | 416<br>( <sup>2</sup> ) | 412<br>( <sup>2</sup> ) |
| Germany                               | <b>}</b> 1\$ | `ģ                      | ġ        | 14                      | 16                      |
| Mexico                                | (1)          | 38                      | 58       | 80                      | 127                     |
| All other                             | (1)          | 187                     | 222      | 317                     | 394                     |
| Total                                 | 274          | 435                     | 652      | 827                     | 949                     |
| Canada                                | (1)          | 1,076                   | 1,271    | 1,262                   | 1,264                   |
| Finland                               | <b>}1</b> \$ | 333                     | 340      | 282                     | 335                     |
| Germany                               | (1)          | 201                     | 160      | 122                     | 119                     |
| Mexico                                | (1)          | <b>35</b>               | 28       | 10                      | 23                      |
| All other                             | (1)          | 418                     | 475      | 423                     | 430                     |
| Total                                 | 1,547        | 2,063                   | 2,274    | 2,099                   | 2,171                   |
| Canada                                | (1)          | -864                    | -909     | -846                    | -852                    |
| Finland                               | <b>{1</b> {  | -333                    | -339     | -281                    | -334                    |
| Germany                               | (!)          | -192                    | -151     | -108                    | -103                    |
| Mexico                                | (¹)          | _ 3                     | 32       | 72                      | 104                     |
| All other                             | (י)          | -240                    | -251     | -104                    | -37                     |
| Total                                 | -1,273       | -1,628                  | -1,622   | -1,272                  | -1,222                  |

Country-level detail is provided only for years in which there are actual trade data under the Harmonized Tariff Schedule of the United States (HTS) and the new Schedule B (based on the HTS).
<sup>2</sup> Less than \$500,000.

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

# APPENDIX B EXPLANATION OF TARIFF AND TRADE AGREEMENT TERMS TARIFF AND TRADE AGREEMENT TERMS

#### TARIFF AND TRADE AGREEMENT TERMS

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

Rates of duty in the general subcolumn of HTS column 1 are most-favored-nation (MFN) rates; for the most part, they represent the final concession rate from the Tokyo Round of Multilateral Trade Negotiations. Column 1-general duty rates are applicable to imported goods from all countries except those enumerated in general note 3(b) to the HTS, whose products are dutied at the rates set forth in column 2. Goods from Albania, Armenia, Belarus, Bulgaria, the People's Republic of China, the Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Mongolia, Poland, Russia, Slovakia, and the Ukraine are currently eligible for MFN treatment. Among articles dutiable at column 1-general rates, particular products of enumerated countries may be eligible for reduced rates of duty or for duty-free entry under one or more preferential tariff programs. Such tariff treatment is set forth in the special subcolumn of HTS column 1. Where eligibility for special tariff treatment is not claimed or established, goods are dutiable at column 1-general rates.

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

The Caribbean Basin Economic Recovery Act (CBERA) affords nonreciprocal tariff preferences

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

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

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

Preferential nonreciprocal duty-free or reducedduty treatment in the special subcolumn of column 1 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 in 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 3(c)(ix) to the HTS.

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

The General Agreement on Tariffs and Trade (GATT) (61 Stat. (pt. 5) A58; 8 UST (pt. 2) 1786) is the multilateral agreement setting forth basic principles governing international trade among its 111 signatories. The GATT's main obligations relate to most-favored-nation treatment, the maintenance of scheduled concession rates of duty, and national (nondiscriminatory) treatment for imported products; the GATT also provides the legal framework for customs valuation standards, "escape clause" (emergency) actions, antidumping and countervailing duties, and other measures. Results of GATT-sponsored multilateral tariff negotiations are set forth by way of separate schedules of concessions for each participating contracting party, with the U.S. schedule designated as Schedule XX.

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