

---

**CHAPTER III**

**World Markets for U.S. Wood Products**

# Contents

	<i>Page</i>
Summary . . . . .	49
World Markets for U.S. Forest Products .....	50
Established Markets for Pulp and Paper Products . . . . .	52
Established Markets for Solid Wood Products and Raw Materials . . . . .	57
Barriers to U.S. Trade in Wood Products . . . . .	60
Tariffs and Traditional Quotas . . . . .	60
Nontariff Barriers . . . . .	62
Other Factors Affecting Exports of Wood Products . . . . .	64
U.S. Imports of Forest Products ..... ..	66
Solid Wood Products . . . . .	67
Pulp and Paper Products . . . . .	68

## List of Tables

<i>Table No.</i>	<i>Page</i>
6. Pulp and Paper Trade Patterns, by U.S. Region, 1976 . . . . .	51
6. Solid Wood Trade Patterns, by U.S. Region, 1976 . . . . .	51
7. U.S. Exports of Solid Wood Products, 1981. . . . .	57
8. U.S. Imports of Solid Wood Products, 1982 . . . . .	67
9. U.S. Imports of Pulp and Paper Products, 1982 . . . . .	68

## List of Figures

<i>Figure No.</i>	<i>Page</i>
2. Value of U.S. Exports of Wood Products, 1964-80 . . . . .	51
3. U.S. Balance of Trade in Wood Products, 1964-80 . . . . .	52
4. U.S. Woodpulp Exports by Area of Destination . . . . .	53
5. U.S. Paper, Paperboard, and Converted Products Exports, by Area of Destination . . . . .	54
6. Pulpwood Cost at Mill Site by Volume, Under Bark Basis, Current General Overhead, Estimated at 5 Percent, Included . . . . .	55
7. Tonnage of U.S. Wood Imports, by Product, 1950-79 . . . . .	66
8. Value of U.S. Wood Products Imports, 1964-80 . . . . .	67
9. Relative Importance of Canadian Softwood Lumber Imports, 1950-82 . . . . .	67

# World Markets for U.S. Wood Products

---

## Summary

The United States is a major importer and exporter of wood products. Since 1950, U.S. exports of forest products, in constant (deflated) dollars, have risen 400 percent, while imports have increased by roughly 75 percent. Although the United States is still a net importer of forest products, the balance-of-payments deficit has narrowed, particularly since 1978. This is due primarily to increased exports of pulp and paper products and decreased imports of lumber caused by a precipitous decline in the housing market.

Growth in world demand for forest products may result in a 50-percent increase in consumption by 2000. In the next several decades, therefore, the United States has many unique opportunities to increase its exports, particularly in paper products. It has both the manufacturing capacity and the forest resource needed to expand production, and, unlike that of many traditional wood-producing nations, its inventory is increasing and accessible. This gives the U.S. forest products industry a sustainable advantage in world markets. Many of the world's forests, especially in Latin America and the eastern Soviet Union, are remote and inaccessible, and the investment needed to bring these forests into commercial production may be prohibitive. Southeast Asia, another major wood-producing area, has been heavily deforested, and harvesting rates that prevailed in the 1970's probably are not sustainable.

Most of the world's increased forest products consumption probably will come from industrialized nations. Major foreign markets for U.S. forest products in the future are Western Europe and Japan, which will probably rely

more heavily on U.S. woodpulp and paper. Promotion of U.S. homebuilding techniques may be instrumental in expanding markets for lumber and panel products as well. U.S. producers will have little trouble increasing exports of raw materials such as logs, wood chips, waste paper, and woodpulp. The United States also is in a favorable position to expand its exports of linerboard.

A wide variety of trade barriers, however, will limit the ability of the United States to expand its exports of processed products such as lumber, panels, and paper. Efforts to ease or eliminate some of these barriers are underway, although there is little likelihood that the United States will gain free access to Western European and Japanese markets. In addition, U.S. exporters are at a disadvantage on world markets due to the overvaluation (strength) of the dollar against foreign currencies and worldwide recession. Improvements in these financial conditions probably will stimulate exports of wood products even without substantial progress in reducing trade barriers. The formation of export trading companies, now permitted under U.S. law, also may improve the competitive position of U.S. exporters,

The United States probably will continue to import substantial quantities of lumber, woodpulp, and newsprint from Canada. Canada's proximity to major consuming regions of the United States, the availability of low-cost transportation, and the distribution of the Canadian softwood resource combine to make Canadian products competitive in U.S. markets.

## World Markets for U.S. Forest Products

The United States has an unprecedented opportunity to expand its exports of many forest products. There are three principal reasons for this: 1) world demand for paper and solid wood products are expected to grow rapidly, 2) many established wood-producing nations are confronted with diminishing wood supplies, and 3) the United States has both an abundant wood resource and a highly developed manufacturing capacity compared with most other countries.

The United Nations Food and Agriculture Organization (FAO) projects that world demand for industrial roundwood will grow by about 2 percent per year for the next 20 years.<sup>1</sup> According to FAO, consumption of paper and paperboard is expected to increase by 75 percent, wood-based panels by 55 percent, and lumber by 25 percent between 1980 and 2000.<sup>2</sup> Although these projections are not necessarily accurate, they do point out prospects for growth in world forest products consumption. Much of this increase is expected to occur in the developed countries of Western Europe, North America, and Japan, although demand for paper and solid wood products in developing nations is expected to increase as well.

Regional trends in industrial roundwood production suggest that traditional suppliers cannot continue to increase production at past rates, and some probably will not even be able to maintain present rates. Wood supplies from the western Soviet Union, which are important to Eastern and Western Europe, declined during the 1970's and probably will continue to decline. While the U.S.S.R. has vast softwood forests in Siberia, much of this area is inaccessible and manufacturing capacity is lacking. Western Europe, which has depended on the Soviet Union for some of its wood, can expand its timber harvests somewhat, but probably not

enough to compensate for declining Soviet supplies coupled with rising demand. Timber resources in the Far East, which supply the majority of Japanese wood imports, are shrinking. Recent hardwood production levels in Far Eastern countries outside Japan probably cannot be sustained through 2000, and some of these nations are beginning to restrict log exports.

Many Far Eastern countries, especially Japan, will become more dependent on imports from other regions to satisfy growing demand for forest products. Although Latin America has vast acreages of forests, it will probably not become a major competitor with U.S. forest products on world markets before the turn of the century. The situation in South America is similar to the Soviet Union's—forests are remote and inaccessible, and the capacity to process more than a fraction of the potential harvest does not exist. Some past efforts to establish forest products manufacturing industries in Brazil have failed, and the enormous capital requirements to build South America as a major world supplier of forest products (other than pulp) by 2000 are almost certainly beyond the means of these developing nations.

In contrast, the forest resource of the United States is increasing. Between 1952 and 1977, growing stock on its commercial forestland increased nearly 20 percent.<sup>3</sup> Harvest levels have been remarkably stable, from 10 billion to 14 billion cubic feet (ft<sup>3</sup>) per year since the early 1900's. U.S. forests can support substantially larger harvests, even with increasing domestic demand.

U.S. trade in forest products has different effects in different areas of the country, depending on the availability of supplies from foreign and domestic forests and on manufacturing capacity (tables 5 and 6). In 1976, the Great Lakes

<sup>1</sup>Cited in Environment Canada, *Policy Statement: A Framework for Forest Renewal*, Ottawa, Canada: Sept. 2, 1982, p. 2.

<sup>2</sup>Cited in "A Forest Sector Strategy for Canada," discussion paper Sept. 30, 1981, p. 7.

<sup>3</sup>U.S. Department of Agriculture, Forest Service, *An Analysis of the Timber Situation in the United States, 1952-2030*, Forest Resource Report No. 23 (Washington, D. C.: U.S. Government Printing Office, December 1982), p. 113.

**Table 5.—Pulp and Paper<sup>a</sup>Trade Patterns, by U.S. Region, 1976**

Region	Imports (millions of dollars)	Major supplier	Exports (millions of dollars)	Major customer	Trade balance (millions of dollars)
Pacific Northwest . . . . .	141	Canada	309	Japan	168
South Atlantic . . . . .	15	Western Europe	449	Western Europe	434
Gulf . . . . .	26	Western Europe	485	Western Europe	459
North Atlantic . . . . .	341	Canada	354	Western Europe	13
South Pacific . . . . .	23	Japan	117	Asia	94
Great Lakes . . . . .	755	Canada	238	Canada	-517
North Central . . . . .	158	Canada	19	Canada	-139
South Central . . . . .	—	—	9	Mexico	9
Alaska . . . . .	—	—	67	Japan	67

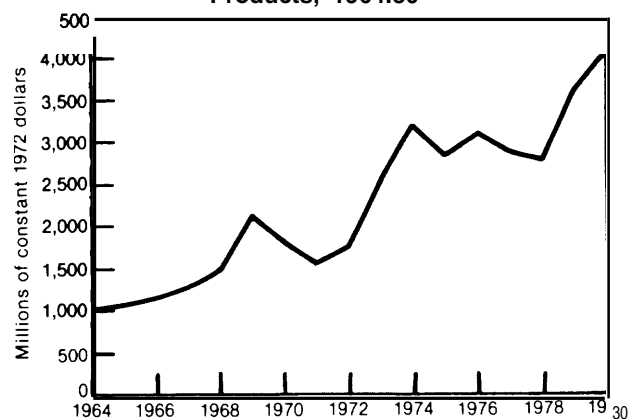
<sup>a</sup>Excluding waste paperSOURCE<sup>b</sup> Sedjo and Radcliffe, *Postwar Trends in U.S. Forest Products Trade* (Washington, D.C. Resources for the Future, 1980)**Table 6.—Solid Wood Trade Patterns, by U.S. Region, 1976**

Region	Imports (millions of dollars)	Major supplier	Exports (millions of dollars)	Major customer	Trade balance (millions of dollars)
Pacific Northwest . . . . .	422	Canada	1,246	Japan	824
South Atlantic . . . . .	103	Far East	40	Europe	-63
Gulf . . . . .	130	Far East	54	Europe	-76
North Atlantic . . . . .	342	Canada	126	Europe	-216
South Pacific . . . . .	82	Far East	90	Japan	8
Great Lakes . . . . .	627	Canada	173	Canada	-454
North Central . . . . .	230	Canada	36	Canada	-194
South Central . . . . .	1	Mexico	6	Mexico	5
Alaska . . . . .	1	Canada	77	Japan	76

<sup>a</sup>Excluding waste paperSOURCE<sup>b</sup> Sedjo and Radcliffe, *Postwar Trends in U.S. Forest Products Trade* (Washington, D.C. Resources for the Future, 1980)

States and the North Central region were net importers of paper and pulp, most of which came from Canada, while other regions were net exporters. Conversely, the Pacific Northwest, Alaska, and the South Central region were net exporters of solid wood products, although the trade surplus in the Pacific Northwest is much larger than the deficit in any other single region. Efforts to increase exports are likely to benefit the Pacific Northwest, Alaska, and the Southern regions (South Atlantic, Gulf, and South Central States). The Great Lakes States and the North Central region, which are close to cheap water transportation and Canadian softwood forests, probably will remain net importers of most forest products.

For at least the past two decades, U.S. exports of forest products have increased (fig. 2), but in general, the United States still is a net importer. This may be changing. Since 1978,

**Figure 2.—Value of U.S. Exports of Wood Products, <sup>a</sup>1964-80**

<sup>a</sup>Wood products here include waste paper and paperboard, and do not include converted products (numbers for waste paper exports obtained by phone conversation with API representative)

SOURCES: United Nations Food and Agriculture Organization, *1980 Yearbook of Forest Products* and *1975 Yearbook of Forest Products* American Paper Institute, personal communication.

the U.S. deficit in forest products trade has narrowed sharply, primarily due to an increase in exports of pulp and paper products (fig. 3).

In 1982, the United States exported forest products (paper, paperboard, logs, lumber, railroad ties, wood-based panels, woodpulp, and wood chips) valued at \$7.3 billion. The largest markets for these products were Western Europe, Canada, and Japan, markets that can expand considerably. There are also opportunities to develop totally new markets.

While world markets offer the United States an opportunity to sustain a positive balance of trade in forest products, it is unlikely that the United States will reduce or curtail its imports. The United States is a major importer of softwood lumber, newsprint, and woodpulp, most of which comes from Canada. Reliance on inexpensive Canadian products, in fact, enables the United States to develop greater export capacity in other product lines, such as linerboard, clear lumber, panels, printing and writing papers, and converted paper products, many of which have higher value added than imports,

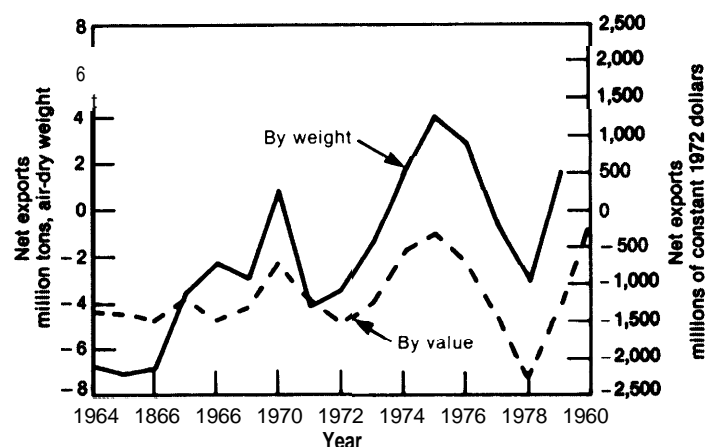
### Established Markets for Pulp and Paper Products

In 1979, international exports of forest products amounted to about \$46 billion, nearly 3 percent of total world trade. Roughly one-third of this involved paper and paperboard. In 1982, U.S. exports of pulp and paper totaled \$4.3 billion. In deflated dollars, this was slightly lower than 1980 levels, reflecting worldwide recession, the strength of the dollar against foreign currencies, and, in some cases, protectionist pressures.<sup>4</sup> Between 1972 and 1981, however, the tonnage of U.S. exports of woodpulp has increased 63 percent and paper, paperboard, and converted products by 50 percent. Waste paper exports increased 450 percent between 1971 and 1981.

U.S. pulp and paper producers are in a better position to expand exports than are producers of lumber, panels, and other solid wood products for several reasons. Demand for pulp

<sup>4</sup>American Paper Institute, International Department, "Exports of Pulp, Paper, Paperboard, and Converted Products to World Markets-1981" (New York: American Paper Institute, 1981).

Figure 3.—U.S. Balance of Trade in Wood Products,<sup>a</sup> 1964-80



<sup>a</sup>Wood products ~~ham~~ include waste paper and paperboard and do not include converted products. With the exception of waste paper and H - - W \* wood fiber component of products is included in total tonnage. In the case of waste paper and paperboard, other constituents such as clay fillers are included.

SOURCES: U.S. Department of Agriculture, Forest Service, *U.S. Timber Production, Trade, Consumption, and Price Statistics, 1950-1980*, p. 10; and United Nations, Food and Agriculture Organization, *Yearbook of Forest Products, 1980*, pp. 359, 361 and *Yearbook of Forest Products, 1975*, pp. 301, 303. American Paper Institute.

and paper is intrinsically less cyclic than demand for solid wood products. Moreover, the pulp and paper sector of the forest products industry is highly capital intensive, production is large-scale, and the sector must operate very close to capacity to maintain profit margins. This situation provides strong incentives to maintain lasting agreements with all customers, domestic or foreign. In addition, market pulp and many types of paper are commodity (or standard) products in world markets, while lumber and panel products tend to be specialties overseas. Producers of lumber and panels often must devote substantial effort to create foreign demand through the promotion of U.S. building techniques and product specifications and performance. In contrast, demand for most U.S. paper products already exists. Finally, due to a combination of labor and resource availa-

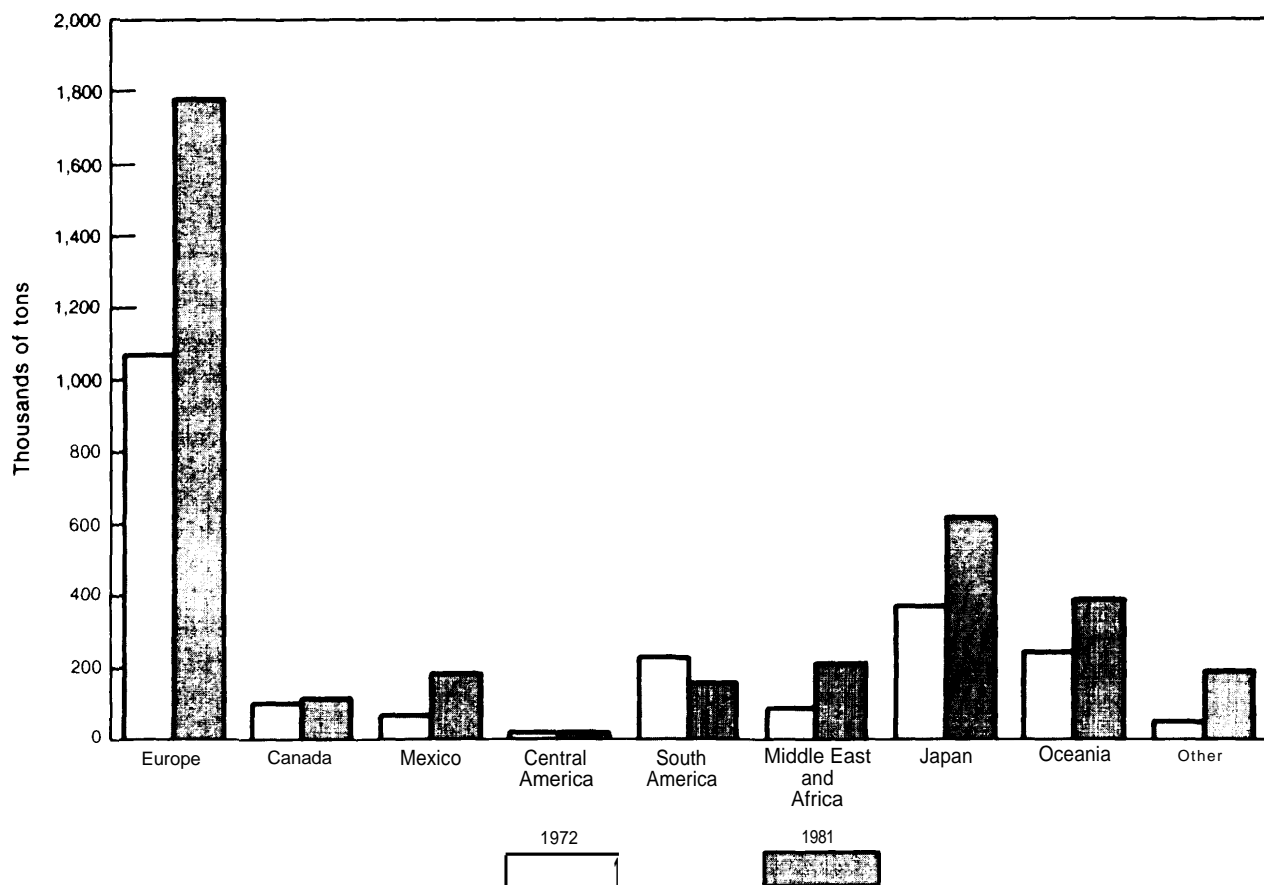
bility, energy costs, and production efficiency, U.S. pulp and paper are fully cost competitive in world markets. s

### Western Europe

Western Europe is the largest single market for U.S. pulp and paper products. It accounted for 49 percent of U.S. exports of woodpulp and 21 percent of U.S. exports of paper, paperboard, and converted products. Over the past decade, however, Western Europe's imports of U.S. paper, paperboard, and converted products have declined in both percentage and tonnage, while woodpulp imports have increased (figs. 4 and 5). This shift is probably a result

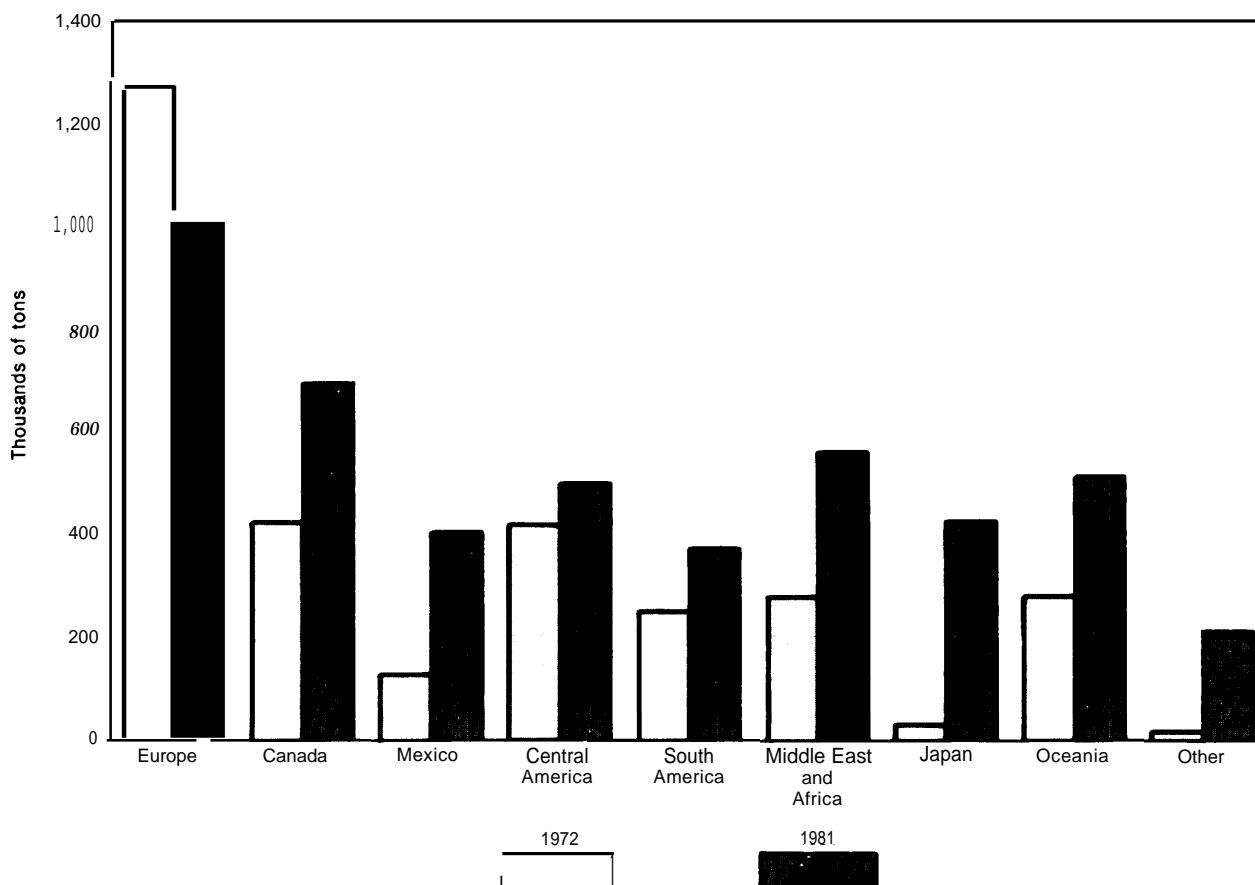
<sup>5</sup>American Paper Institute, "The American Paper Industry: An International Profile," paper submitted to the Industry Sector Advisory Committee No. 12, Aug. 12, 1982, p. 6.

Figure 4.—Woodpulp Exports by Area of Destination



SOURCE American Paper Institute, "Exports of Pulp, Paper, Paperboard, and Converted Products to World Markets— 1981," New York API International Department, n.d., p. xxiv

Figure 5.—U.S. Paper, Paperboard, and Converted Products Exports, by Area of Destination



SOURCE: American Paper Institute, "Exports of: Pulp, Paper, Paperboard, and Converted Products to World Markets-1981," New York: API International Department, n.d., p. xxv

of decreased exports of woodpulp from Scandinavia to other Western European countries. Scandinavian woodpulp prices have been rising because major producers are paying much higher prices for pulpwood than their North American counterparts (fig. 6). As a result, Scandinavian producers are facing losses of Western European pulp markets. In addition, Scandinavian production costs are considerably higher than those of North American competitors, and many marginal Scandinavian mills are closing.<sup>6</sup> Scandinavian producers are increasing their papermaking capacity in integrated mills which are efficient enough to produce paper at prices competitive in the European Community, displacing imported pa-

per from other sources. The trend toward integration has focused on high value products, which will probably force higher reliance on North American kraft linerboard as well as pulp. In the short run, Scandinavian paper probably will continue to satisfy a large part of Western Europe's paper demand, but the capacity to increase production is limited. In the long run, particularly with an economic recovery, Western Europe is expected to increase its reliance on North America for paper products.<sup>7 8 9 10</sup>

<sup>7</sup>"The Battle is on for Control of Europe's Paper Market," *World Business Weekly*, June 15, 1981, pp. 22-23.

<sup>8</sup>"North America Newsprint Exports: Today and Tomorrow," *Paper*, May 10, 1982, p. 48.

<sup>9</sup>Kenneth E. Smith, "SPCI Focuses on World Fiber Deficit, Competition From North America," *Pulp and Paper*, August 1981, pp. 179-185.

<sup>10</sup>"World Review," *Pulp and Paper*, August 1981, p. 66.

<sup>6</sup>J.W. Garrigan, "International Outlook for Pulp, Paper and Paperboard Products," *Paper Trade Journal*, 165(6): p. 22, Mar. 30, 1981.



**Figure 6.— Pulpwood Cost (Softwood) at Mill Site by Volume, Under Bark Basis, Current General Overhead, Estimated at 5 Percent, Included**



<sup>a</sup>Not available before 1975

SOURCE Jaako Poyry Interforest Prospectus for the 1982 edition of *Availability and Cost of Wood in Major Forest Product Regions 1970/1990*, 1 983, Finland, p 11

While the tonnage of all paper, paperboard, and converted products exported to Western Europe has fallen in the last decade, the mix of products has changed significantly. Western Europe now is importing larger amounts of printing and writing papers and bleached paperboard than in 1972, while imports of unbleached kraft linerboard (primarily used in making corrugated boxes) have fallen. In the future, Western Europe is expected to increase its imports of paper in which woodpulp accounts for relatively large shares of the product value, such as in newsprint and linerboard.

### Canada

In 1981, Canada imported 15 percent, or almost 700,000 short tons, of the U.S. paper, paperboard, and converted products and a smaller percentage of its woodpulp. Exports of paper products to Canada have increased 65 percent since 1972 and are expected to continue to rise. Over half of these exports are printing, writing, and converted products

(paper which has been converted to product form, such as envelopes, corrugated and other boxes, tissues, and paperboard cartons and drums).

Although Canada is a major paper producer itself, well equipped to compete in world markets for paper products based on softwoods, it lacks a hardwood resource. As a result, Canada is expected to rely on its North American neighbor for paper products that require significant amounts of hardwood pulp. In addition, Canadian pulp, newsprint, and other writing papers are cost competitive with U.S. products.

### Japan and the Far East

In the past decade, U.S. exports of paper, paperboard, and converted products to Japan and the Far East have tripled (fig. 3). Most of this large increase was due to an expansion of Japanese imports of unbleached kraft linerboard, bleached paperboard (for which Japan

has almost no domestic production capacity), and newsprint (largely due to U.S.-Japan joint ventures).

Japan is a major paper producer. It ranks second in paper and paperboard and third in pulp worldwide. However, it is facing increasing costs for raw materials, energy, and pollution controls that threaten to place many grades of Japanese paper among the world's most expensive.<sup>11 12</sup> Exports of paper, paperboard, and converted products to Japan alone have increased almost 14 times in the last decade, accounting for most of the expansion into Far Eastern markets for U.S. paper. This increase reflects Japanese difficulties in obtaining inexpensive raw materials for their pulp and paper mills and an unfavorable climate for investment in milling capacity.<sup>13</sup> As a result, the Japanese have relied more heavily on imported pulp and paper to satisfy growing demand for paper and paperboard products.<sup>14 15</sup>

About half of the raw material used in Japanese pulpmills is hardwood pulpwood and log processing residues, with most hardwood logs imported from other Far Eastern countries. The levels of hardwood harvesting prevalent in the 1970's in these countries probably are not sustainable through the end of this century. This looming problem, combined with a growing tendency for some Far Eastern nations to shift exports from logs to processed products, means that the Japanese probably will rely more heavily on North America for wood chips, woodpulp, and paper in the future. \*e Competition among the United States, Canada, Oceania, Southeast Asia, and Chile for Japa-

nese pulp and paper markets, however, may be quite intense.<sup>17 18</sup>

Countries in the Far East and Oceania, other than Japan, imported 11 percent of U.S. paper, paperboard, and converted products exports in 1981, up from 9 percent in 1972. In tonnage, exports to these countries increased by 80 percent in the last decade. Woodpulp exports to Far Eastern countries other than Japan have remained stable in terms of percentage, accounting for just over 10 percent of U.S. woodpulp exports during the last decade (fig. 5).

China may become a major market for U.S. paper products within the next decade, too, particularly in packaging material. In 1980, much of China's linerboard came from Japan, but lower cost U.S. linerboard may become more competitive in the Chinese market.<sup>19</sup>

### Other Markets

The United States sold nearly 16 percent of its woodpulp and 40 percent of its paper, paperboard, and converted products to Mexico, Central America and the Caribbean, South America, the Middle East, and Africa in 1981 (figs. 4 and 5). These percentages have remained fairly stable over the last decade, although woodpulp exports fell slightly, primarily due to fewer sales to South America.

Mexico's value share of U.S. paper, paperboard, and converted products exports doubled and the tonnage tripled (fig. 4). These large increases occurred despite stricter licensing requirements and import duties that cut Mexico's imports of U.S. packaging and industrial converting grades of paper. Nevertheless, Mexico remains the biggest single purchaser of U.S. printing, writing, and tissue paper, while im-

<sup>11</sup>"The American Paper Industry: An International Profile," op. cit., p. 14.

<sup>12</sup>"World Review," p. 66.

<sup>13</sup>U.S. Department of Agriculture, Forest Service, Alaska Region, *Timber Supply and Demand 1981*, mimeograph draft report to Congress in compliance with the Alaska National Interest Lands Conservation Act, Apr. 1, 1982, p. 39-40.

<sup>14</sup>Y. Shiota, and A. P. Schniewind, "Recent Trends in the Wood Industry of Japan," *Forest Products Journal* June 1980, p. 23.

<sup>15</sup>Garrigan, "International Outlook," op. cit., p. 23.

<sup>16</sup>*Timber Supply and Demand*, op. cit., p. 42.

<sup>17</sup>*Ibid.*, pp. 45-46.

<sup>18</sup>David R. Darr, "The Impacts of International Trade on Domestic Markets," Proceedings, *The Impact of Change on the Management of Private Forest Lands in the Northwest*, Portland, Oreg., Mar. 29-31, 1978, pp. 30-31.

<sup>19</sup>*Timber Supply and Demand*, op. cit., p. 45.

porting large amounts of other kinds of paper and paperboard as well.

South America, with over 13 billion acres of exploitable forest, became a net exporter of woodpulp during the past decade. On the other hand, its imports of U.S. paper, paperboard, and converted products increased by nearly 50 percent. The immense forest resource of South America could become a major world source of wood, but this is not likely to happen in the near future. The continent does not have the transportation and manufacturing capacity to support increased production of processed wood products, and the amount of capital required to develop this capacity is probably beyond the immediate means of these nations. Technologies for using South American mixed hardwoods exist, but substantial investments must be made before these forests can be fully exploited. South American markets for U.S. paper and paperboard may continue to be fairly strong for the next few decades.

The United States also should have a strong competitive position in supplying paper to the Caribbean, Africa, and the Middle East in the future. Caribbean markets have the advantage of proximity to the highly productive forests of the American South, which means ample supplies and lower transportation costs. Exports of both woodpulp and paper products to this region probably will expand, Africa and

the Middle East have little forest area and lack the capacity to exploit what few trees do exist, Africa and the Middle East accounted for 12 percent of U.S. paper and paperboard exports in 1981, up from 9 percent in 1972. Continued economic growth in this region probably will mean expanding markets for all products,

### Established Markets for Solid Wood Products and Raw Materials

In 1982, the U.S. exported solid wood products\* valued at \$2.6 billion—down from \$3.2 billion in 1979—reflecting the effects of worldwide economic recession.<sup>20</sup> Over 40 percent of the 1981 value was in logs and timber, of which 75 percent was softwood logs exported to Japan. Lumber and railroad ties accounted for 34 percent of solid wood product exports, and the remainder was divided among pulpwood, wood chips, wood wastes and fuels, and wood-based panels (table 7). The major market areas are Western Europe, Canada, and Japan.

\*Logs, timber, pulpwood, wood chips, waste and fuels, lumber and railroad ties, and wood-based panels.

<sup>20</sup>The figure for 1979 differs from the \$3.8 billion that the National Forest Products Association cites in *Increased Wood Products Exports: A Bonus for the Industry and Nation*, International Trade Committee (Washington, D.C.: National Forest Products Association). OTA figures are based on unpublished data from the U.S. Department of Commerce, International Trade Commission. NFPA also cites Department of Commerce data, but it is not disaggregated to permit detailed comparison.

Table 7.—U.S. Exports of Solid Wood Products, 1981

Product	Quantity (thousands)	Value (thousands of dollars)	Percent of value
Logs and timber (board ft) . . . . .	2,534,224	\$1,094,716	40.760/o
Hardwood . . . . .	157,125	91,868	3.42
Softwood . . . . .	2,377,099	1,002,848	37.34
Pulpwood (cords) . . . . .	176	9,911	0.37
Wood chips (short tons) . . . . .	3,546	290,184	10.80
Wood waste, wood fuel . . . . .	NA	12,894	0.48
Lumber and railroad ties (board ft) . . . . .	2,374,055	923,784	34.40
Hardwood lumber . . . . .	381,481	243,026	9.05
Softwood lumber . . . . .	1,903,809	655,544	24.41
Railroad ties . . . . .	88,765	25,214	0.94
Wood-based panels . . . . .	NA	354,293	13.19
Softwood plywood and veneer . . . . .	NA	189,727	7.06
Other . . . . .	NA	164,566	6.13
Total . . . . .	—	2,685,782	100.0

SOURCE U S International Trade Commission

The United States exports substantially larger quantities of raw materials (e.g., logs and chips) than most other exporters of solid wood products. There is some pressure, particularly on the American west coast, to limit log exports in favor of lumber and panels. However, while log exports may create fewer jobs per unit of volume in the United States than exports of processed products, the average dollar value of softwood logs exported to Japan is higher than the average value of exported softwood lumber.<sup>\*</sup> Log exports, therefore, are more valuable in creating foreign exchange and help to maximize the value the United States realizes on its raw materials.

### Western Europe

Twelve percent of U.S. softwood lumber exports in 1981 went to Western Europe. Although this portion is substantially smaller than in the preceding decade, for the past 30 years softwood lumber exports to this area have been increasing slowly, though erratically. Western Europe historically has imported clear Douglas-fir and southern pine lumber, but the increasing popularity of platform frame (2 x 4) construction in some countries may open markets to a wider range of sizes and grades of these softwood materials.

The most important market for U.S. hardwood lumber is Western Europe, which is a major customer for hardwood logs and veneer. U.S. exports of these products to the European Community and Spain have tripled since 1977. Given Western European tastes for fine furniture, markets for hardwood lumber and logs, particularly high-quality logs suitable for veneer, may be larger in the future.<sup>21</sup> Presently, however, some countries are concerned about oak wilt, a U.S. oak fungus which reportedly does not exist there, which could be trans-

mitted in imported goods.<sup>22</sup> Solving this problem could pave the way for more U.S. hardwood exports.

Western Europe is the biggest buyer of U.S. panel products, mostly softwood plywood. The trend toward platform frame construction already visible in the United Kingdom, is expected to create even larger markets for U.S. plywood.<sup>23</sup> The potential for this expansion is strong, particularly if efforts to reduce or eliminate Western European tariffs on plywood are successful.<sup>24</sup>

### Canada

Between 1950 and 1981, Canada's imports of lumber from the U.S. increased over sevenfold, with most of the growth in softwood lumber. Much of the lumber exported to Canada consists of species, grades, or sizes not available there—redwood, for example. In 1979, Canada accounted for 30 percent of U.S. lumber exports. Log exports to Canada, which have increased almost tenfold since 1950, account for about 10 percent of the logs that the United States sells abroad.<sup>25</sup>

With Canada so near, some U.S. producers can supply products to local Canadian markets, which in some cases may be cheaper than Canada's own goods. This situation probably will not change, but the United States undoubtedly will continue to import more solid wood products from Canada than it exports there in the foreseeable future. The United States probably will remain reliant on cheaper Canadian lumber for quite some time.

### Japan

Japan is by far the biggest Far Eastern buyer for U.S. solid wood products. Most of these im-

<sup>\*</sup>"There are several reasons why the Japanese pay higher prices for U.S. logs than for U.S. lumber. Some Japanese log imports are high value species. Also, the Japanese lumber manufacturing process produces higher value lumber than most U.S. manufacturers.

<sup>21</sup>Harold W. Wisdom, "The Export Market for Hardwoods," June 1978, p. 14-18, paper presented at the Society of American Foresters Annual Convention, Sept. 20-22, 1982, Cincinnati, Ohio, p. 14.

<sup>22</sup>National Forest products Association and the U.S. Foreign Agricultural Service, *Forest Products Industry FAS/NFPA Foreign Market Development Plan FY 82* (Washington, D. C.: National Forest Products Association, International Trade Division, Sept. 1, 1981), p. 2.

<sup>23</sup>"British Columbia Fights Back," *Timber Trade Journal*, October 1982, pp. 19-21.

<sup>24</sup>National Forest Products Association and the U.S. Foreign Agricultural Service, *Foreign Market Development Plan*, pp. 1-40.

<sup>25</sup>*Analysis of the Timber Situation*, op. cit., pp. 317-331.

ports are softwood logs, for which the United States is the largest supplier and the Soviet Union is the second largest.<sup>28</sup> The United States also exports substantial quantities of wood chips, woodpulp, and softwood lumber to Japan, along with a variety of other products, including hardwood logs and lumber, wood panels, waste paper, and pulpwood. Between 1979 and 1981, U.S. log exports to Japan, which represent over half the value of all U.S. solid wood products sent there, decreased 13 percent, while exports of all other solid wood products increased. The outlook for continued log and wood chip exports to Japan is favorable, although other suppliers in New Zealand, Canada, the eastern Soviet Union, and Chile probably will compete.

There is great potential to expand lumber exports to Japan to satisfy the nation's growing housing needs, North American standard sizes and grades of lumber, however, are not well suited to Japanese construction standards and methods, but while both the United States and Canada are aggressively promoting North American platform frame construction, only a small fraction of Japanese homes are built this way. Traditionally, the Japanese use wood as both decorative and structural components of their houses by leaving wood framing members exposed for esthetic appeal. U.S. construction grade lumber usually is not suitable for these purposes. There has been some progress in adapting Japanese inspections and standards to U.S. products, and some industry analysts see this as a promising development for increased exports of U.S. lumber to Japan.<sup>27</sup> Canada has been quite active in courting Japanese lumber markets, too, although a significant portion of the lumber Canada sends there consists of squared logs that are sawn to final dimensions at their destination. In the future, Canada probably will provide strong competition to U.S. producers. Furthermore, Canadian producers have been more willing than their U.S. counterparts to saw lumber to the metric sizes preferred in Japanese (and other world) markets.

The availability of logs to Japan is another factor that could limit progress in promoting exports of U.S. lumber. Japanese lumber is protected by tariffs, but logs are imported duty-free. Japan may continue to import mainly logs as long as it has access to them, even if it adopts Western construction methods using U.S. lumber grades.<sup>28 29</sup>

There are also opportunities for increased softwood plywood exports to Japan. These opportunities, like opportunities to export softwood lumber, depend to some extent on Japanese acceptance of platform frame construction. The Japanese plywood industry, which produces mainly hardwood plywood, is the second largest in the world and is protected by a number of tariff and nontariff barriers discussed in more detail below,

### Other Markets

Other encouraging markets for U.S. solid wood products exist elsewhere. Increased trade in these products shows promise in the Far East, particularly China. Exports of softwood logs to China have increased, which some analysts see as the first step to opening Chinese markets for other wood products. so Trade with mainland China is difficult, however, and conditions uncertain, Hong Kong, South Korea, Taiwan, and Singapore, all rapidly growing and industrializing, lack adequate forest resources, Australia and New Zealand are attractive markets for U.S. solid wood products because these countries have high purchasing power and similar business practices. Australia may offer particular near-term potential for U.S. exporters, but it has a policy encouraging self-sufficiency in forest products. New Zealand is and probably will continue to be a net exporter of wood products,

Many South American nations are heavily forested and probably will continue to protect

<sup>28</sup>*Increased Wood Products Exports*, Op. cit., p. 27.

<sup>27</sup>*Ibid.*, p. 28.

<sup>28</sup>John V. Ward, Director, International Trade, National Forest Products Association, letter to Louis Murphy, U.S. Department of Commerce, Office of International Sector Policy with attachments, Sept. 19, 1981.

<sup>29</sup>Darr, op. cit., pp. 29-30.

<sup>30</sup>Personal communication with John V. Ward, Director, International Trade, National Forest Products Association.

their own forest industries. Many of the people of South America are extremely poor, and there is a limited clientele among those wealthy enough to afford foreign goods. Even as affluence increases, cultural preferences may not stimulate much demand for wood. In Chile, for example, a wooden house is seen as a sign of poverty.

The most promising South American markets are probably Argentina and Venezuela. Argentina has a European-like culture with European housing tastes. Venezuela, strengthened by its petroleum exports, has a high standard of living and ambitious development plans. Its current housing shortage is tremendous. However, the recent drop in world oil prices have hurt Venezuela, and its potential as a major importer of U.S. solid wood products probably depends on recovery of oil markets.<sup>31</sup> The

<sup>31</sup>Hugh Love, "Latin America Emerges as Big Market for U.S. Wood Products," *Foreign Agriculture*, December 1982, p. 8.

Caribbean and Mexico also may become more important customers for the United States.

Enriched by oil export revenues, Egypt, Saudi Arabia, and the other oil exporting countries of the Arabian peninsula, have set off a huge construction boom. There is potential for growth in this Middle East market in modular or prefabricated buildings and building components as well as lumber, plywood, panels, and other solid wood products.<sup>32</sup> These countries have almost no forest resources or industries of their own, but they do have liberal trade policies. Their populations are small, however, and it is possible that these markets can be saturated quickly. They, too, have been hurt by falling oil prices, which could limit their near-term potential as solid wood importers.

<sup>32</sup>John R. Forrest, *World Trade Opportunities in Wood Products*, presented to Forest Industries Advisory Council, February 1982, p. 8.

## Barriers to U.S. Trade in Wood Products

World trade in forest products is shaped not only by the general forces of supply and demand but also by tariffs and traditional quotas, nontariff barriers or distortions, and economic and governmental performance. Since World War II, the General Agreement on Tariffs and Trade (GATT) has been very effective in reducing its members' tariffs and traditional quotas, \* and the subsequent growth of international commerce has been impressive. However, the use of nontariff barriers (NTBs) also has grown and often poses a more potent threat to free trade than tariffs and quotas. Governmental policies and worldwide economic conditions also exert a powerful influence, as the recent global recession illustrates.

### Tariffs and Traditional Quotas

GATT, both a treaty and an organization, was established in the postwar years to provide

\*Traditional quotas are formal quotas which are public and usually codified into law.

a set of negotiated rules to govern world trade. The United States, the principal creator of GATT, always has seen it as a vehicle for reducing tariffs, quotas, and other trade barriers and GATT has been successful indeed in easing both tariffs and traditional quotas of member nations. Many tariffs and quotas remain, however, and these can be very influential in determining the character of trade in forest products.

In general, tariffs and traditional quotas restrict imports of processed products, such as lumber, plywood, paper, paperboard, and panels, more than raw materials. Even nations whose forest resources are small or nonexistent often restrict imports of processed products, preferring to import raw materials such as logs, pulpwood, wood chips, and woodpulp, to capture the value added employment in processing them.

While GATT has effectively reduced the general level of tariffs, it does permit preferential

trade agreements. These can be particularly troublesome for forest products exporters in the United States. Preferential trade agreements include customs unions, common markets, and free trade associations, and provide for the reduction or elimination of tariffs or quotas from participating countries. Imports from nonparticipants are subject to quotas or regular most favored nation (MFN) rates, preventing nonmembers from competing fully in preferential areas. This is particularly important in Western Europe, where countries of the European Economic Community (EEC, or Common Market) and the European Free Trading Association (EFTA) are better able to compete in Western European markets for solid wood and paper products than the United States. Swedish papers, for example, are assessed lower tariffs in the European Community (EC) than U.S. or Canadian paper products, and as of 1984 will be assessed no tariff at all. While this places the United States at a comparative disadvantage, restructuring of Western European paper markets is expected to lead to expanded markets for North American kraft linerboard and kraft pulp.<sup>33</sup> Opportunities for increased U.S. exports of all types of paper and paperboard depend on implementation of recently negotiated tariff reductions and Western European ability and willingness to resist growing protectionist tendencies in its own paper industry. Pulp exports are not subjected to any significant tariff in the EC.

Japan also maintains tariffs on paper and paperboard. Under the latest round of GATT negotiations in the 1970's (the so-called Tokyo Round of Multilateral Trade Negotiations), the Japanese agreed to lower some tariff rates by 1987. Under strong pressure from the United States, some of these tariff reductions were accelerated. In January 1983, the Japanese cut tariffs slightly on kraft paper and paperboard, while most other wood and paper tariffs went unchanged.

The Canadian situation on paper and paperboard products is still awaiting resolution.

Under the so-called Kennedy Round of Multilateral Trade Negotiations in the late 1960's, Canada and the United States agreed to certain tariff reductions for paper products. As a result, the United States eliminated its duty on printing and writing paper and lowered tariffs on other products. Canada reduced its tariffs on printing and writing papers, but failed to bring tariffs on linerboard, bleached board, and recycled paperboard to the same level.<sup>34</sup> Furthermore, the two countries disagree on tariff reductions on other types of paper. These disagreements currently are being negotiated.

U.S. solid wood products also are affected by tariffs and quotas in the European Community. Technically, softwood plywood is duty-free but subject to a restrictive quota. Above the amount allowed by the quota, European Economic Community tariffs on softwood plywood are 11.6 percent. Recently, the French Government petitioned for a quota on imported softwood lumber, but this quota probably would be temporary if enacted.<sup>35</sup> The Tokyo Round was successful in easing some Western European barriers to solid wood products trade. By 1987, the EC's tariffs on wood products will be sharply reduced, with no tariff on logs or most types of rough lumber, a 4 percent tariff on finished lumber, and a 6 percent tariff on most veneer. Softwood plywood, however, still will be subject to a duty over quota.

Japanese tariffs on plywood and lumber are of more concern. While Japan welcomes imports of logs and some types of rough lumber duty-free, it collects tariffs on finished lumber, some veneers, plywood, millwork and molding, and particleboard ranging from 9 to 20 percent. Japan's system of small decentralized sawmills and finishing plants is one of its industries "targeted" for special protection, and progress in achieving tariff reductions probably will require some concessions from the United States. While many U.S. producers do not consider lumber tariffs a major problem, plywood duties

<sup>33</sup>"The American Paper Industry: An International Profile," *op. cit.*, p. 12.

<sup>34</sup>*Ibid.*, pp. 15-16.

<sup>35</sup>Personal communication by Julie Gorte, OTA, with William Hoffmeier, Agricultural Economist, Forest Products staff, U.S. Department of Agriculture, Foreign Agricultural Service, January 1983.

are higher, and many producers prefer that they be cut.

Other Far Eastern nations also levy tariffs that are generally higher on processed products than on raw materials.

Mexico, which is not a member of GATT, maintains strong protectionist measures and enforces high tariffs and import licensing requirements, with tariffs on forest products ranging from 10 percent on lumber to 70 percent on particleboard. Tariff barriers also tend to be strong in South America. Brazil, in order to protect its developing forest industry, maintains tariffs ranging from 45 percent on pulpwood logs to 160 percent on plywood. While some other South American tariffs are not as stringent as Brazil's, they are still high, and other import regulations often discourage wood product imports. Chile, with a 10 percent across-the-board tariff, maintains the lowest rates, but Chile is a net exporter of wood.

### **Nontariff Barriers**

NTBs or distortions are growing in importance, but they are often difficult to identify. The effects of NTBs are equally difficult to measure, but there is little debate about whether they are potent hindrances to trade in forest products. Recent additions to GATT rules established some codes of conduct regarding some NTBs, but the new codes are not comprehensive and will be hard to enforce.

Some NTBs, such as product standards, have affected forest products exports significantly. Others have been less important, but may have more impact in the future as the use of NTBs expands. There are seven types of NTBs—quantitative restrictions, nontariff charges on imports, government intervention in trade, product standards, administrative practices, discriminatory ocean freight rates, and restrictions on export-related services.

### **Quantitative Restrictions**

New-style quantitative restrictions or informal quotas on trade take many forms and have become more popular in recent years. The

most frequently used types are new forms of quotas, embargoes, orderly marketing agreements, and voluntary export restraints. For forest products, many countries use embargoes, particularly to protect domestic resources and processing industries. Indonesia, Malaysia, and the Philippines place major restrictions on exports of hardwood logs in an effort to conserve stocks. The United States does not permit exports of logs harvested from National Forest System land or the substitution of National Forest System logs for exported logs produced from private lands.

### **Nontariff Charges on Imports**

Nontariff charges on imports often take the form of taxes levied at various points in the product's distribution channel. Both Western Europeans and the Japanese levy value added taxes. In Sweden and Norway, where tariffs are fairly low, stiff value added taxes are levied on both domestic and foreign forest products.

### **Government Participation in Trade**

Government participation in trade can involve countertrade (a form of barter), purchases by national enterprises or trading companies, and government procurement policies. None of these is a significant barrier to U.S. forest products exports at present, but countertrade in particular could become much more important in the future. Countertrade consists of agreements, usually between nations, to purchase certain quantities and types of products from each other. These arrangements are becoming much more common in East-West trade, and many Communist countries prefer countertrade arrangements to other types of trade. A countertrade agreement between Japan and the Soviet Union includes the exchange of Japanese construction machinery for Siberian timber. The Chinese have shown a preference for countertrade as well and may want to link future imports of forest products to exports of Chinese goods. The Japanese and Western Europeans have been willing to engage in countertrade agreements with Communist nations, while the United States has not. Since countertrade agreements often freeze out



other suppliers, increasing use of this technique could deter U.S. exports of solid wood and pulp and paper products.

### Product Standards

Health, safety, and other product standards often limit imports, although not all product standards are developed and used specifically to block imports. This type of NTB is particularly important in forest products. Standards can inhibit trade in many ways. Some are difficult or expensive for foreign producers to meet; some countries enforce standards, but do not publish them. Some change standards frequently, creating uncertainty for foreign producers interested in exporting. Finally, some standards are simply interpreted in arbitrary ways. The Japanese generally are acknowledged to use product standard barriers much more frequently than most other nations.

Plywood is one of the U.S. products most adversely affected by current standards. For example, German standards on preservatives restrict the types of plywood that are imported from the United States. Japanese standards for plywood knots, adhesive strength, and “white pockets”—fungus remnants in Douglas-fir plywood—have dampened U.S. plywood sales. These standards recently have been loosened, but they still may limit U.S. plywood exports to Japan. Significant reduction of these plywood trade barriers could benefit substantially both Pacific Northwestern and Southern producers.

Standards also are troublesome for U.S. paper producers. EEC has agreed, under the Multilateral Trade Negotiations, to reduce tariffs on kraft linerboard, but will not apply the reduction if the product contains 20 percent or more hardwood pulp. Most U.S. linerboard currently meets this ceiling, but industry trends have led to greater use of hardwood pulp. As a result, this standard may be more restrictive in the future,

### Administrative Practices

The rules that a country establishes can act as barriers to trade, as can the way these rules

are implemented and enforced. The most common types of administrative practices that can hinder trade include arbitrary methods of customs valuation, arbitrary product classification, inspection procedures, and licensing procedures. These barriers, which are used by nearly all nations, undoubtedly affect forest products trade. Mexico, for example, recently imposed new licensing requirements which effectively reduce imports of U.S. paper products. Recent revisions to GATT include codes on customs valuation, product classification, and import licensing procedures, but the details of these rules are not yet developed and their eventual impact is unknown.

### Ocean Freight Rates

One-way ocean freight rates for certain commodities usually are set by conferences of nations. Many U.S. producers maintain that these rates discriminate against them. In fact, the American Paper Institute lists higher U.S. shipping costs as a disincentive to exporting certain grades of paper, particularly printing, writing, and specialty papers. so

Recent proposed changes in the regulation of ocean-liner conferences also concern U.S. paper producers. The 98th Congress is considering legislation that would largely exempt ocean-liner conferences from antitrust laws and which, if enacted, might result in significantly higher shipping rates in the view of some U.S. analysts.

### Restrictions on Export-Related Services

Exporters require a broad range of services if they are to market their products successfully in overseas markets. Many countries have barriers against American banks and insurance companies and also may limit the ability of foreign firms to get local financing and insurance. While these barriers do not necessarily discriminate against any particular country or product, their existence may inhibit U.S. exports of solid wood and paper products.

<sup>10</sup>“The American Paper Industry: An International Profile,” *op. cit.*, p. 10.

## Other Factors Affecting Exports of Wood Products

Tariffs, quotas, and NTBs undoubtedly curb the ability of U.S. producers to export solid wood and pulp and paper products, but, while removal of these distortions would alter the nature of international commerce, the most dramatic stimulus to trade would be the improvement of the global economy. In all, there are five important factors that affect the volume and type of products traded—global economic conditions, currency exchange rates, private business attitudes, government policies that hinder exports, and government assistance to exporters.

### Global Economic Conditions

In recent history, it has become increasingly difficult for nations to maintain separate economic identities. One-seventh of all U.S. jobs now depend on exports, and the situation is similar in most of the world's developed economies. The current global recession has damaged nearly all segments of the wood industry (although exports of most paper products have performed remarkably well under such adverse conditions) and has probably hurt U.S. wood exports far more than have NTBs. Economic recovery is likely to stimulate offshore demand for U.S. forest products much more than the removal or reduction of any trade barrier, although this is not meant to minimize the importance of efforts aimed at easing those barriers.

The recession is complicated further by the world financial situation. High interest rates, largely a function of U.S. monetary and fiscal policy, mean that Third World countries heavily in debt are having serious problems refinancing those debts. Many are turning for help to the International Monetary Fund, which will impose austerity programs in return for financial assistance. While this makes a certain degree of sense, it also makes it harder for these countries to import goods or to stimulate their own economies. It also makes it more difficult for U.S. producers to penetrate these markets.

## Currency Exchange Rates

The value of the dollar relative to other currencies affects the prices and competitiveness of American goods overseas. For the past few years, the dollar has been very strong on world markets, rising sharply against the yen, the deutsche mark, and the franc between June 1980 and November 1982. Although it has fallen slightly since then, the dollar still is highly valued, particularly against the yen, considering the U.S. trade deficit with Japan,

The dollar is likely to remain strong as long as U.S. interest rates are significantly higher than foreign interest rates. Prolonged balance-of-payments deficits in the United States ordinarily would lead to devaluation of the dollar against other currencies, but this has not happened. High interest rates in the United States and the huge Eurodollar market have overwhelmed other currency adjustments, and, until these adjustments are made, U.S. exporters will have a disadvantage on world markets. U.S. interest rates are particularly high compared with those in Japan, which keeps its own interest rates low by preventing foreign entry into Japanese financial markets.<sup>37</sup>

### Private Business Attitudes

World perceptions of private U.S. business attitudes can have a major impact on trade. Until recently, the U.S. forest products industry was believed to be somewhat unreliable or unwilling to make long-term commitments that many importers want. According to one analysis, the U.S. forest products industry has never made a concerted effort to export its products, but is now beginning to see offshore markets as a strategy for survival.<sup>38</sup> Responding primarily to the enormous demands of the domestic market for forest products, the industry has tended to view exports as something to do with its products during downturns in the business

<sup>37</sup>Norman Gall, "Black Ships Are Coming?" *Forbes*, Jan. 31, 1983, p. 75.

<sup>38</sup>Kathleen K. Wiegner, "Forest Products," *Forbes*, Jan. 3, 1983, p. 110.

cycle,<sup>39</sup> and has gained a reputation for losing interest in offshore customers when domestic demand picks up. In part, foreign protectionist practices limit imports of U.S. products, especially during downturns, but the reputation of U.S. producers still persists.

This “American Market Syndrome” is changing. The National Forest Products Association, representing a large portion of the Nation’s solid wood products sector, has launched a cooperative effort to develop foreign markets for lumber, plywood, and panels with the U.S. Department of Agriculture’s (USDA) Foreign Agricultural Service (FAS). The project largely involves working with foreign governments in removing or reducing NTBs to trade in solid wood and promoting the use of U.S. wood products abroad. Over the last three decades, FAS has had an excellent record in promoting agricultural exports and its success bodes well for the future of exports of solid wood products.

A key element in U.S. producers’ establishing their reliability as world suppliers of forest products is their performance when domestic demand rises. The commitment of these producers to foreign markets has yet to be fully tested. As the U.S. economy recovers and domestic demand for wood products increases, the behavior of U.S. firms that have expressed interest in foreign trade will be watched carefully.

### Government Policies That Hinder Exports

Government as well as industry shapes world perceptions of the United States as an unreliable trading partner. Increasing willingness by the U.S. Government to use export controls—embargoes, sanctions, and other export bans—has hurt U.S. producers. While the Federal Government has not applied trade sanctions specifically in forest products, its readiness to use them as an instrument of foreign policy (or as a weapon) probably has harmed all U.S. exporters to some degree.

Taxation of foreign earned income also may hamper the ability of U.S. producers to promote products overseas. The United States is the only major industrial country that taxes on the basis of citizenship rather than residence. Nationals of other countries generally are taxed only in the country where they live. Because American citizens must pay U.S. taxes on income earned abroad, it is very expensive for U.S. companies to keep American executives overseas, and to maintain marketing support in foreign countries.

Uncertainty over the interpretation of the Foreign Corrupt Practices Act may also hinder exports.

### Government Assistance to Exporters

Several U.S. Government agencies affect trade policies and offer assistance to exporters. They include:

- the Office of the U.S. Trade Representative, a cabinet-level official who represents the United States in both GATT and bilateral trade negotiations;
- the Department of State, which is involved in trade negotiations;
- the Department of Commerce, which maintains the Foreign Commercial Service and otherwise assists U.S. exporters and which also administers export controls;
- USDA, which maintains FAS, now assisting wood products exporters;
- the Department of Treasury, which helps set international economic and monetary policy;
- the National Security Council and the Department of Defense, both of whom play an active role in policies on export controls; and
- others who provide assistance, including the Export-Import Bank, the Small Business Administration, the Overseas Private Investment Corporation, and USDA’s Commodity Credit Corporation.

As noted, FAS recently has been authorized to help solid wood products exporters. However, there is no comparable assistance at present available to U.S. paper producers. The For-

<sup>39</sup>*Increased Wood Production Exports*, op. cit., p. 3.

Foreign Commercial Service, while it is empowered to provide this service, is organized along regional rather than commodity lines and probably is unable to provide the type of export assistance offered by FAS. While there is no legal restraint on FAS offering assistance to U.S. paper producers, the agency is currently too understaffed both in the United States and abroad to provide this additional service. Nevertheless, the paper industry has shown little interest in FAS assistance to date.

The U.S. Government does not provide the level of export assistance that some other governments do. Assistance from the U.S. Trade Representative and the Departments of Commerce and Agriculture are available, but no agency provides the kind of comprehensive information and assistance given, for example, by the Japan External Trade Relations Organization (JETRO). Generally, the U.S. Government does not confer direct export subsidies that would be acceptable within the GATT framework. More common than direct finan-

cial assistance are certain forms of tax assistance. One such program, the Domestic International Sales Corporation (DISC), provides special subsidies for export sales that allow corporations to defer some taxes. This program has been found illegal by a GATT tribunal under the Tokyo Round subsidies code, and the Reagan administration has committed itself to a reappraisal of the program as a result. Abolition or dilution of DISC, according to the American Paper Institute, could hinder future plans for exports.<sup>40</sup>

Another program that can aid U.S. producers in expanding exports is a new law allowing American firms, including banks, to form export trading companies. It is intended to help small and medium-sized companies band together in order to export. Certain exemptions from current antitrust law may permit new forms of cooperation, but it is too early to assess the impact of this program.

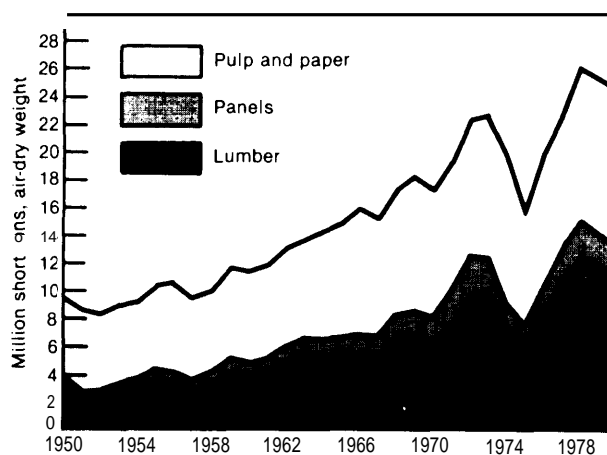
@The American Paper Industry: An International Profile," op. cit., p. 8.

## U.S. Imports of Forest Products

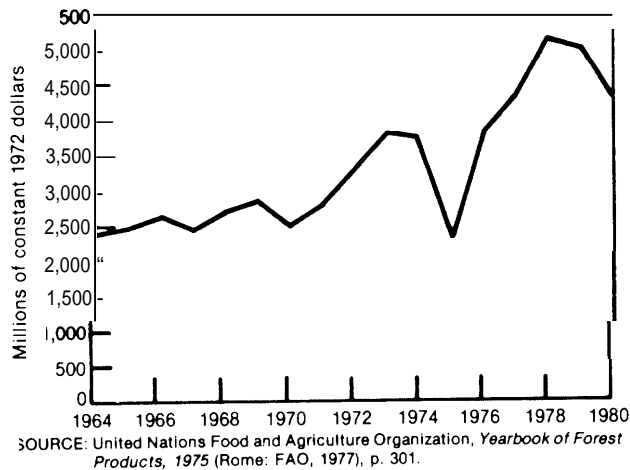
The tonnage of U.S. imports of forest products has increased over 250 percent since 1950 (fig. 7). The constant (deflated) value of wood imports has increased by 75 percent since 1964 (fig. 8). While the United States has been a net importer of forest products for at least 20 years, the balance-of-payments deficit has narrowed sharply. In 1979, the deficit was over \$2.6 billion, but dropped to less than \$1.7 billion in 1982. In 1982, for the first time in recent history, the United States became a net exporter of solid wood products (roundwood, sawwood, and panels), primarily because the value of imports dropped more than the value of U.S. exports during the recent recession. The United States remained a net importer of pulp and paper, although the trade deficit in pulp and paper dropped by more than \$400 million.

<sup>40</sup>U.S. Department of Commerce, International Trade Commission, unpublished data, 1983.

Figure 7.—Tonnage of U.S. Wood Imports, by Product, 1950-79



SOURCE: U.S. Department of Agriculture, Forest Service, *An Analysis of the Timber Situation in the United States 1952-2030*, Forest Resource Report No. 23 (Washington, D. C.: U.S. Government Printing Office, December 1982), pp. 302-303.

**Figure 8.—Value of U.S. Wood Products Imports, 1964-80**

### Solid Wood Products

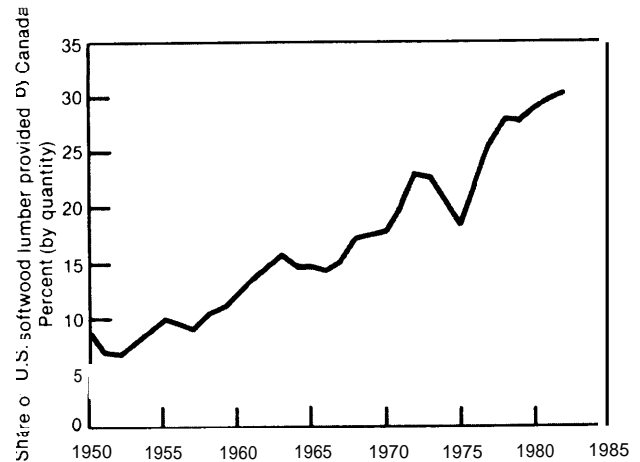
In 1982, the value of U.S. imports of solid wood products\* totaled nearly \$2.3 billion, down from over \$3.5 billion in 1979, with almost 70 percent of 1982 imports of solid wood products consisting of softwood lumber from Canada (table 8). For over 30 years, imported Canadian lumber has accounted for a growing share of the volume of U.S. lumber consumption, rising from less than 7 percent in the early 1950's to over 30 percent in 1982

\* Logs and timber, pulpwood (including chips), wood wastes and fuels, lumber and railroad ties, and wood-based panels.

(fig. 9), although the tonnage decreases during downturns in U.S. homebuilding activities.

The current recession has caused the volume of all imported lumber to drop from 11.6 billion board ft in 1978 to 8.9 billion board ft in 1982. Declining lumber imports between 1981 and 1982 accounted for over 70 percent of the total decrease in U.S. imports of solid wood products.

The U.S. probably will continue to be a major importer of solid wood products. No sig-

**Figure 9.—Relative Importance of Canadian Softwood Lumber Imports, 1950-82****Table 8.—U.S. Imports of Solid Wood Products, 1982**

Product	Quantity (mbf <sup>a</sup> )	Value (thousands of dollars)	Percent of total value
Logs and timber . . . . .	117,032	\$26,430	1.2 %
Hardwood . . . . .	18,268	3,500	0.2
Softwood . . . . .	98,764	22,930	1.0
Pulpwood (including chips) . . . . .	NA	56,248	2.5
Wood waste, fuel . . . . .	NA	8,446	0.4
Lumber and railroad ties . . . . .	9,200,075	1,665,312	73.2
Softwood lumber . . . . .	8,973,652	1,567,931	68.9
Other . . . . .	226,423	97,381	4.3
Wood-based panels . . . . .	NA	519,585	22.8
Hardwood veneer and plywood . . . . .	NA	402,798	17.7
Other . . . . .	NA	116,787	5.1
Total . . . . .		\$2,276,021	100.0 %

ambf = million board feet

SOURCE: U.S. International Trade Commission

nificant changes in patterns of U.S. imports are foreseen,<sup>42</sup> although the declining availability of tropical veneer species from Southeast Asia may limit U.S. hardwood imports before the end of the century.

### Pulp and Paper Products

In 1982, the United States imported woodpulp and paper products worth \$5.3 billion, and its balance-of-payments deficit in these products was over \$1 billion, considerably less than in 1979 when net imports were over \$1.4 billion. Imports of fine papers (mainly news-

print) accounted for over 60 percent of U.S. pulp and paper imports in 1982, and woodpulp accounted for almost 30 percent (table 9). About 90 percent of all pulp and paper imports came from Canada.

No major changes in the patterns of U.S. imports of pulp and paper are expected. Although the United States also is exporting increasing amounts of woodpulp and paper, many States of the Northeast, the Great Lakes, and the Midwest are deficient in softwoods needed to manufacture newsprint. The proximity of Quebec and Ontario, with large softwood resources, gives Canadian producers advantages in exporting these products to needy U.S. markets,

<sup>42</sup>Analysis of the Timber Situation, Op. Cit., p. 102.

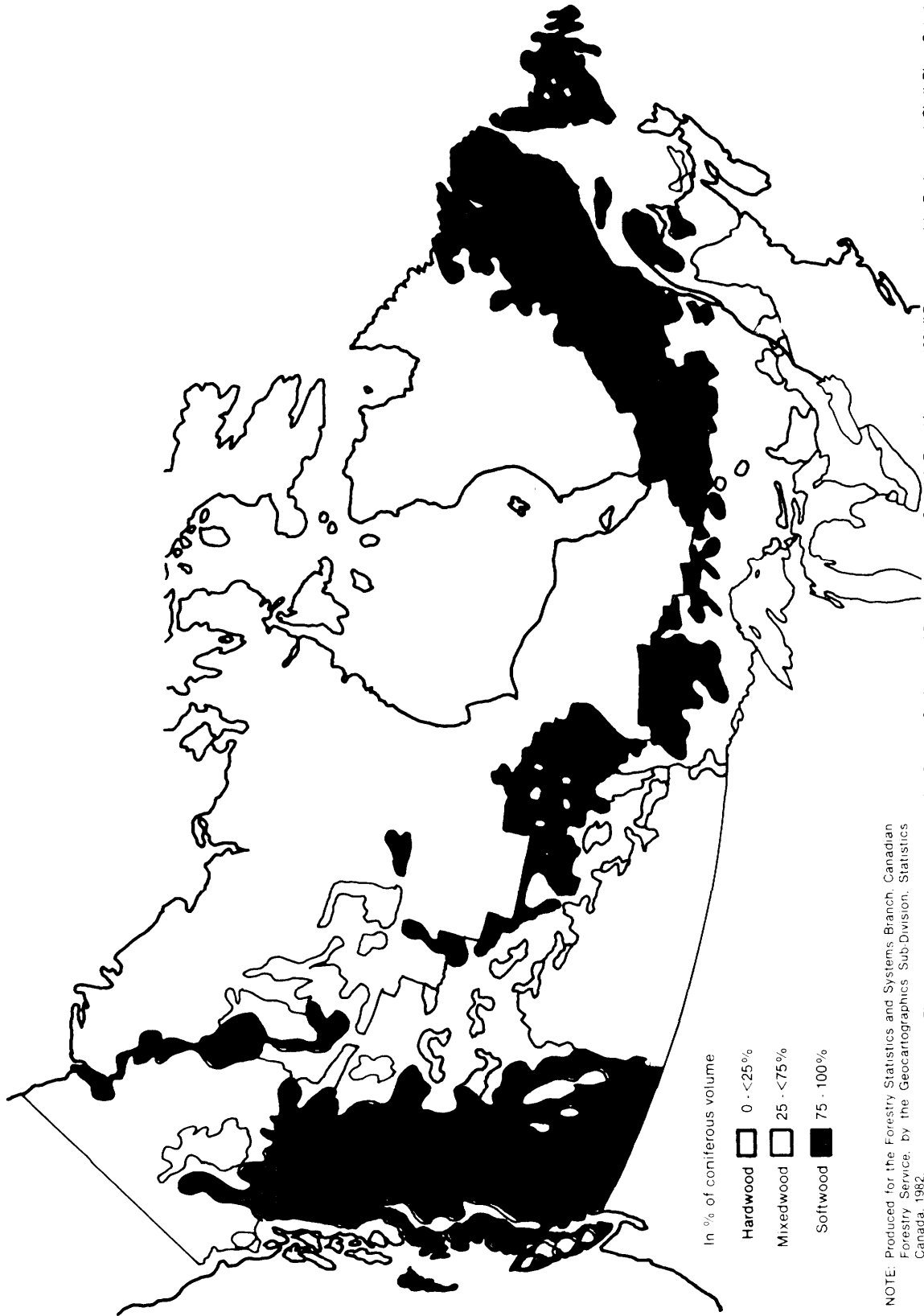
Table 9.—U.S. Imports of Pulp and Paper Products, 1982

Product	Quantity (st <sup>a</sup> )	Value (thousands of dollars)	Percent of total value
Woodpulp . . . . .	3,656	\$1,493,241	28.1 0/0
Paper products . . . . .	NA	3,826,595	71.9
Waste paper . . . . .	132	24,291	0.5
Building paper . . . . .	187	44,099	0.8
Industrial			
Paperboard . . . . .	76	23,173	0.4
Fine papers . . . . .	NA	3,328,696	62.6
Miscellaneous <sup>b</sup> . . . . .	NA	406,336	7.6
Total . . . . .		\$5,319,985	100.00/0

<sup>a</sup>st - short tons

<sup>b</sup>Industrial papers, packaging, and miscellaneous paper

SOURCE. U.S. International Trade Commission.



NOTE: Produced for the Forestry Statistics and Systems Branch, Canadian Forestry Service, by the Geocartographics Sub-Division, Statistics Canada, 1982.

Photo credit: Canadian Forestry Service, Forestry Statistics and Systems Branch, "Canada's Forest Inventory, 1981," Department of the Environment, Chalk River, Ontario

Canada's softwood forests are well located = satisfy many Northeastern U.S. wood markets