LOG, LUMBER, AND VENEER HARDWOOD EXPORT MARKETS[1/]

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Abstract.--Dramatic changes have taken place in the hardwood export market in the past 10 years. World demand for U.S. hardwood logs, lumber, and veneer have increased by more than 100 percent. Exports to Europe and the Pacific Rim, in particular, have grown significantly. A quantitative assessment of the U.S. export situation is presented. Also addressed are such issues as the importance of exports to our primary industry and likely short-term future developments in the hardwood export market.

Keywords: hardwood products, world markets, trade

INTRODUCTION

The following is a discussion of past and present demand for U.S. hardwoods on the export market. Included is a summary of the export situation, discussion of major U.S. export products and their importance, detailed information on major export markets for U.S. hardwoods, and likely short-term future developments in the hardwood export market. Specifically, we will explain why, during the last 10 years, the United States has become a major supplier of hardwood products (figs. 1-3) to the international marketplace. And why, as the latest world data show, the United States in 1981 ranked No. 4 in the world in hardwood lumber exports and No. 8 in hardwood log exports.

HARDWOOD EXPORTS ARE IMPORTANT

Exports have become increasingly important to our primary processing industry (fig. 4). In 1979, the United States produced about 7.3 billion board feet of hardwood lumber, of which about 294 million board feet--or 4 percent of production--were exported. In 1983, the U.S. hardwood production totaled 5.5 billion board feet, of which about 448 million board feet--or 8.2 percent of production--were exported. Even more impressive is that the estimated value of these hardwood lumber exports in relation to total lumber shipments grew from 10.7 percent in 1979 to 21. cent in 1983 (fig. 5). In other words, mor $1 of every $5 received by the hardwood saw industry in 1983 was a result of export sal This trend continued in 1984.

MARKETING OF EXPORT MATERIAL

Product specifications for logs, lumbe veneer on the export market often are quite ferent from those for products sold on the tic market. Log exports are primarily of v quality. Export veneer is cut thinner and ped and packaged differently.

Hardwood export lumber, in particular, the most different. It is sold kiln dried, coated, branded, labeled, strapped, and prc with corner cardboard. Lumber is reinspect ter drying to remove badly dried boards and sometimes completely wrapped with plastic f protection. Most bundles are accompanied b tally sheet showing the measurement of all Most export lumber is shipped in protective tainers that also provide much needed secur whereas most domestic shipments are made or bed trailers with tarps to protect kiln-dri lumber from the elements.

MARKETS HAVE BEEN SHIFTING AND GROWINC

In our discussion of individual market Pacific Rim market is emphasized because it relatively new market compared with the Eur and Canadian markets.

Ten years ago, Pacific Rim demands for hardwood logs, lumber (this includes some r dimension), and veneer were minor (Table 1) 1975, Canada purchased more than 71 percent

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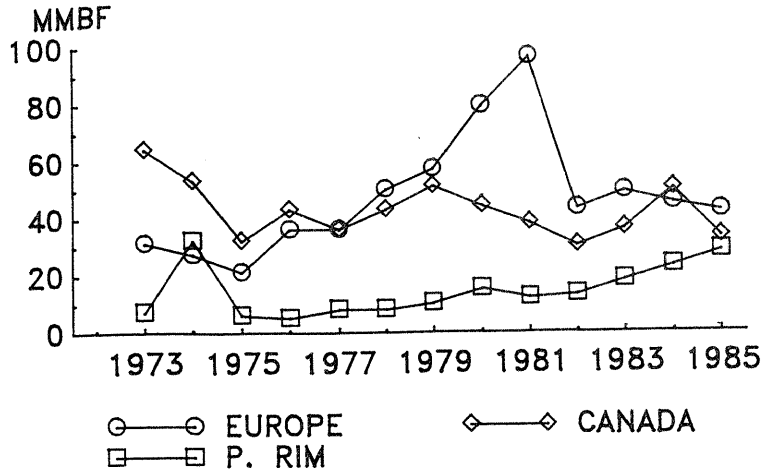


Figure 1.--U.S. hardwood log exports.

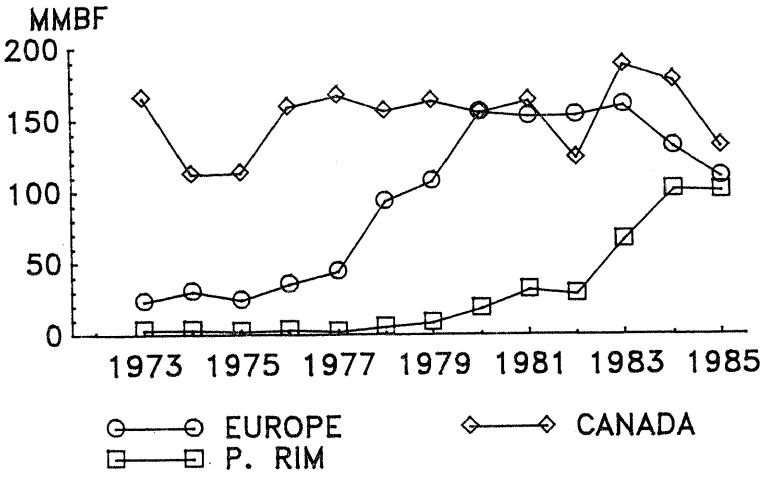


Figure 2.--U.S. hardwood lumber exports.

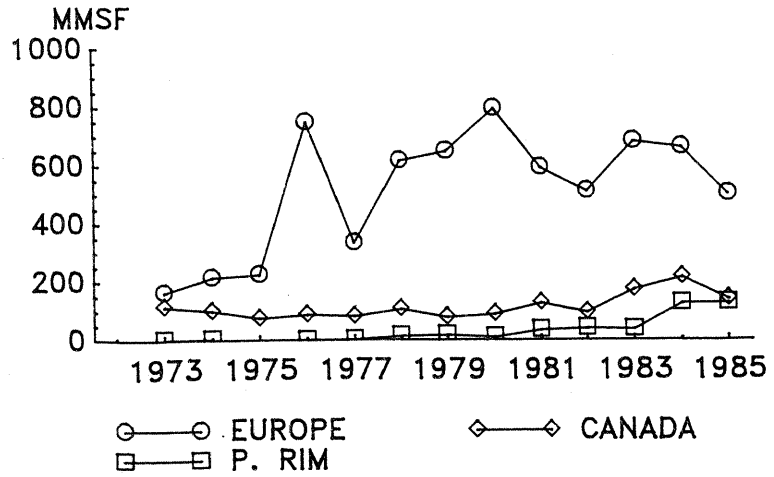
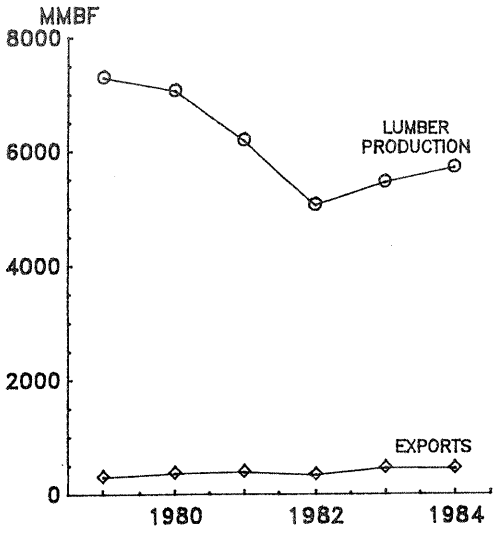
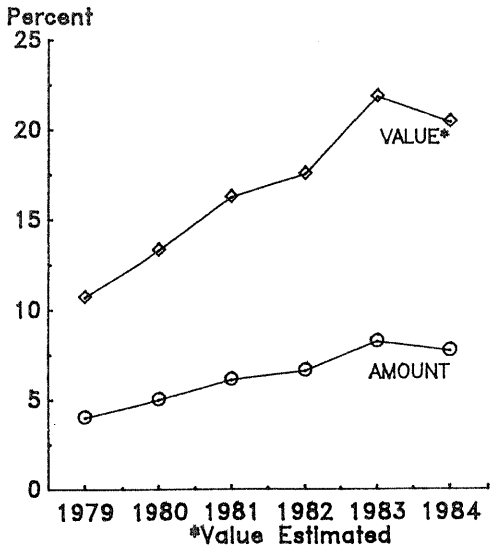


Figure 3.--U.S. hardwood veneer exports.



	1979	1980	1981	1982	1983	1984
HARDWOOD EXPORTS	294	294	379	334	448	441
LUMBER PRODUCTION	7294	7294	6194	5062	5454	5715

Figure 4.--U.S. sawn hardwoods.



YEAR	AMOUNT	VALUE
1979	4.0	10.7
1980	5.0	13.3
1981	6.1	16.2
1982	6.6	17.5
1983	8.2	21.8
1984	7.7	20.4

Figure 5.--Percent of sawn hardwoods exported.

Table 1.--Hardwood (log, lumber, and veneer) exports for 1975, 1980, and 1984 (values in million board feet).

Destinations	1975 exports	1980 exports	1984 exports
Canada	147	202	233
Europe	51	256	194
Pacific Rim	8	33	128
Total	206	491	555

Source: U.S. Department of Commerce.

our exports; Europe was second with nearly 25 percent, leaving the Pacific Rim with less than 4 percent. (Smaller amounts--generally of less than 1 percent--have been and are being shipped to other parts of the world.) By 1980, Europe had taken the No. 1 spot, consuming 52 percent of our exports. Canada's share dropped to 41 percent, and the Pacific Rim share increased to nearly 7 percent. Figures for 1984 show the Pacific Rim to be an important participant in the world marketplace, demanding 23 percent of our hardwood log, lumber, and veneer exports. At the same time, European demands dropped to 35 percent and Canadian demands remained steady. Figure 6 shows the growth in hardwood log, lumber, and veneer exports to the Pacific Rim area.

Why have hardwood exports to the Pacific Rim increased at such a tremendous pace? Or, stated another way, why have our hardwood producers turned to this market to sell their products? And why have they been so successful in the last 5 years? Several factors can be credited.

During this period, sales in Europe and Canada were hurt by the increased value of the U.S. dollar and slowed economic growth in these countries. At the same time, U.S. imports of furniture and furniture parts were increasing, reducing domestic demand for logs, lumber, and veneer. On the other side of the globe, log embargoes by Indonesia, Malaysia, Singapore, and the Philippines to Taiwan and Korea caused a restructuring and redirection of Taiwanese and Korean industry from the manufacture of plywood to manufacture of furniture. This created different material needs that required new sources of supply and new product markets. Japan's hardwood consumption also was increasing, putting pressure on that country's limited hardwood resources and causing the Japanese to turn to America since our woods are similar in many respects to those of Japan and are readily available.

To follow is a closer look at recent U.S. hardwood exports to the Pacific Rim, Western Europe, and Canada.

PACIFIC RIM MARKET

The Pacific Rim (basically Taiwan, Japan, and Korea) has become an important trading area for U.S. hardwood products. For the last 5 years, shippers from all regions--eastern, western,

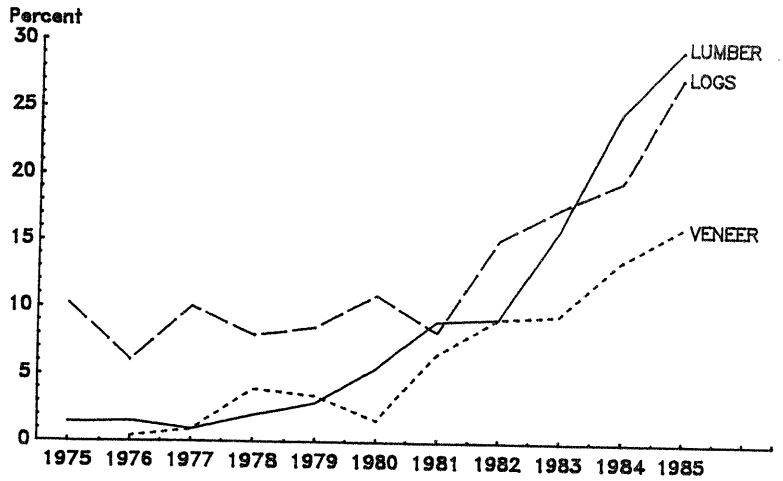


Figure 6.--Pacific Rim share of hardwood exports 1975-1985.

ıthern, northern, and Appalachian--of the United ıtes have increased hardwood exports to the Pa- ·ic Rim area. These shipments include a greater ·iety of species and lesser percentages of red white oak than is shipped to Europe.

Exports of logs, lumber, and veneer to the ific Rim nations are shown in Table 2 (dollar ues in all tables are F.A.S. port of export). major recipients were Japan and Taiwan. In an, U.S. hardwoods substitute for Japanese dwoods in fine hardwood products. In Taiwan Korea, U.S. hardwoods are used in furniture ducts that, in turn, are exported to the United tes, Canada, Europe, and Japan. In general, hardwood is not competing with Southeast Asian lwood products. Let's take a closer look at ›rts to Japan and Taiwan.

Exports to Japan

On a value basis, U.S. hardwood exports to Japan in 1984 totaled $44.9 million (Table 3). Of this total, 79 percent was in lumber, 20 percent in logs, and 1 percent in veneer. On a quantity basis, 86 percent was in lumber, 14 percent in logs, and less than 1 percent in veneer.

Unlike the European and Canadian hardwood lumber export markets, oak does not dominate U.S. exports to Japan. Two-thirds of our lumber exports are listed as "other" by the U.S. Department of Commerce, and 68 percent is shipped in dressed form. It is generally believed that most of this "other" material is red alder produced in the Pacific Northwest. The remainder of the "other" category is believed to be predominately yellow-

Table 2.--U.S. hardwood product exports to Pacific Rim nations in 1984.

	Logs		Lumber		Veneer	
	Quantity (M bm)	Value (M $)	Quantity (M bm)	Value (M $)	Quantity (M ft^2)	Value (M $)
Australia	10	13	1,843	1,515	16,464	636
China	-	-	31	24	-	-
Hong Kong	42	44	1,571	1,138	133	34
Japan	8,429	9,014	50,750	35,515	3,154	376
S. Korea	2,077	3,115	2,683	2,153	21,066	2,337
New Zealand	-	-	115	91	180	39
Pac. Islands	-	-	44	36	-	-
Philippines	-	-	333	254	-	-
Singapore	829	1,114	1,183	959	8,149	761
Taiwan	11,930	9,011	42,756	33,855	70,175	5,526
Total	23,317	22,311	101,309	75,540	119,321	9,709

Source: U.S. Department of Commerce.

poplar, black cherry, and cottonwood. Information in this category is not available on the exact species or quantities by species.

Most lumber exports are destined for use in furniture or cabinet products, as showings at the recent 1985 Tokyo Furniture Show confirmed. Fine grained hardwoods and oak were the predominant woods in furniture exhibits, but the oak seemed to be mostly Japanese white oak. Japanese manufacturers generally restrict use of U.S. oak to legs and trim work, saving the more expensive and preferred Japanese oak for the larger, more visible surfaces.

The Japanese furniture manufacturers who use oak prefer and pay a premium for quarter-sawn lumber and/or quarter-sliced veneer with tight (narrow) growth rings. Many Japanese primary producers cut and separate quarter- and flat-sawn material. The material is then sold separately to the furniture industry.

Japanese furniture manufacturers also like to use uniform, light-colored, fine-grained hardwoods that can be given a natural or stained finish. Several U.S. hardwoods meeting these criteria were evident at the Tokyo Furniture Show. They include red alder, black cherry, cottonwood, maple, and sap-one-side yellow-poplar. Part of U.S. promotional efforts are aimed at introducing additional hardwoods such as gum, aspen, and soft maple.

Exports to Taiwan

In 1984, nearly $50 million worth of hardwood logs, lumber, and veneer were shipped to Taiwan from U.S. ports (Table 4). As with Japan, the order of importance based on value was lumber (70 percent), logs (19 percent), and veneer (11 percent). On a quantity basis, 75.5 percent was lumber, 21 percent log, and 3.5 percent veneer exports.

Unlike shipments to Japan, shipments to Taiwan were mainly red and white oak. On a quantity basis, 93 percent of the lumber, 84 percent of the logs, and 62 percent of the veneer were oak

Table 3.--U.S. log, lumber, and veneer exports to Japan in 1984.

Species	Logs		Lumber		Veneer	
	Quantity (M bm)	Value (M $)	Quantity (M bm)	Value (M $)	Quantity (M ft^2)	Value (M $)
Birch	26	23	in "Other"		0	0
Maple	164	120	4,527	1,629	463	49
Red oak	721	489	8,107	5,903	731	104
White oak	864	797	5,000	4,082	0	0
Ash/Hickory	in "Other"		1,695	1,306	in "Other"	
Walnut	636	1,433	331	336	80	30
Other	6,018	6,151	31,090	22,260	1,880	193
Total	8,429	9,013	50,750	35,516	3,154	376

Source: U.S. Department of Commerce.

Table 4.--U.S. log, lumber, and veneer exports to Taiwan in 1984.

Species	Logs		Lumber		Veneer	
	Quantity (M bm)	Value (M $)	Quantity (M bm)	Value (M $)	Quantity (M ft^2)	Value (M $)
Birch	6	3	in "Other"		8,312	185
Maple	252	105	517	170	61	11
Red oak	8,780	6,426	29,988	23,232	40,580	3,444
White oak	1,202	1,212	9,842	8,867	2,870	395
Ash/Hickory	in "Other"		868	592	in "Other"	
Walnut	141	380	131	100	553	82
Other	1,549	884	1,410	893	17,799	1,409
Total	11,930	9,010	42,756	33,854	70,175	5,526

Source U.S. Department of Commerce.

exports--the majority being red oak. Remaining shipments were of woods such as birch, ash, walnut, and cherry.

Why the great demand by Taiwanese manufacturers for American oak? Taiwan's major furniture producers are export oriented, we are the largest single market in the world for furniture, and oak furniture is in the greatest demand in the United States. Therefore, the Taiwanese manufacturers want and need oak. Japanese oak is too expensive and is available only in limited quantities, so the Taiwanese have little recourse other than to turn to the United States.

Rubberwood and other Southeast Asian species also are being used in furniture parts and furniture produced in Taiwan for export. The recent Taiwan Furniture Show in Taipei and the fall Southern Furniture Show in High Point, NC, provided ample evidence of this. However, it seems that the companies using the greatest amount of rubberwood are those selling directly to retailers in the United States and not those dealing with U.S. furniture manufacturers. Most of the companies selling to U.S. furniture manufacturers are using U.S. hardwoods that American consumers are accustomed to seeing in the furniture products manufactured domestically by the importing companies.

WESTERN EUROPEAN MARKET

The Western European market is a major trading area for U.S. hardwood logs, lumber, and veneer (Table 5). Leading purchasers were West Germany, Belgium, Italy, United Kingdom, France, and the Netherlands.

Species shipped to Europe (Table 6) were mostly red and white oak, followed by "other," walnut, and maple. White oak logs made up two-thirds of the logs exported to Europe; these were high-quality veneer logs (Table 6). White oak veneer, going primarily to West Germany, also is popular. The Europeans are using U.S. hardwoods in fine hardwood products such as furniture and cabinets. In addition, they are slicing logs for architectural veneered panels, and using solid wood for high-quality millwork and other products.

CANADIAN MARKET

Exports of hardwood products to Canada for 1984 are shown in Table 7. Not included are transshipments being made through Canada by U.S. producers to other parts of the world to take advantage of lower shipping costs or more convenient ports. Included, however, is lumber that is re-exported by Canadians mostly to Europe, and export veneer manufactured from our logs. Some of the veneer manufactured by Canadians from imported U.S. logs is subsequently purchased by American companies.

Canadians are purchasing a wider variety of species than are Western Europeans (Table 8). For logs, leading species purchased are red oak and birch. For lumber, red oak is No. 1 followed by "other." White oak, ash/hickory, maple, and walnut lumber also is purchased in large quantities. For veneer, on a volume basis, "other" is first followed by red oak; on a dollar basis, red oak is first followed by "other." Substantial quantities of white oak and walnut veneer also are imported by the Canadians. Some of the wood purchased by Canadian firms is converted into furniture and cabinets for sale in the United States. Therefore, as with the Taiwanese, Canadian demand for U.S. hardwood is influenced somewhat by what is ultimately "selling" in the United States.

SUMMARY

Canada is the largest importer of U.S. hardwoods. However, it does re-export some of our

Table 5.--U.S. hardwood product exports to Western European nations in 1984.

	Logs		Lumber		Veneer	
	Quantity (M bm)	Value (M $)	Quantity (M bm)	Value (M $)	Quantity (M ft²)	Value (M $)
Belgium	2,998	3,889	25,935	20,408	29,134	2,910
Denmark	15	41	2,173	1,850	14,022	924
France	1,104	1,611	7,981	7,444	14,046	1,269
Germany, W.	28,769	37,079	29,017	25,788	404,473	36,072
Ireland	12	16	1,474	1,405	5,710	136
Italy	4,201	5,732	18,023	15,567	38,298	4,006
Netherlands	1,602	1,678	13,468	10,174	364	34
Norway	-	-	2,284	2,335	9,956	845
Spain	430	719	4,758	3,898	7,941	566
United Kingdom	4,551	1,748	22,374	15,997	42,371	3,407
Total	43,682	52,513	127,487	104,866	566,315	50,169

Table 6.--U.S. log, lumber, and veneer exports to Western Europe in 1984.

Species	Logs		Lumber		Veneer	
	Quantity (M bm)	Value (M $)	Quantity (M bm)	Value (M $)	Quantity (M ft^2)	Value (M $)
Birch	8	2	-	-	-	-
Maple	2,463	1,270	4,203	1,308	19,894	913
Red oak	12,296	7,253	55,205	41,771	116,774	9,421
White oak	21,239	31,026	51,832	48,683	347,321	33,500
Ash/Hickory	-	-	6,680	4,137	-	-
Walnut	3,029	5,540	2,066	1,965	45,297	4,812
Other	5,819	8,403	11,183	10,038	107,097	7,327
Total	44,854	53,494	131,169	107,902	636,383	55,973

Source: U.S. Department of Commerce.

Table 7.--U.S. hardwood product exports to Canada in 1984.

Product	Quantity	Value (M $)
Logs	49,822 M bm	15,650
Lumber	176,634 M bm	79,210
Veneer	211,152 M ft^2	13,727
Other		11,248
Total		119,835

Table 8.--U.S. log, lumber, and veneer exports to Canada in 1984.

Species	Logs		Lumber		Veneer	
	Quantity (M bm)	Value (M $)	Quantity (M bm)	Value (M $)	Quantity (M ft^2)	Value (M $)
Birch	14,637	4,082	-	-	5,661	324
Maple	12,083	2,884	15,227	3,809	321	17
Red oak	14,591	4,334	100,271	40,262	79,264	4,749
White oak	946	737	9,563	7,215	24,680	2,724
Ash/Hickory	-	-	18,762	5,198	-	-
Walnut	349	315	2,054	1,539	19,360	1,321
Other	7,276	3,298	30,757	21,186	81,866	4,592
Total	49,882	15,650	176,634	79,209	211,152	13,727

Source: U.S. Department of Commerce.

lumber, mostly to Europe. It also exports veneer manufactured from imported U.S. logs. Canada probably will maintain its position as the No. 1 importer of U.S. hardwoods although the gap may narrow.

Shipments of lumber to Western Europe increased dramatically from 1973 to 1983 but dropped off in 1984. We look for moderate growth in the near future, though economically derived, technological changes are taking place that could lower short- and long-term demands. Traditional European furniture products are being made with less solid wood and more veneer and paperfoil-wrapped particleboard. This is due in part to increased competition for the European consumer's "dollar," causing manufacturers to maintain or lower prices by reducing the size of furniture produced and/or the cost of materials used in furniture manufacture. Too, higher costs for hardwood raw material are making European furniture more expensive, causing some manufacturers to switch to substitutes for solid-wood or, where possible, less expensive species.

The Pacific Rim market has been growing and now demands the equivalent of 128 million board feet, or 23 percent of total U.S. hardwood log, lumber, and veneer exports. This material is shipped primarily to Japan and Taiwan. The Taiwanese are purchasing mainly red and white oak to process into finished parts and furniture for export. Their largest furniture export market is the United States. According to Taiwanese statistics, 63 percent of their wood furniture exports from 1980 to 1984 were shipped to the United States. Indications lean toward continued growth in Taiwanese furniture exports to the United States and elsewhere, which, in turn, will increase Taiwan demand for American hardwoods.

The Japanese have been buying mainly red alder, black cherry, yellow-poplar, and cottonwood. Two-thirds of these purchases are dressed or planed, kiln-dried lumber. In contrast with Taiwan, U.S. hardwoods going to Japan are used as substitutes for Japanese hardwoods. Future Japanese needs will depend on many internal market factors and will be influenced mainly by their limited domestic hardwood resources and the desire for real wood of temperate hardwood types.

THE FUTURE

The future of U.S. hardwood product exports will depend on a number of additional factors, including exchange rates between the dollar and foreign currencies, maintenance of competitive production and marketing costs by U.S. producers, and the relative availability of high-quality U.S. hardwood sawtimber. While U.S. hardwood manufacturers might have little control over exchange rates, they can take action to remain competitive and to improve overall resource utilization.

In the past, overseas demand has been centered on high-grade material and only on a few select species. Because high-grade material is in limited supply and domestic demand is strong, there may not be adequate supplies of certain species to serve all markets at existing prices. Problems might be alleviated if export demand could be broadened to include more species and more medium and lower grade material which is in abundance in U.S. forests. The latter might be accomplished partially by shipment of more "specialty" type products, such as rough-dimension and strip stock, standard-size rough dimension, and semifinished or subassembled parts made from No. 1 and No. 2 Common lumber. Efforts to develope new, lower cost processes to manufacture "export" material directly from roundwood and/or lumber might also be beneficial in alleviating demand/supply problems.

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