U.S. Hardwood Product Exports to Canada and a Look at U.S. Hardwood Resources

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Canada became the largest market for primary product hardwood exports in 1987 after slipping to No. 3 in 1986. Preferences for fine hardwoods and limited Canadian supplies of species such as oak should assure continued strong demands for U.S. hardwoods. Another reason for continued strong demand is that some Canadian firms process U.S. lumber and logs for export. This paper briefly discusses U.S. hardwood export markets, Canadian demands for U.S. hardwoods, and the U. S.-Canadian trade balance for all hardwood products. It also examines the sawtimber resources that support the export market.

TABLE 1. – *Hardwood (log, lumber, and veneer} exports from the United States in 1975. 1980. 1986. and 1987. in million board feet.*

Destinations	1975 exports	1980 exports	1986 exports	1987 exports
Canada	147	202	175	239
Europe	51	256	238	320
Pacific Rim	8	33	203	281
Total	206	491	616	840

Source: U.S. Department of Commerce.

Hardwood export overview

The hardwood export market has changed dramatically since 1975 (Table 1). World demand for U.S. hardwood logs, lumber, and veneer has quadrupled. Exports to Europe, and particularly the Pacific Rim, have grown significantly. Exports to Canada have increased at a lower rates; however, they started at a much higher level in 1975. According to some of the latest FAO world forest products data, in 1985 the United States ranked No. 1 in the world in sawn hardwood production, and No. 3 in the world in hardwood lumber exports based on value and quantity of shipments. About $1 of every $5 received by the hardwood sawmill industry is a result of the export market.

Primary product exports to Canada

On a dollar basis, Canada was the No. 1 importer of hardwood products (logs, lumber, and veneer) from the United States in 1987, up from the No. 3 position in 1986 (Table 2). West Germany, Japan, and Taiwan followed closely. The order in 1986 was Taiwan, West Germany, Canada, and Japan. The Canadians mainly purchased lumber, while the West German buyers purchased more veneer and logs than lumber on a value basis. The Japanese and Taiwanese mainly purchased lumber.

Since 1975, logs exports to Canada have grown slightly, but there have been ups and downs during that period. Canadian demands have escalated after decreased demands in 1985 and 1986. Similar amounts of hardwood lumber are going to all three market areas, and all three markets have grown at very positive rates since 1985. Canadian demands for veneer more than doubled from 1986 to 1987. However, combined Canadian and Pacific Rim demands for veneer were only about 60 percent of

TABLE 2. – *United States hardwood product exports, by country.*

Country	Logs Quantity[a]	Logs Value[b]	Lumber Quantity[a]	Lumber Value[b]	Veneer Quantity[c]	Veneer Value[b]	Total value[b]
1987							
Canada	29,610	9,107	202,159	102,333	311,316	15,361	127,947
W. Germany	44,122	36,375	34,261	29,574	474,582	43,918	109,868
Japan	13,578	16,841	123,317	79,304	29,472	1,960	99,807
Taiwan	23,505	17,377	95,271	67,876	110,379	9,728	96,269
Other	38,483	38,575	270,794	195,748	458,909	40,967	271,153
Total	149,298	118,275	725,802	474,835	1,384,658	111,934	705,044
1986							
Taiwan	18,411	15,062	88,767	66,321	114,166	11,010	92,393
W. Germany	61,862	31,968	25,448	23,492	386,395	32,009	87,469
Canada	21,673	8,279	149,037	70,391	143,199	8,545	87,215
Japan	10,024	13,440	61,162	45,324	20,413	1,108	59,872
Other	26,913	28,516	173,870	131,610	331,589	29,091	189,217
Total	138,883	97,265	498,284	337,138	995,762	81,763	516,166

[a] Million board feet.
[b] Million dollars.
[c] Million square feet.
Source: U.S. Department of Commerce.

TABLE 3. – *United* States *hardwood exports to Canada in 1987, by species.*

Species	Logs		Lumber		Veneer	
	Quantity[a]	Value[b]	Quantity[a]	Value[b]	Quantity[c]	Value[b]
Birch	10,537	2,346	--[d]	--[d]	2,664	166
Maple	4,245	1,144	14,124	3,551	2,042	152
Red oak	9,919	3,245	124,131	58,696	68,770	3,794
White oak	799	735	9,074	8,667	12,551	1,084
Ash/Hickory	--[e]	--[e]	18,515	6,155	--[e]	--[e]
Walnut	24	59	1,856	1,495	10,395	894
Other	4,086	2,722	34,459	23,769	214,894	9,271
Total	29,610	9,107	202,159	102,333	311,316	15,361

[a] Million board feet.
[b] Million dollars.
[c] Million square feet.
[d] In "Maple."
[e] In "Other."
Source: U.S. Department of Commerce.

TABLE 4. — *U.S. -Canadian hardwood product trade balance in 1987 (Value in million $).*

Product	Exports		Imports		Trade
	Value	Quantity	Value	Quantity	Balance
Logs (MBF)	10,251	29,610	1,621	3,722	+8,630
Ties (MBF)	1,227	7,433	4,236	24,025	-3,009
Lumber (MBF)	102,233	202,159	51,141	154,383	+51,092
Siding (MBF)	37	136	22	83	+15
Flooring (MBF)	3,910	18,024	7,201	6,867	-3,291
Mouldings (MLF)	3,198	20,797	3,180	11,153	+18
Veneer (MSF)	15,361	311,316	78,135	910,788	-62,774
Plywood (MSF)	3,289	18,631	31,444	87,421	-28,155
Total					
1987	139,608		177,080		-37,472
1986	97,675		128,338		-30,663
1985	96,208		121,223		-25,015
1984	118,891	144,919	-26,028		
1983	128.301	120.112	+8,189		

Source: U.S. Department of Commerce (Imports are customs values).

European shipments in 1986.

The major species purchased from the United States were red oak, white oak, and a category labeled "other" (Table 3). These three species groups made up 74 percent of log exports, 89 percent of lumber exports, and 92 percent of veneer exports to Canada in 1987 on a value basis. The "other" category contained popular species like black cherry.

Trade balance—all hardwood products

Although U.S. forests contain much larger supplies of fine hardwoods than Canadian forests, the United States has had a negative trade balance with Canada for the last 4 years when all hardwood products are considered (Table 4). Furthermore, in 1987 the products with the largest deficits were value-added veneer, plywood, and flooring. We had a negative trade flow for railroad ties and a positive flow for logs and lumber.

U.S. hardwood sawtimber resources

Generally, the same select hardwood species are popular on both the domestic and export markets. The major select species are the select red and white oaks, yellow birch, hard maple, black walnut, black cherry, and the ashes. Stronger demands have stirred many supply-side concerns. For instance, can U.S. forests continue to supply both the domestic and export markets? Can U.S. exports increase? Are U.S. resources being depleted? What is the grade output picture? The answers to these questions are just as important to producers in the United States as they are to export customers.

Sawtimber quantity

Resource data were compiled on eastern hardwood sawtimber from USDA Forest Service state resource evaluation reports. The data were then adjusted to a 1985 base and combined into the eastern hardwood summary with the projections in Table 5. Results show that 32 percent, or 233 billion board feet (international 1/4-inch rule) of the 1985 estimated sawtimber inventories are in the select sawtimber species. About 495 billion board feet are in nonselect species of hardwood sawtimber.

Sawtimber quality

Two hardwood grading systems are used to present information on the quality of standing sawtimber hardwood resources in the eastern United States. The first is a log grading system and the second is a lumber grading system. The eastern data are shown in Table 6. The lumber-grade results were derived by assuming that lumber would be produced from all the logs that are in sawtimber stands. In actual practice, many small-diameter, low-grade logs and many other larger, low-grade logs are never removed from the forests. Consequently, the quality of logs removed is better than that found in the woods. This would improve the actual distribution of sawn lumber, making it somewhat better than the numbers in Table 6.

The resource answers

The eastern United States has substantial quantities of select species, and these resources are increasing, not decreasing. Thus, it would appear that the United States has the resources necessary to continue to supply domestic and export markets. However, to alleviate problems from timber sales through primary processing and selling primary products, improved markets for nonselect species are needed in both the export and domestic markets.

When considering the quality of the standing sawtimber in our forests and the potential output by lumber grade, about 50 percent of the output is secondary-quality

TABLE 5. – *Estimated inventories of hardwood in the eastern United States sawtimber in 1985, and projections for 1990, 1995, and 2000, in billion board feet (international 1/4-in. rule).*

Year	All commercial hardwoods	All select hardwoods	Select oaks	Hard maple	Ash, walnut, cherry	Yellow birch
1985	727.9	233.0	136.9	43.4	44.0	8.8
1990	811.5	261.9	149.9	50.8	51.0	9.5
1995	904.9	294.4	164.3	59.5	59.3	10.2
2000	1,008.8	330.9	180.1	69.6	68.9	11.1

TABLE 6. – *Percent of estimated quality of hardwood sawtimber of select species in the Eastern United States by log grade, and potential output of sawn lumber by lumber grade.*

	Log grade			Lumber grade[a]			
	1	2	3 & 4	FAS & Select	1C	2C	Below 2C
All select hardwoods	15	24	61	12	23	27	38
Select oaks	15	24	61	12	24	27	37
Hard maple	12	23	65	11	21	26	42
Ash. walnut, cherry[b]	15	25	60	19	25	29	27
Yellow birch	11	26	63	12	21	24	43

[a]Grade 4 was not included; all logs grades 3 and 4 were considered as grade 3 in calculations.
[b]Lumber yields based on cherry yield tables from northern statistics.

material (1C/2C), and 38 percent is below this quality level. The vitality of markets for material of secondary quality dictates the overall economic performance of a sawmill and is, therefore, important. The Canadian market consumes secondary-quality material, as well as top grade material, from the United States.

Market summary

Canada is the largest single nation importing U.S. hardwoods; its imports exceeded 200 million board feet in 1987. Canada also has been a steady customer of American hardwood products. It processes and exports some of our lumber, mostly to Europe. It also exports veneer manufactured from imported U.S. logs. Canada should maintain its position as the No. 1 importer of U.S. hardwoods because Canadians want fine hardwoods and Canadian forests contain limited quantities of them.

Current Eastern Hardwood Trade and a Look at the Future: The Canadian Industry Perspective

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Executive Summary not available.

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42nd Annual Meeting

June 19-22, 1988
Hilton International
Quebec, Canada

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