



Bulletin of Hardwood Market Statistics: Fourth Quarter - 1995

Jean W. Nolley

Abstract

Provides current and historical information on primary and secondary hardwood products, production, prices, international trade, and employment.

Introduction

Data contained in this bulletin are intended to provide a general overview of recent trends in the hardwood market for use by hardwood-related industries, forest managers, the academic community, and the general public. The statistics presented in this bulletin are not inclusive. Specific series were selected on the basis of their availability and completeness, and were derived from a variety of sources. Questions about data collection procedures should be directed to the issuing agency or organization.

The import and export data for hardwood logs, lumber, veneer, and plywood reported here are reproduced in their entirety as received from the U.S. Department of Commerce, Bureau of the Census. Reporting errors have occurred in the past due to coding and computing program errors and changes in tariff systems. For information on

these errors, see Luppold (1995). Readers interested in export and import data are encouraged to reference additional sources when evaluating international trade statistics. For additional information on the international trade series presented here, please contact Bruce Hansen at 304-431-2739.

Readers interested in price data for specific subregions of the domestic hardwood market are encouraged to contact state forestry officials for information on local market conditions.

Your input is critical in helping us make this bulletin more useful. We welcome comments or suggestions on additional data series to include or different breakdowns of the data currently reported. Copies of this bulletin are free upon request. Send your comments and requests to Jean W. Nolley at the address below.

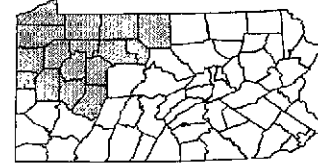
JEAN W. NOLLEY is a member of the hardwood demand analysis unit at the Northeastern Forest Experiment Station, Forestry Sciences Laboratory, 241 Mercer Springs Road, Princeton, WV 24740.

Tables Included in This Series of Reports and Frequency of Update

Number	Title	Frequency of update
Hardwood Stumpage, Log, and Lumber Prices		
1	Average hardwood stumpage prices in northwestern Pennsylvania, 1990-95	Quarterly
2	Average hardwood stumpage prices in Missouri, statewide, 1990-95	Quarterly
3	Average hardwood stumpage prices in Maine, statewide, 1990-94	Yearly
4	Average hardwood stumpage prices in the northern and delta and river regions of Mississippi, 1990-95	Bi-monthly
5	Average hardwood stumpage prices in Ohio, 1989-95	Bi-annual
6	Average hardwood mill prices of grade 1 logs in northwestern Pennsylvania, 1990-95	Quarterly
7	Average hardwood mill prices of grade 1 logs in Missouri, statewide, 1990-95	Quarterly
8	Average hardwood mill prices of grade 1 logs in eastern Tennessee, 1990-95	Quarterly
9	Average hardwood mill prices in the northern and delta and river regions of Mississippi, 1990-95	Bi-monthly
10	Average hardwood mill prices of red oak logs in Ohio, 1989-95	Bi-annual
11	Air-dried hardwood lumber prices, 1990-95	Quarterly
12	Kiln-dried hardwood lumber prices, 1990-95	Monthly
Hardwood Product Prices, Production, and Employment		
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27	Volume and value of U.S. exports of nonconiferous chips, by region, 1990-95	Quarterly

HARDWOOD STUMPAGE, LOG, AND LUMBER PRICES

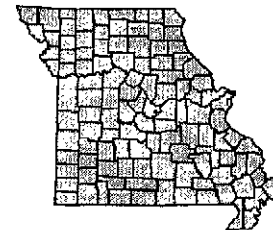
Table 1.—Average hardwood stumpage prices in northwestern Pennsylvania, 1990-95
(Dollars/Mbf, International 1/4" scale)



Year/quarter	Red oak	White oak	Black cherry	Hard maple	Soft maple	Yellow-poplar
1990	303	157	380	77	57	58
1991	282	162	416	85	64	63
1992	351	187	544	123	76	60
1993	479	235	748	194	114	93
1994/1	454	199	782	217	121	94
1994/2	561	252	945	224	141	114
1994/3	550	264	901	213	138	129
1994/4	512	256	937	228	144	137
1994 avg.	519	243	891	221	136	119
1995/1	472	248	842	224	135	163
1995/2	509	234	828	194	137	103
1995/3	513	236	875	172	110	122
1995/4	503	209	707	170	110	125
1995 avg.	499	232	813	190	123	128

Source: Cooperative Extension Service, U.S. Department of Agriculture, The Pennsylvania State University.

Table 2.—Average hardwood stumpage prices in Missouri, statewide, 1990-95
(Dollars/Mbf, International 1/4" scale)

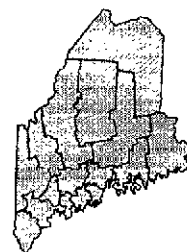


Year/quarter	Red oak	White oak	Ash	Hard maple	Soft maple	Mixed hardwoods
1990	NA	NA	NA	NA	NA	NA
1991	95	102	39	NA	48	51
1992	99	109	96	NA	71	62
1993	116	113	140	75	67	76
1994/1	109	133	101	NA	NA	102
1994/2	177	162	181	40	40	132
1994/3	169	139	197	NA	155	86
1994/4	159	140	152	60	75	94
1994 avg.	154	144	158	50	90	104
1995/1	166	157	179	50	184	118
1995/2	103	92	70	NA	72	94
1995/3	195	124	180	NA	NA	100
1995/4	235	195	85	245	110	65
1995 avg.	175	142	129	NA	NA	94

NA - Not available.

Source: Missouri Department of Conservation, Forestry Division.

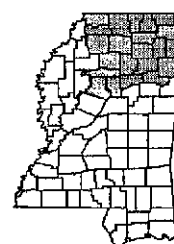
Table 3.--Average hardwood stumpage prices in Maine, statewide, 1990-94
(Dollars/Mbf, International 1/4" scale)



Year/quarter	Oak	Yellow birch	White ash	Hard maple	Soft maple
1990	174	79	140	75	36
1991	207	82	123	88	33
1992	162	71	109	72	45
1993	176	73	121	91	54
1994	219	96	118	103	53

Source: Management and Utilization Division, Maine Forest Service.

Table 4.--Average hardwood stumpage prices in the northern and delta and river regions of Mississippi, 1990-95
(Dollars/Mbf, Doyle scale)



Year/quarter	North		Delta and River	
	Oak	Mixed hardwoods	Oak	Mixed hardwoods
1990	131	101	192	99
1991	135	93	174	87
1992	154	101	197	84
1993	218	126	323	124
1994:				
Jan-Feb	224	149	369	126
Mar-Apr	209	131	268	148
May-Jun	215	141	355	150
Jul-Aug	205	119	300	121
Sep-Oct	188	132	296	115
Nov-Dec	243	156	249	108
1994 average	214	138	306	128
1995:				
Jan-Feb	232	154	293	142
Mar-Apr	211	139	306	131
May-Jun	220	132	284	128
Jul-Aug	227	136	296	132
Sep-Oct	232	148	291	143
Nov-Dec	195	149	280	149
1995 average	220	143	292	138

Source: Cooperative Extension Service, Mississippi State University, Mississippi State.

Table 5.--Average hardwood stumpage prices in Ohio, statewide, 1989-95
(Dollars/Mbf, Doyle scale)

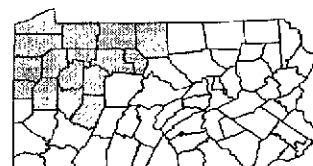


Year/season	White oak	Red oak	Cherry	Yellow-poplar
1989/spring	263	291	249	116
1989/fall	243	282	257	133
1990/spring	268	283	278	148
1990/fall	267	272	274	135
1991/spring	242	248	247	118
1991/fall	225	230	248	114
1992/spring	NA	NA	NA	NA
1992/fall	299	324	376	161
1993/spring	303	341	402	209
1993/fall	318	419	552	207
1994/spring	324	374	442	213
1994/fall	347	443	636	225
1995/spring	340	415	525	210

NA - Not available.

Source: Ohio Agricultural Statistics Service, Columbus, OH.

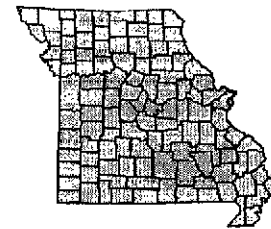
Table 6.--Average hardwood mill prices of grade 1 logs in northwestern Pennsylvania, 1990-95
(Dollars/Mbf, International 1/4" scale)



Year/quarter	Red oak	White oak	Black cherry	Hard maple	Soft maple	Yellow-poplar
1990	369	260	376	166	131	116
1991	379	285	424	174	149	143
1992	455	321	527	228	176	158
1993	490	334	629	356	219	172
1994/1	599	330	722	335	220	169
1994/2	479	352	641	329	218	158
1994/3	546	877	704	335	222	206
1994/4	594	371	774	408	269	223
1994 avg.	555	483	710	352	232	756
1995/1	575	352	751	352	211	164
1995/2	575	411	751	338	176	164
1995/3	575	376	763	354	210	200
1995/4	514	326	669	326	175	167
1995 avg.	560	366	734	343	193	174

Source: Cooperative Extension Service, U.S. Department of Agriculture, The Pennsylvania State University.

Table 7.--Average hardwood mill prices of grade 1 logs in Missouri, statewide, 1990-95
(Dollars/Mbf, International 1/4" scale)

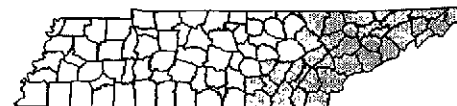


Year/quarter	Red oak	White oak	Cherry	Ash	Soft maple	Black walnut
1990	NA	NA	NA	NA	NA	NA
1991	267	274	317	207	182	531
1992	297	285	319	277	162	509
1993	NA	NA	NA	NA	NA	NA
1994/1	345	295	320	262	250	552
1994/2	354	342	471	262	230	425
1994/3	345	347	448	335	276	497
1994/4	402	342	449	321	251	697
1994 avg.	362	332	422	295	252	543
1995/1	382	335	322	308	279	550
1995/2	327	268	361	263	205	699
1995/3	380	336	534	313	232	688
1995/4	360	320	315	250	185	500
1995 avg.	362	315	383	284	225	609

NA - Not available.

Source: Missouri Department of Conservation, Forestry Division.

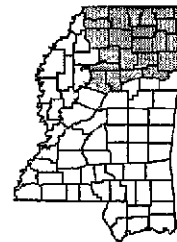
Table 8.--Average hardwood mill prices of grade 1 logs in eastern Tennessee, 1990-95
(Dollars/Mbf, Doyle scale)



Year/quarter	Red Oak	White oak	Walnut	Ash	Hard maple	Yellow-poplar
1990	575	481	425	500	200	238
1991	519	550	400	500	200	250
1992	588	563	400	500	200	250
1993	725	669	450	525	325	288
1994/1	775	700	500	550	350	325
1994/2	775	700	500	550	350	325
1994/3	775	700	500	550	400	325
1994/4	775	700	500	600	400	375
1994 avg.	775	700	500	563	375	338
1995/1	775	700	500	600	400	375
1995/2	775	700	500	600	350	375
1995/3	775	700	500	600	350	375
1995/4	775	700	500	550	350	325
1995 avg.	775	700	500	588	363	363

Source: The Tennessee Division of Forestry, Utilization Section.

Table 9.--Average hardwood mill prices in the northern and delta and river regions of Mississippi, 1990-95
(Dollars/Mbf, Doyle scale)



Year/quarter	North		Delta and River	
	Oak	Mixed hardwoods	Oak	Mixed hardwoods
1990	202	181	272	160
1991	NA	187	239	156
1992	247	198	281	169
1993	329	232	372	203
1994:				
Jan-Feb	310	218	404	155
Mar-Apr	310	230	400	183
May-Jun	324	233	405	196
Jul-Aug	318	227	371	190
Sep-Oct	305	215	374	198
Nov-Dec	318	220	395	205
1994 avg.	314	224	392	188
1995:				
Jan-Feb	310	221	439	194
Mar-Apr	315	225	448	242
May-Jun	305	208	397	209
Jul-Aug	300	205	395	210
Sep-Oct	305	210	391	177
Nov-Dec	300	205	414	250
1995 avg.	306	212	414	214

NA - Not available.

Source: Cooperative Extension Service, Mississippi State University.

Table 10.--Average hardwood mill prices of red oak logs in Ohio, statewide, 1989-1995
(Dollars/Mbf, Doyle scale)



Year/season	Average all grades	Grade 1 16 inches	Grade 1	Grade 2	Grade 3
1989/spring	417	630	424	244	123
1989/fall	380	634	441	241	131
1990/spring	417	648	418	243	132
1990/fall	343	575	396	213	123
1991/spring	321	558	333	198	115
1991/fall	330	620	418	251	120
1992/spring	NA	NA	NA	NA	NA
1992/fall	428	725	496	273	146
1993/spring	459	753	494	267	139
1993/fall	468	788	524	296	154
1994/spring	460	731	461	284	150
1994/fall	472	884	546	305	157
1995/spring	450	800	510	290	125

NA - Not available.

Source: Ohio Agricultural Statistics Service, Columbus, OH.

Table 11.--Air-dried hardwood lumber prices, 1990-95
(Dollars/Mbf)

Year/quarter	4/4 Appalachian red oak 1C	4/4 Poplar 1C	4/4 Cherry 1C	4/4 Northern hard maple 1C	4/4 Northern soft maple 1C
1990	540	309	664	395	329
1991	530	284	620	400	335
1992	638	290	674	501	356
1993	789	384	960	725	475
1994/1	800	425	1040	740	545
1994/2	800	430	1040	740	545
1994/3	800	425	1040	730	610
1994/4	800	420	1040	715	545
1994 avg.	800	425	1040	731	561
1995/1	740	420	1040	705	545
1995/2	740	395	1040	705	545
1995/3	725	350	975	695	515
1995/4	705	315	860	690	490
1995 avg.	728	370	979	699	524

Source: By permission from the Hardwood Market Report, Memphis, TN.

Table 12.--Kiln-dried hardwood lumber prices, 1990-95
(Dollars/Mbf)

Year/quarter	4/4 Appalachian red oak 1C	4/4 Poplar 1C	4/4 Cherry 1C	4/4 Northern hard maple 1C	4/4 Northern soft maple 1C
1990	775	408	771	545	NA
1991	744	362	695	569	NA
1992	876	432	803	694	NA
1993	1043	579	1457	987	NA
1994/1	985-1,115	555-605	1,375-1,515	965-1,055	760-810
1994/2	955-1,115	570-620	1,395-1,535	930-1,020	770-820
1994/3	965-1,115	560-610	1,390-1,530	930-1,020	740-790
1994/4	970-1,120	540-590	1,400-1,540	930-1,020	730-780
1994 avg.	1,043	579	1,457	987	775
1995/1	965-1,115	520-570	1,335-1,475	940-1,030	730-780
1995/2	930-1,080	480-530	1,240-1,380	900-990	705-755
1995/3	875-1,025	450-500	1,110-1,250	900-990	685-735
1995/4	890-1,040	450-500	1,060-1,200	1,110-1,190	655-705
1995 avg.	957	515	1,315	958	719

NA - Not available.

Source: Weekly Hardwood Review, Charlotte, NC.

HARDWOOD PRODUCT PRICES, PRODUCTION, AND EMPLOYMENT

Table 13.--Producer price indexes for selected wood industries, 1990-95
(1982=100)

Year/ quarter	Hardwood lumber	Hardwood dimension	Wood kitchen cabinets	Wood household furniture	Upholstered wood household furniture	Wood office furniture	All commodities
1990	131.0	138.9	121.7	131.7	121.9	133.0	116.3
1991	128.5	140.9	125.2	135.4	124.9	135.9	116.5
1992	140.7	145.5	129.2	138.7	125.9	138.3	117.2
1993	163.3	162.1	135.1	143.9	128.9	141.3	118.9
1994/1	167.0	168.2	138.9	148.1	133.1	143.9	119.4
1994/2	168.3	169.5	140.2	149.7	134.3	145.4	120.0
1994/3	168.9	171.1	141.3	150.8	134.6	146.3	121.0
1994/4	168.8	171.9	142.2	152.0	135.1	146.7	121.4
1994 avg.	168.3	170.2	140.7	150.2	134.3	145.6	120.4
1995/1	169.9	174.4	144.1	153.8	135.5	147.6	123.4
1995/2	168.1	174.6	146.3	155.1	136.3	149.1	124.9
1995/3	166.0	173.7	147.4	155.7	137.5	150.3	125.2
1995/4	164.1	173.0	148.0	156.3	138.7	151.3	125.3
1995 avg.	167.0	173.9	146.5	155.2	137.0	149.6	124.7

Source: Producer Price Indexes, U.S. Department of Labor, Bureau of Labor Statistics.

Table 14.--Value of domestic wood furniture shipments and wood furniture imports, 1990-95
(Millions of dollars)

Year	Value of ¹ domestic wood furniture shipments (actual \$)	Value of ² domestic wood furniture shipments (1982 \$)	Value of ³ wood furniture imports (actual \$, c.i.f.)	Value of wood ² furniture imports (1982 \$, c.i.f.)	Ratio of ⁴ imports to domestic production
1990	8,303	6,304	2,854	2,167	.34
1991	7,980	5,894	2,713	2,004	.34
1992	8,645	6,231	2,884	2,079	.33
1993	9,377	6,520	3,380	2,349	.36
1994	10,194	6,787	4,050	2,696	.40
1995	10,638	6,854	4,451	2,868	.42

¹ Source: U.S. Department of Commerce, International Trade Administration.

² Deflated by wood household furniture price index listed in Table 13.

³ Source: U.S. Department of Commerce, Bureau of the Census.

⁴ Developed from columns 1 and 3.

Table 15.--Production of wood pallets and oak strip flooring, 1989-95

Year	Wood pallets ¹ (Million)	Oak strip flooring ² (M feet)
1989	504.8	206,401
1990	536.4	205,187
1991	540.7	199,734
1992	565.6	222,573
1993	599.0	265,858
1994	NA	307,689
1995	NA	330,212

NA - Not available.

¹ Source: National Wooden Pallet and Container Association statistics.

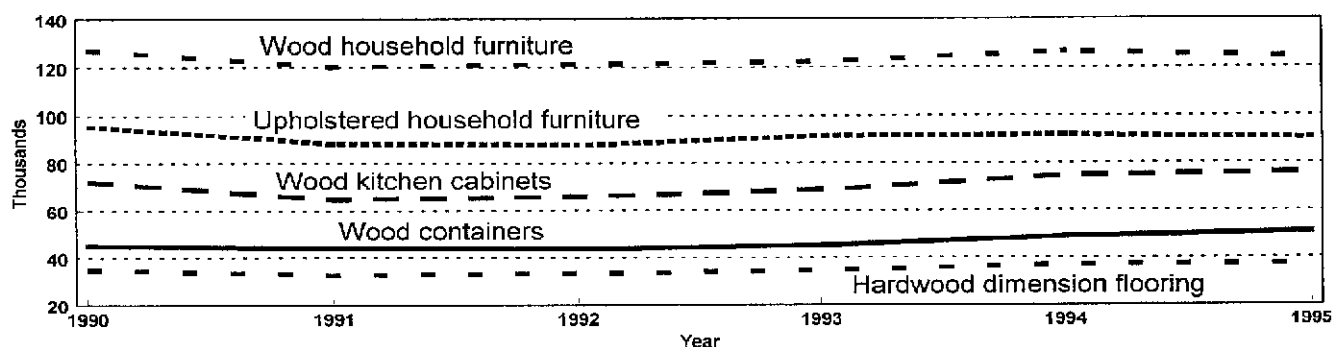
² Source: National Oak Flooring Manufacturers Association statistics.

Table 16.--Employment in selected wood-using industries, 1990-95
(Thousands)

Year/quarter	Wood containers (SIC 244)	Upholstered household furniture (SIC 2512)	Wood household furniture (SIC 2511)	Wood kitchen cabinets (SIC 2434)	Hardwood dimension and flooring (SIC 2426)
1990	45.1	95.6	127.3	72.3	34.8
1991	44.0	88.2	120.2	64.6	32.6
1992	43.5	87.5	121.2	65.7	33.3
1993	45.2	91.3	122.4	68.6	34.5
1994/1	45.5	92.2*	126.1*	71.0*	36.1*
1994/2	49.7*	91.8*	126.9*	74.0 *	36.6*
1994/3	50.0*	90.7*	125.6*	76.7 *	36.7*
1994/4	50.0	92.0	127.2	77.1	37.5
1994 avg.	48.8*	91.7	126.4	74.7	36.8
1995/1	50.4	91.7	127.0	75.5	38.0
1995/2	51.0	90.5	124.5	76.0	37.5
1995/3	50.8	88.5	120.7	76.0	36.6
1995/4	50.5	90.5	124.4	75.5	36.6
1995 avg.	50.7	90.3	124.2	75.8	37.2

* - revised figure.

Source: U.S. Department of Labor.



Employment in selected wood-using industries, 1990-1995.

INTERNATIONAL HARDWOOD PRODUCT TRADE

Table 17.--International exchange rate, foreign currency per U.S. dollar, 1990-1995

Year/qtr.	Belgium (franc)	Canada (dollar)	China (yuan)	France (franc)	Germany (mark)	Hong Kong (H.K. \$)	Indonesia (rupiah)	Italy (lira)
1990	33.418	1.1668	4.7832	5.4453	1.6157	7.7897	1,842.81	1,198.1
1991	34.148	1.1457	5.3234	5.6421	1.6595	7.7712	1,950.32	1,240.6
1992	32.149	1.2087	5.5146	5.2938	1.5616	7.7406	2,029.92	1,232.4
1993	34.597	1.2901	5.7620	5.6633	1.6533	7.7356	2,087.10	1,573.7
1994/1	35.638	1.3412	8.7019	5.8620	1.7342	7.7273	2,128.71	1,684.8
1994/2	34.217	1.3823	8.6725	5.6875	1.6617	7.7273	2,152.63	1,604.3
1994/3	32.196	1.3712	8.5901	5.3536	1.5621	7.7270	2,171.52	1,571.5
1994/4	31.775	1.3679	8.5104	5.3051	1.5431	7.7320	2,189.82	1,589.2
1994 avg.	33.456	1.3656	8.6187	5.5520	1.6228	7.7284	2,160.67	1,612.4
1995/1	30.493	1.4089	8.000	5.1688	1.4803	7.7360	2,209.48	1,639.6
1995/2	28.705	1.3713	8.000	4.9177	1.3962	7.7347	2,231.86	1,668.2
1995/3	29.441	1.3555	8.000	4.9490	1.4322	7.7390	2,261.79	1,610.1
1995/4	29.280	1.3560	8.000	4.9304	1.4238	7.7337	2,291.31	1,600.7
1995 avg.	29.480	1.3724	8.000	4.9915	1.4331	7.7358	2,248.61	1,629.6

Year/qtr.	Japan (yen)	Malaysia (ringgit)	Mexico (peso)	Singapore (S.dollar)	So.Korea (won)	Spain (pesetas)	Turkey (liras)	U.K. (pound)
1990	144.79	2.7049	2.81	1.8125	707.76	101.93	2,608.6	0.563
1991	134.71	2.7501	3.02	1.7276	733.35	103.91	4,171.8	0.567
1992	126.65	2.5474	3.09	1.6290	780.65	102.38	6,872.4	0.570
1993	111.20	2.5741	3.12	1.6158	802.67	127.26	10,984.6	0.667
1994/1	107.62	2.7313	3.17	1.5910	807.78	141.06	17,594.1	0.672
1994/2	103.33	2.6328	3.34	1.5463	807.24	136.40	32,409.6	0.665
1994/3	99.05	2.5726	3.39	1.5026	803.09	129.35	32,223.7	0.645
1994/4	98.83	2.5600	3.60	1.4699	795.66	129.02	36,207.3	0.631
1994 avg.	102.21	2.6242	3.38	1.5274	803.44	133.96	29,608.7	0.653
1995/1	96.26	2.5517	5.97	1.4422	786.70	130.55	41,049.9	0.632
1995/2	84.43	2.4638	6.16	1.3957	763.33	123.07	42,821.4	0.626
1995/3	94.09	2.4647	6.21	1.4145	765.77	122.87	46,352.7	0.636
1995/4	101.46	2.5375	7.34	1.4171	769.30	122.26	53,156.2	0.641
1995 avg.	94.06	2.5044	6.42	1.4174	771.27	124.69	45,845.1	0.634

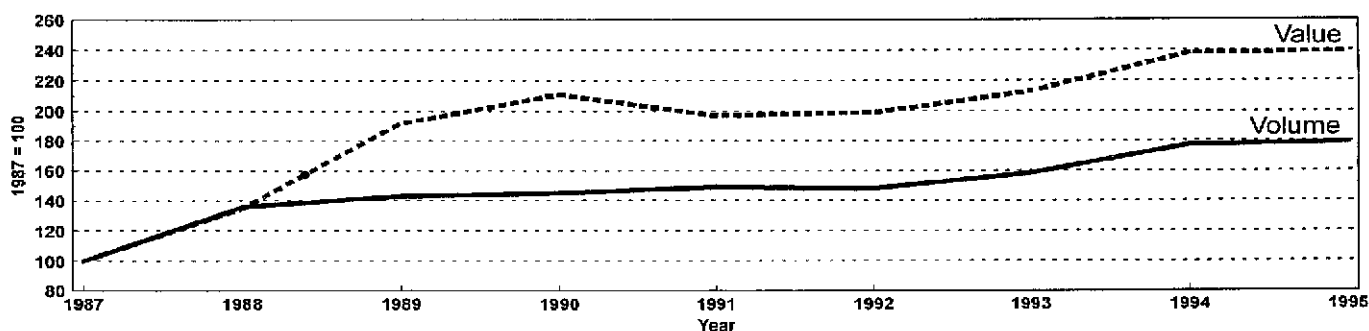
Source: International Monetary Fund.

Table 18.—Volume and value of U.S. hardwood log exports, by region, 1990-95
(Cubic meters and thousands of dollars, f.a.s.)

Year/qtr.	Canada		Central & South America and Caribbean		Western Europe	
	Volume	Value	Volume	Value	Volume	Value
1990	325,584	51,781	13,915	4,118	292,686	91,063
1991	416,893	53,930	17,142	4,201	230,866	78,635
1992	522,481	62,713	16,405	5,727	193,992	82,005
1993	616,313	73,627	11,884	5,082	160,865	72,603
1994/1	184,936	21,260	3,728	1,391	56,548	23,552
1994/2	121,270	18,576	6,467	2,282	68,977	28,969
1994/3	194,007	23,170	4,260	1,432	34,081	14,655
1994/4	209,865	26,682	4,091	1,581	49,670	21,774
Total 1994	710,078	89,685	18,546	6,686	209,276	88,937
1995/1	213,648	29,222	2,614	1,136	60,761	26,840
1995/2	189,164	25,924	2,480	1,084	64,847	26,490
1995/3	184,461	20,805	2,354	1,015	18,734	8,140
1995/4	181,842	22,868	2,476	1,015	31,331	15,547
Total 1995	769,115	98,818	9,924	4,249	175,673	77,016

Year/qtr.	Asia		All other		Total	
	Volume	Value	Volume	Value	Volume	Value
1990	335,104	96,965	14,222	61,900	981,511	250,116
1991	335,091	94,533	5,245	16,888	1,005,237	232,986
1992	240,269	83,666	30,489	17,455	1,003,636	235,858
1993	278,393	99,937	3,132	10,066	1,070,587	252,253
1994/1	72,556	26,033	417	213	318,185	72,446
1994/2	80,230	31,040	2,622	995	279,566	81,854
1994/3	34,450	13,557	1,427	522	268,225	53,330
1994/4	63,309	23,663	1,107	498	328,042	74,188
Total 1994	250,545	94,285	5,573	2,225	1,194,018	281,819
1995/1	84,465	33,551	775	297	362,263	91,048
1995/2	94,190	39,620	266	83	350,947	93,198
1995/3	26,472	9,170	530	136	232,551	39,263
1995/4	49,268	19,039	556	185	265,473	58,652
Total 1995	254,395	101,376	2,127	701	1,211,234	282,159

Source: U.S. Department of Commerce, Bureau of the Census.



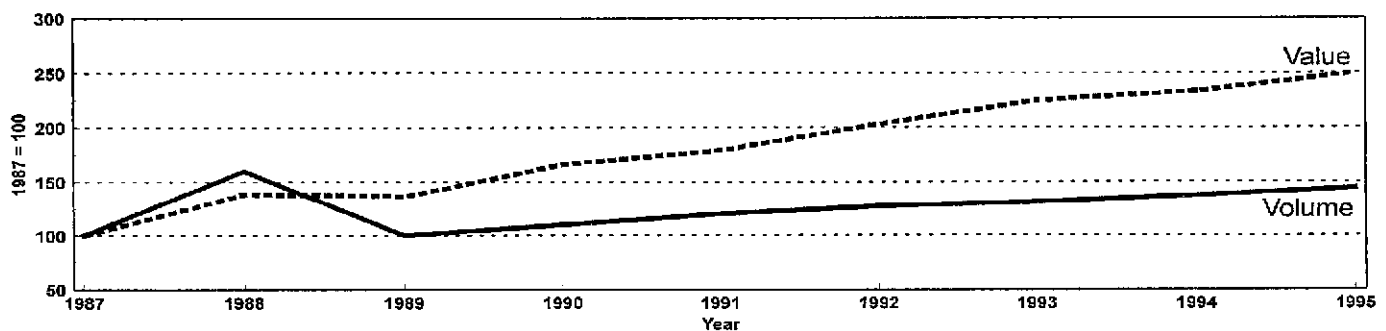
Volume and value index of all U.S. hardwood log exports, 1987-1995.

Table 19.—Volume and value of U.S. hardwood lumber exports, by region, 1990-95
(Cubic meters and thousands of dollars, f.a.s.)

Year/qtr.	Canada		Central & South America and Caribbean		Western Europe	
	Volume	Value	Volume	Value	Volume	Value
1990	547,941	198,767	89,427	26,960	653,309	313,550
1991	465,152	166,462	106,483	33,082	771,827	368,731
1992	602,457	195,976	129,753	43,497	801,865	431,696
1993	702,640	236,565	124,624	49,493	726,776	429,784
1994/1	190,611	62,460	35,769	13,824	195,916	114,231
1994/2	195,396	65,955	30,296	12,006	202,904	118,414
1994/3	184,557	60,894	40,352	15,395	169,909	101,999
1994/4	192,170	64,308	35,088	14,315	177,099	101,574
Total 1994	762,734	253,617	141,505	55,540	745,828	436,218
1995/1	226,982	76,699	47,830	14,008	187,323	114,474
1995/2	216,167	70,713	31,248	13,060	218,736	135,470
1995/3	174,232	54,511	45,018	17,999	160,279	101,631
1995/4	175,490	55,613	37,945	15,510	172,288	106,829
Total 1995	792,871	257,536	162,041	60,576	738,626	458,409

Year/qtr.	Asia		All other		Total	
	Volume	Value	Volume	Value	Volume	Value
1990	540,412	222,899	60,584	27,996	1,891,673	790,167
1991	651,148	257,188	56,856	24,500	2,051,466	849,963
1992	583,845	266,199	51,019	26,022	2,168,939	963,388
1993	641,792	322,400	51,095	28,518	2,246,927	1,066,755
1994/1	142,038	72,107	12,594	6,882	576,928	269,497
1994/2	169,857	86,763	8,585	5,003	607,038	288,135
1994/3	169,273	89,774	15,872	9,115	579,963	277,178
1994/4	159,518	84,953	13,972	7,689	577,847	272,846
Total 1994	640,686	333,592	51,023	28,694	2,341,776	1,107,659
1995/1	171,962	90,043	13,573	7,611	647,670	302,836
1995/2	193,295	102,470	13,597	6,997	673,043	328,709
1995/3	180,869	96,757	16,257	8,241	576,655	279,139
1995/4	169,449	90,934	13,700	7,244	568,872	276,129
Total 1995	715,575	380,197	57,127	30,089	2,466,240	1,186,811

Source: U.S. Department of Commerce, Bureau of the Census.



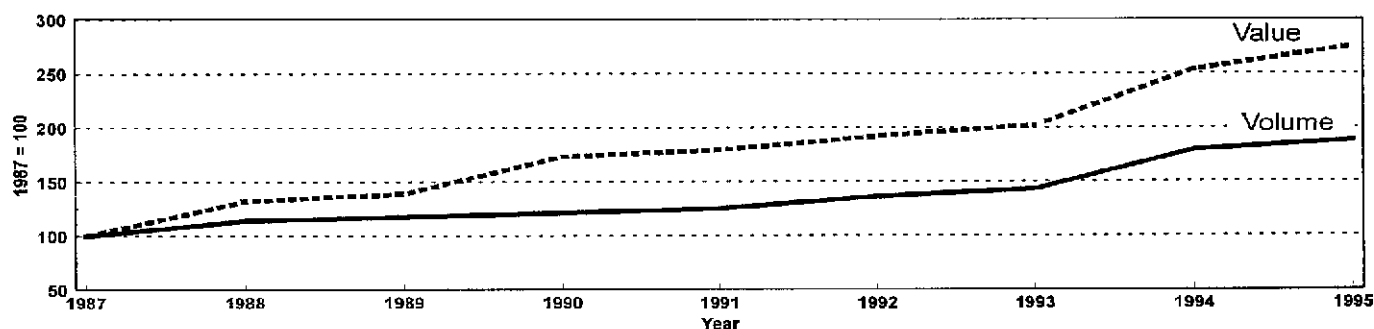
Volume and value index of all U.S. hardwood lumber exports, 1987-1995.

Table 20.--Volume and value of U.S. hardwood veneer exports, by region, 1990-95
(Million square meters and thousands of dollars, f.a.s.)

Year/qtr.	Canada		Central & South America and Caribbean		Western Europe	
	Volume	Value	Volume	Value	Volume	Value
1990	20.0	25,096	2.5	3,319	103.4	125,366
1991	15.5	19,751	3.5	4,915	107.6	128,815
1992	20.8	23,626	4.4	6,410	116.2	140,176
1993	25.0	28,719	9.0	12,312	106.7	129,095
1994/1	7.1	9,990	2.6	3,447	30.2	35,688
1994/2	8.5	10,864	1.7	2,353	35.0	43,052
1994/3	7.1	9,466	2.6	3,491	29.0	37,591
1994/4	8.9	11,515	2.2	2,384	34.6	43,898
Total 1994	31.5	41,836	9.2	11,674	128.8	160,231
1995/1	10.0	11,636	1.2	1,691	32.9	42,609
1995/2	8.6	10,513	2.5	3,281	40.3	52,186
1995/3	7.3	10,024	2.4	3,118	30.5	38,492
1995/4	7.7	10,231	3.1	3,966	37.8	49,450
Total 1995	33.6	42,405	9.1	12,053	141.4	182,733

Year/qtr.	Asia		All other		Total	
	Volume	Value	Volume	Value	Volume	Value
1990	27.0	35,842	3.3	4,074	156.2	93,698
1991	28.9	41,458	4.7	5,319	160.3	200,262
1992	27.9	38,264	5.7	6,974	175.1	215,449
1993	37.3	48,175	5.8	7,296	183.7	225,595
1994/1	12.2	13,377	1.7	1,758	53.8	64,262
1994/2	12.0	14,285	2.0	2,345	59.1	72,900
1994/3	14.4	16,554	2.1	2,539	55.2	69,637
1994/4	14.4	17,179	2.0	2,652	62.1	77,625
Total 1994	53.0	61,390	7.8	9,289	230.2	284,423
1995/1	12.6	14,924	3.2	3,931	59.8	74,784
1995/2	12.0	14,871	2.7	3,289	66.1	84,138
1995/3	10.7	12,997	2.8	3,232	53.7	67,863
1995/4	10.5	13,905	2.6	3,414	61.7	80,963
Total 1995	45.7	56,694	11.3	13,864	241.2	307,749

Source: U.S. Department of Commerce, Bureau of the Census.



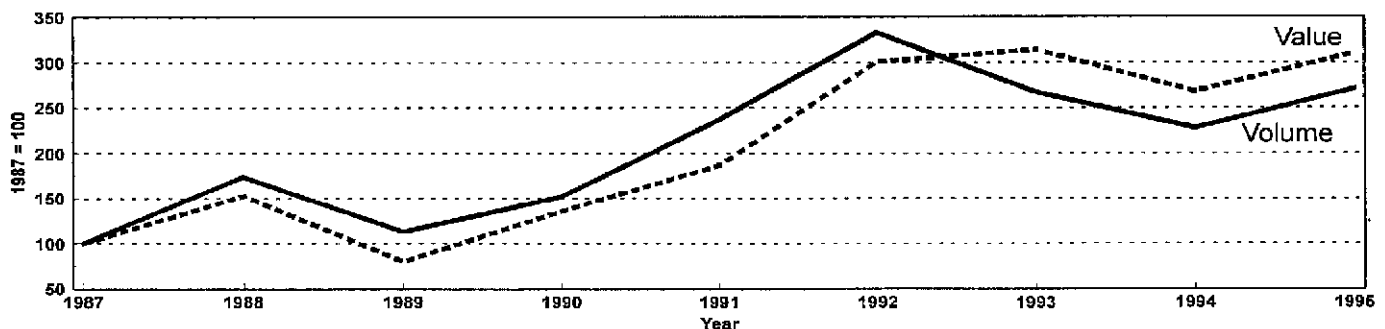
Volume and value index of all U.S. hardwood veneer exports, 1987-1995.

Table 21.--Volume and value of U.S. hardwood plywood exports, by region, 1990-95
(Cubic meters and thousands of dollars, f.a.s.)

Year/qtr.	Canada		Central & South America and Caribbean		Western Europe	
	Volume	Value	Volume	Value	Volume	Value
1990	31,623	10,552	42,033	7,533	2,947	671
1991	51,896	15,200	57,296	9,790	4,099	923
1992	64,046	19,245	73,338	14,301	30,299	8,212
1993	55,747	19,041	31,302	8,172	21,583	8,678
1994/1	13,415	4,278	7,734	2,570	915	852
1994/2	12,511	3,693	11,010	2,776	738	679
1994/3	14,410	4,145	10,875	2,929	119	44
1994/4	17,384	4,966	8,704	2,850	818	577
Total 1994	57,720	17,082	38,323	10,780	2,590	2,152
1995/1	16,457	4,938	8,126	2,579	2,114	1,538
1995/2	19,485	5,503	7,050	2,062	2,798	1,874
1995/3	21,981	6,462	6,942	2,146	651	488
1995/4	22,580	6,754	5,918	1,839	0	0
Total 1995	80,503	23,657	28,036	8,623	5,563	3,901

Year/qtr.	Asia		All other		Total	
	Volume	Value	Volume	Value	Volume	Value
1990	2,987	716	710	262	80,300	19,732
1991	10,571	962	917	222	124,779	27,097
1992	6,964	1,596	1,102	383	175,749	43,737
1993	31,685	9,369	560	363	140,877	45,621
1994/1	6,998	2,837	87	25	29,149	10,562
1994/2	4,056	1,972	282	81	28,597	9,198
1994/3	4,707	2,090	665	193	30,776	9,403
1994/4	4,123	1,572	381	110	31,410	9,734
Total 1994	19,884	8,471	1,415	408	119,932	38,896
1995/1	5,775	2,205	186	56	32,658	11,317
1995/2	3,828	1,732	107	36	33,268	11,205
1995/3	4,642	1,872	35	56	34,251	11,024
1995/4	14,219	2,884	329	110	43,046	11,587
Total 1995	28,464	8,693	657	256	143,223	45,133

Source: U.S. Department of Commerce, Bureau of the Census.



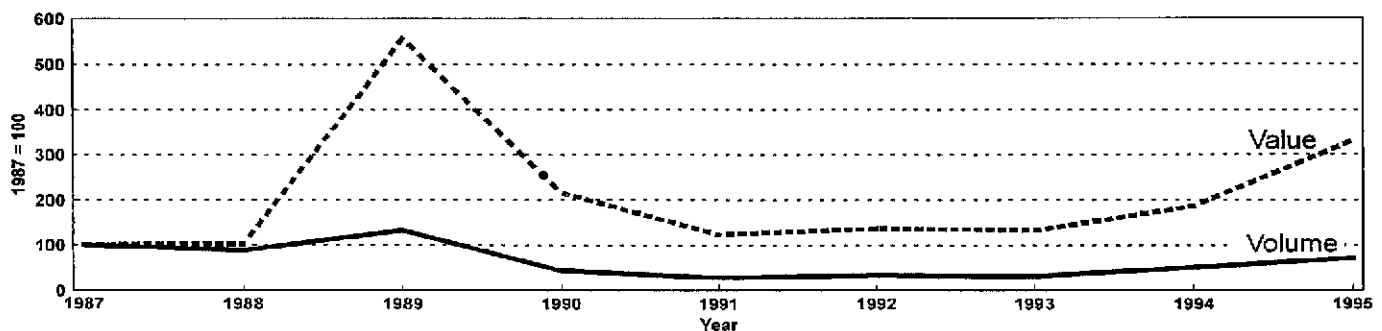
Volume and value index of all U.S. hardwood plywood exports, 1987-1995.

Table 22.--Volume and value of U.S. hardwood log imports, by region, 1990-95
(Cubic meters and thousands of dollars, c.i.f.)

Year/qtr.	Canada		Central & South America and Caribbean		Africa	
	Volume	Value	Volume	Value	Volume	Value
1990	15,138	1,971	756	384	4,332	1,507
1991	10,275	1,439	1,550	228	1,103	419
1992	16,069	2,242	238	105	1,968	787
1993	14,604	2,143	690	476	1,409	540
1994/1	4,587	633	793	278	105	40
1994/2	4,086	740	84	82	1,031	345
1994/3	7,807	1,098	327	141	500	163
1994/4	9,601	1,477	32	4	25	18
Total 1994	26,081	3,947	1,236	505	1,661	567
1995/1	11,627	1,856	0	0	127	85
1995/2	9,288	1,712	60	37	723	282
1995/3	10,918	1,837	0	0	107	46
1995/4	9,080	1,814	286	52	0	0
Total 1995	40,913	7,218	346	89	957	413

Year/qtr.	Asia and Pacific Ocean		All other		Total	
	Volume	Value	Volume	Value	Volume	Value
1990	7,913	3,466	1,646	547	27,785	7,875
1991	3,681	1,940	1,006	486	17,615	4,515
1992	1,987	1,237	1,131	599	21,393	4,970
1993	2,012	1,106	908	573	19,623	4,837
1994/1	453	309	83	80	6,021	1,340
1994/2	1,485	726	349	259	7,035	2,152
1994/3	134	88	102	84	8,870	1,575
1994/4	305	186	54	62	10,017	1,747
Total 1994	2,377	1,309	588	487	31,943	6,813
1995/1	418	1,096	129	98	12,301	3,136
1995/2	761	1,512	405	300	11,237	3,844
1995/3	272	450	153	94	11,450	2,427
1995/4	367	662	316	80	10,049	2,607
Total 1995	1,818	3,719	1,003	572	45,037	12,014

Source: U.S. Department of Commerce, Bureau of the Census.



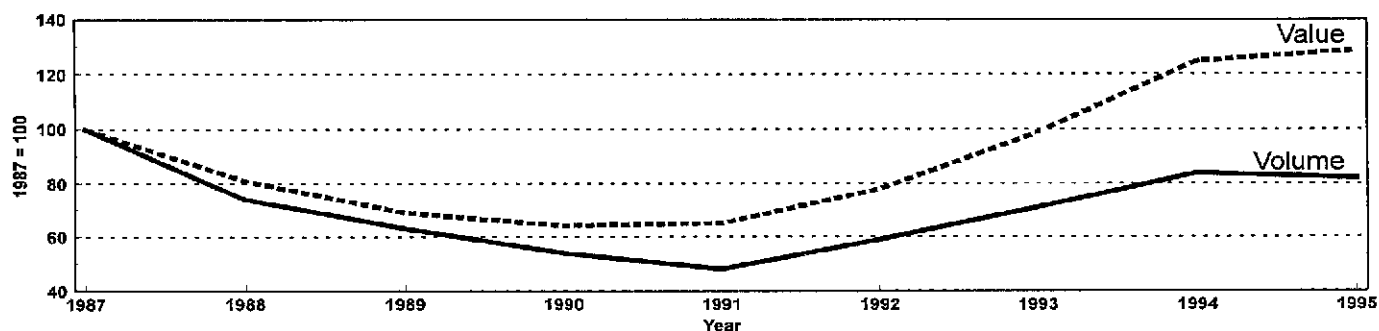
Volume and value index of all U.S. hardwood log imports, 1987-1995.

Table 23.--Volume and value of U.S. hardwood lumber imports, by region, 1990-95
(Cubic meters and thousands of dollars, c.i.f.)

Year/qtr.	Canada		Central & South America and Caribbean		Africa	
	Volume	Value	Volume	Value	Volume	Value
1990	269.5	48,395	203.1	70,072	7.1	4,140
1991	252.5	45,763	182.4	81,589	4.9	2,841
1992	361.5	75,071	181.8	79,136	6.1	3,658
1993	481.2	110,490	185.7	86,367	5.6	3,924
1994/1	127.4	31,585	47.7	24,846	1.8	984
1994/2	153.3	36,143	58.3	26,346	2.1	1,185
1994/3	130.6	31,262	54.4	27,489	6.9	1,981
1994/4	138.1	31,844	60.2	32,463	2.1	1,669
Total 1994	549.3	130,835	220.6	111,143	12.9	5,820
1995/1	127.2	30,444	58.5	31,304	2.8	2,126
1995/2	121.9	29,689	46.1	22,154	3.1	2,448
1995/3	113.5	26,286	60.7	31,490	2.5	1,577
1995/4	133.7	30,703	83.7	48,481	2.7	1,786
Total 1995	496.3	117,122	249.0	133,422	11.1	7,936

Year/qtr.	Asia and Pacific Ocean		All other		Total	
	Volume	Value	Volume	Value	Volume	Value
1990	78.7	40,134	10.4	2,091	568.8	164,835
1991	64.4	32,583	6.4	3,253	510.6	166,030
1992	75.0	40,929	3.9	2,051	628.2	200,843
1993	74.6	48,549	7.4	3,790	754.5	253,117
1994/1	22.0	15,095	1.9	940	200.8	73,450
1994/2	22.2	16,184	4.8	1,769	240.6	81,627
1994/3	25.4	15,571	3.3	2,059	220.6	78,363
1994/4	26.5	18,818	2.5	1,411	229.4	86,210
Total 1994	96.0	65,670	12.6	6,177	891.5	319,651
1995/1	24.0	17,595	5.3	1,740	217.7	83,206
1995/2	22.1	16,023	1.3	574	194.5	70,883
1995/3	24.2	16,786	2.7	911	203.6	77,050
1995/4	21.2	17,244	6.0	975	247.3	99,189
Total 1995	91.4	67,649	15.3	4,202	863.0	330,329

Source: U.S. Department of Commerce, Bureau of the Census.



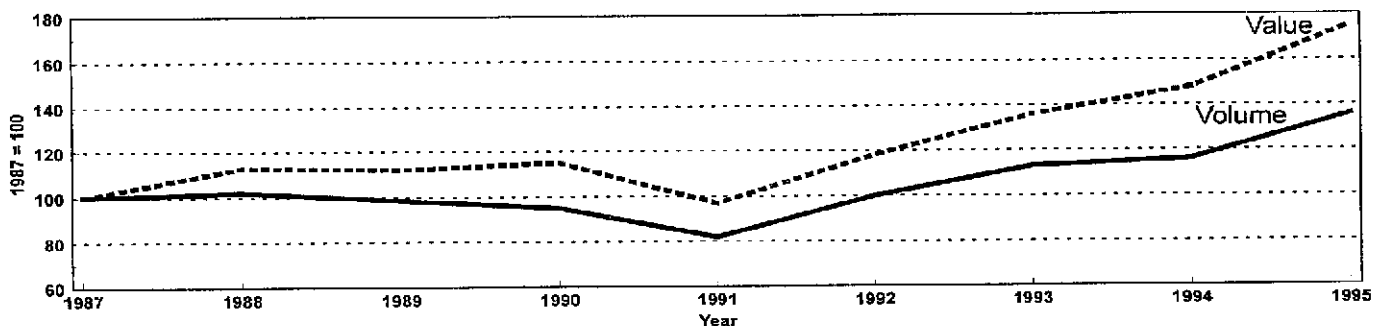
Volume and value index of all U.S. hardwood lumber imports, 1987-1995.

Table 24.--Volume and value of U.S. hardwood veneer imports, by region, 1990-95
(Million square meters and thousands of dollars, c.i.f.)

Year/qtr.	Canada		Central & South America and Caribbean		Africa	
	Volume	Value	Volume	Value	Volume	Value
1990	84.0	92,166	29.8	30,640	3.0	3,868
1991	78.2	81,276	22.5	24,815	2.5	4,844
1992	92.7	100,379	33.9	35,944	2.1	2,322
1993	107.6	111,860	42.1	48,057	3.6	4,677
1994/1	32.0	33,585	8.3	7,925	0.5	952
1994/2	29.2	33,936	10.8	12,954	1.1	1,564
1994/3	24.5	29,734	9.2	9,249	0.7	1,588
1994/4	27.8	32,533	10.1	10,754	1.5	2,241
Total 1994	113.4	129,789	38.5	40,882	3.4	6,346
1995/1	31.0	37,972	8.2	8,881	2.0	2,799
1995/2	28.8	37,502	8.9	10,494	2.8	2,487
1995/3	23.7	32,718	14.4	13,782	2.8	3,971
1995/4	26.7	35,502	21.9	18,375	3.0	3,744
Total 1995	110.2	143,695	53.5	51,534	10.6	13,999

Year/qtr.	Asia and Pacific Ocean		All other		Total	
	Volume	Value	Volume	Value	Volume	Value
1990	23.3	23,406	8.7	231,757	148.7	173,255
1991	18.4	16,367	7.0	198,090	128.6	147,110
1992	19.4	17,438	7.5	231,454	155.6	179,226
1993	14.7	16,509	8.9	25,013	176.9	206,117
1994/1	3.3	4,282	2.6	7,423	46.7	54,167
1994/2	2.0	2,781	4.4	9,149	47.6	60,385
1994/3	2.3	3,139	3.7	8,658	40.4	52,369
1994/4	3.3	3,592	3.4	8,076	46.1	57,196
Total 1994	11.0	13,797	14.1	33,304	180.8	224,117
1995/1	4.8	5,009	4.6	8,058	50.7	62,716
1995/2	9.6	9,402	3.2	8,218	53.3	69,105
1995/3	2.8	3,102	2.2	6,488	46.0	60,063
1995/4	7.8	7,839	2.7	8,055	62.1	73,515
Total 1995	25.0	25,354	12.8	30,822	212.1	265,399

Source: U.S. Department of Commerce, Bureau of the Census.



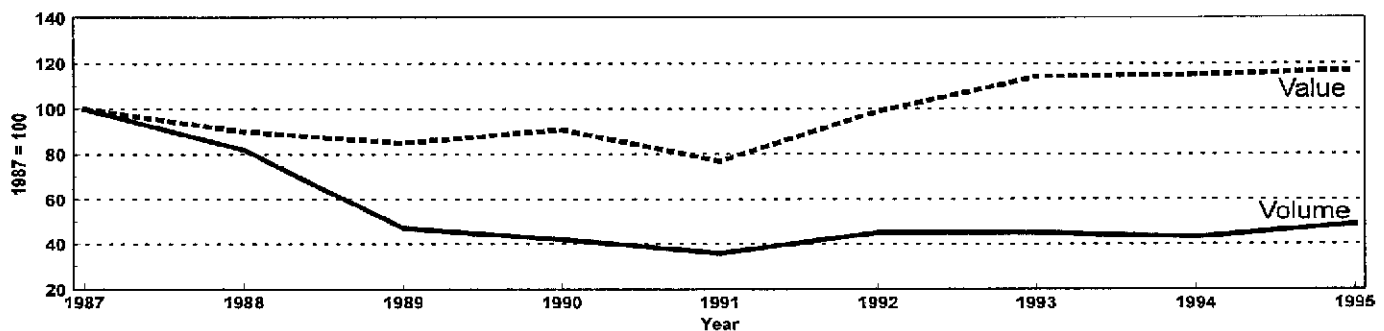
Volume and value index of all U.S. hardwood veneer imports, 1987-1995.

Table 25.—Volume and value of U.S. hardwood plywood imports, by region, 1990-95
(Cubic meters and thousands of dollars, c.i.f.)

Year/qtr.	Canada		Central & South America and Caribbean		Africa	
	Volume	Value	Volume	Value	Volume	Value
1990	88,656	35,112	124,623	41,642	0	0
1991	88,755	38,121	121,000	43,468	14	9
1992	113,359	48,758	198,026	67,597	34	12
1993	123,456	60,060	298,495	115,885	258	141
1994/1	34,982	16,435	94,947	36,786	391	188
1994/2	42,005	19,539	105,436	41,923	0	0
1994/3	36,874	16,877	86,849	31,608	14	8
1994/4	43,108	18,357	79,412	30,511	0	0
Total 1994	156,969	71,209	366,644	140,830	405	196
1995/1	40,016	18,892	82,661	32,764	0	0
1995/2	42,958	20,675	87,954	36,240	0	0
1995/3	43,242	19,947	96,920	39,237	0	0
1995/4	53,471	22,569	94,042	38,941	0	0
Total 1995	179,327	82,083	361,577	147,184	0	0

Year/qtr.	Asia and Pacific Ocean		All other		Total	
	Volume	Value	Volume	Value	Volume	Value
1990	1,154,248	484,731	54,305	23,606	1,421,832	585,092
1991	962,719	397,398	54,824	16,150	1,227,312	495,148
1992	1,174,221	501,774	38,845	19,231	1,524,485	637,374
1993	1,056,320	534,010	55,409	28,393	1,533,938	738,487
1994/1	193,959	122,242	24,180	10,270	348,459	185,928
1994/2	264,019	156,199	23,479	9,888	434,939	227,550
1994/3	225,465	133,390	25,672	10,463	374,874	192,347
1994/4	150,549	81,992	15,914	8,943	288,983	139,736
Total 1994	833,992	493,756	89,245	39,568	1,447,255	745,561
1995/1	278,358	128,312	21,078	9,982	422,113	189,950
1995/2	258,962	118,783	26,697	13,683	416,211	189,381
1995/3	210,876	106,054	51,697	15,206	402,735	180,448
1995/4	243,884	120,183	31,652	14,662	423,049	196,354
Total 1995	992,080	473,331	131,124	53,535	1,664,108	756,133

Source: U.S. Department of Commerce, Bureau of the Census.

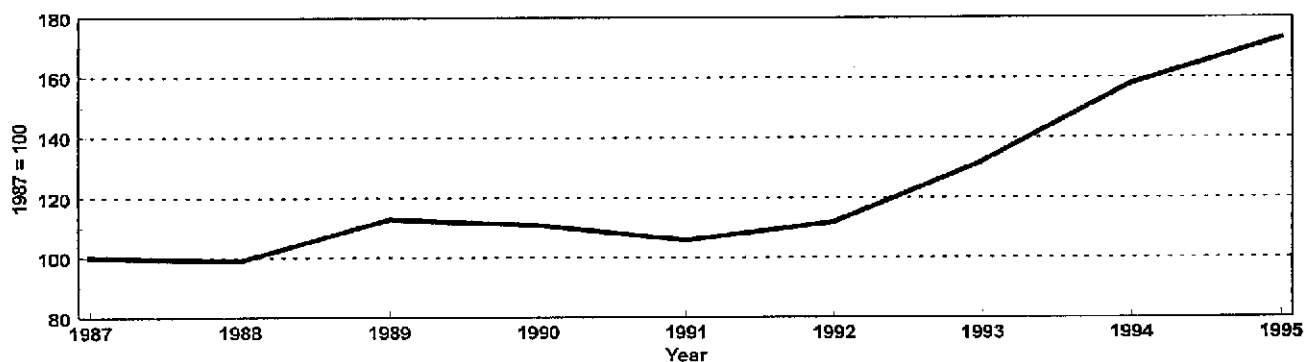


Volume and value index of all U.S. hardwood plywood imports, 1987-1995.

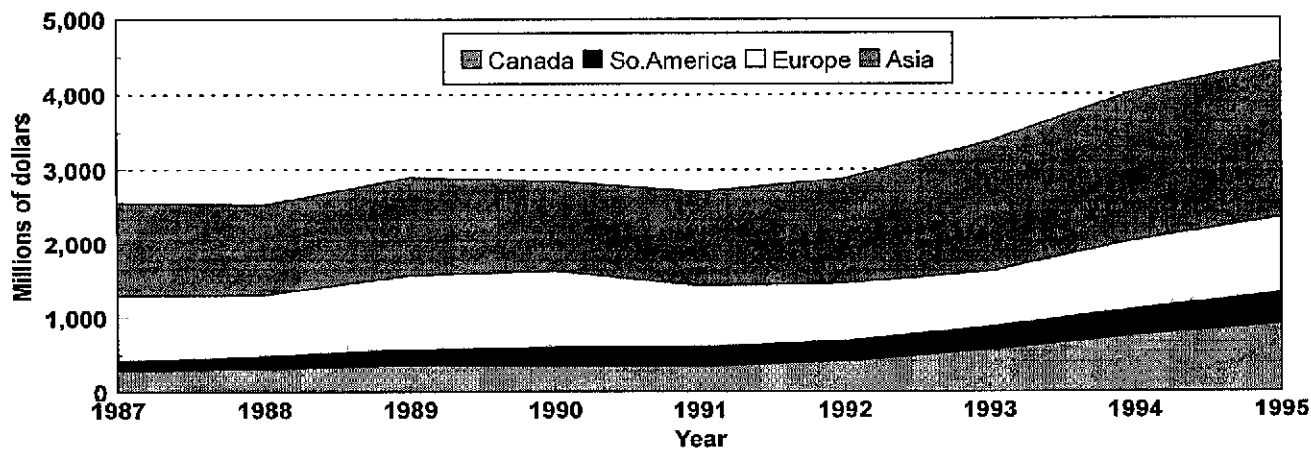
Table 26.--Value of U.S. wood furniture imports, by region, 1990-95
(Thousands of dollars, c.i.f.)

Year/qtr.	Canada	Caribbean, South, and Central America	Europe	Asia, Middle east, and Pacific	All other	Total
1990	358,934	244,751	1,031,711	1,213,362	5,334	2,854,098
1991	346,139	256,841	833,211	1,271,590	4,811	2,712,594
1992	412,880	269,361	784,314	1,412,052	5,740	2,884,347
1993	563,326	301,397	755,104	1,751,680	9,488	3,380,993
1994/1	160,802	75,326	196,852	456,047	2,527	891,554
1994/2	193,041	86,534	237,993	458,252	2,966	978,785
1994/3	185,180	93,829	239,385	521,222	4,617	1,044,236
1994/4	214,567	92,005	266,882	557,871	4,436	1,135,763
Total 1994	753,590	347,697	941,112	1,993,394	14,546	4,050,338
1995/1	195,002	92,206	246,945	494,190	3,677	1,032,018
1995/2	213,062	100,497	272,254	493,587	4,106	1,083,503
1995/3	236,988	104,215	255,200	536,295	4,064	1,136,758
1995/4	254,298	114,811	268,546	556,318	4,754	1,198,726
Total 1995	899,350	411,731	1,042,945	2,080,382	16,600	4,451,004

Source: U.S. Department of Commerce, Bureau of the Census.



Value index of U.S. furniture imports, 1987-1995.



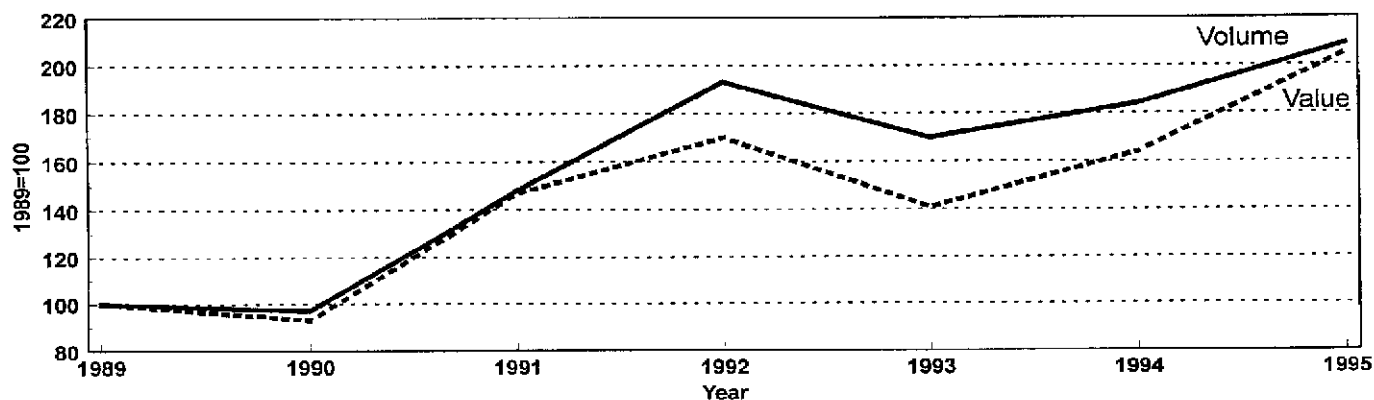
Value of U.S. furniture imports, by region, 1987-1995.

Table 27.--Volume and value of U.S. exports of nonconiferous chips, by region, 1990-95
(Tons and thousands of dollars, f.a.s.)

Year/qtr.	Western Europe		Canada		Japan		Mexico	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value
1990	1,035	52	42,495	1,974	1,336,612	125,500	37,451	1,764
1991	334	20	107,632	4,225	2,178,574	214,233	0	0
1992	1,519	110	148,519	6,256	2,565,423	234,189	18,120	1,224
1993	23,023	1,943	170,143	6,676	2,454,629	199,244	87	6
1994/1	390	71	61,127	2,342	547,846	49,473	1,200	43
1994/2	91	206	67,760	2,607	611,037	53,033	242	17
1994/3	28	83	62,876	2,442	744,458	62,185	0	0
1994/4	219	564	57,082	2,172	745,857	65,873	0	0
Total 1994	728	923	248,845	9,562	2,649,198	230,564	1,442	60
1995/1	NA	998	75,051	2,848	531,593	46,714	0	0
1995/2	NA	23	78,912	3,547	606,420	64,233	18	20
1995/3	NA	99	74,230	3,226	907,433	94,452	0	0
1995/4	NA	99	55,933	2,385	986,039	94,266	0	0
Total 1995	NA	1,218	284,126	12,007	3,031,485	299,663	18	20

Year/qtr.	Taiwan		South Korea		All other		Total	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value
1990	179,993	14,624	69,856	6,347	1,097	47	1,668,539	150,309
1991	190,600	14,141	63,756	4,621	1,738	105	2,542,634	237,345
1992	326,060	13,221	235,992	20,237	2,984	333	3,298,617	275,568
1993	22	26	254,808	18,867	4,432	2,129	2,907,144	228,892
1994/1	0	0	115,784	9,470	627	69	726,974	61,466
1994/2	0	0	40,710	4,424	10	3	719,850	60,290
1994/3	0	0	41,962	4,794	418	25	849,742	69,529
1994/4	0	0	50,179	5,075	769	81	854,106	73,764
Total 1994	0	0	248,635	23,763	1,824	177	3,150,672	265,050
1995/1	0	0	69,696	5,598	1,052	113	677,786	56,270
1995/2	0	0	48,381	2,607	73	9	733,870	70,439
1995/3	0	0	44,975	3,273	1,544	1,080	1,028,617	102,128
1995/4	0	0	93,410	5,916	2,415	105	1,139,125	102,770
Total 1995	0	0	256,462	17,394	5,084	1,305	3,579,398	331,607

Source: U.S. Department of Commerce, Bureau of the Census.



Volume and value index of all U.S. exports of nonconiferous chips, 1989-1995.

Definition of Terms

c.i.f. (Cost, Insurance, Freight) - The term is used for shipment to designated overseas port of import. The seller quotes a price for the goods, including insurance, all transportation, and miscellaneous charges to the point of debarkation from vessel or aircraft.

f.a.s. (Free Alongside a Ship at designated U.S. port of export) - The seller quotes a price that includes charges for delivery of the goods alongside a vessel at the port. The seller handles the cost of unloading and wharfage. Loading, ocean transportation, and insurance are the buyer's responsibility.

Useful Conversion Factors

1 MBF (lumber) = 2.36 cubic meters
1 MBF* (logs - FAO) = 4.53 cubic meters
1 MBF** (logs - Doyle scale) = 4.59 cubic meters
1 MBF** (logs - International 1/4" rule) = 3.48 cubic meters
1 MBF** (logs - Scribner) = 3.90 cubic meters
1 cubic meter = 35.32 cubic feet
1 ton = 2000 lbs.
1 metric ton = 2204.623 lbs.

* Factor used by the Food and Agricultural Organization of the United Nations.

** Approximation based on 16-foot log with a 15-inch diameter at the top end inside bark. Actual conversion will depend on the distribution of logs under consideration.

Literature Cited

Luppold, William G. 1995. Causes and remedies for errors in international forest products trade data: Examples from the hardwood trade statistics. *Forest Science*. 41(2): 278-283.

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