

## CHAPTER 5

# ROUNDWOOD SUPPLY, TRADE AND CONSUMPTION

### Highlights

- European removals of roundwood rose in 1997 in accordance with higher demand from processing industries.
- United States removals fell slightly as logs normally exported to Asia were consumed in domestic markets.
- Roundwood removals in Russia sank to new lows, but exports recovered to near 1995 levels.
- Baltic exports of roundwood to Finland and Sweden continued to grow strongly.
- Roundwood markets in Asia, notably Japanese imports, fell sharply in 1997 and the first half of 1998, causing major shifts in the pattern of roundwood trade in the Pacific region.

This chapter briefly describes trends in the supply and trade of roundwood, as a background to the description of markets for the various products described below. A complicating factor for the market analysis is that frequently one assortment of roundwood can be a raw material for several different types of product (e.g. round pulpwood can be used for the manufacture of pulp or of particle board or of fibreboard), and that in trade statistics, no distinction is now made between logs and pulpwood; data are available for coniferous or non-coniferous “industrial wood in the rough”. For these reasons it is often impossible to make direct links between product markets and supply of the raw material for that product.

Another factor is the differences in scales between different parts of the market: many roundwood markets are intensely local, with regional particularities, small volumes and many sellers and buyers, (sometimes, but not always grouped into associations of one type or another). However there are also very high volume flows, over long distances, such as the transpacific trade in logs or chips, or the large-scale pulpwood imports by Sweden and Finland from Russia and the Baltic States. Taken together these factors make it difficult to paint a clear picture of general market conditions: this chapter aims to present the basic parameters and trends, and some country data

in tables. Because of the fragmentation of roundwood markets, the price series presented may well not be typical of developments elsewhere.

### 5.1 Developments in Europe

In 1997, in line with the generally strong demand conditions, European roundwood supply increased significantly. European removals, still by far the largest component of supply<sup>1</sup>, rose by 11.6 million m<sup>3</sup> (3.4%) to reach 354 million m<sup>3</sup><sup>2</sup> (table 5.1.1). This was still 10 million m<sup>3</sup> less than the record year of 1990, although the 1990 figure was distorted by the windblow in Germany. The increase was concentrated on coniferous industrial wood in the rough (logs and pulpwood): fuelwood and other industrial wood fell (although the reliability of annual statistics on these assortments cannot be considered very high). Non-coniferous removals also increased only marginally, although the rise would no doubt be higher if French and German data had been available, as these are the

<sup>1</sup> The components of European wood and fibre supply (1990 share of total in brackets) are European removals (69%), residues of wood processing (i.e. chips and residues) (8%), waste or recovered paper (13%) and imports from other regions (10%). Source: *European Timber Trends and Prospects: into the 21<sup>st</sup> century* (ECE/TIM/SP11) (ETTS V), 1996.

<sup>2</sup> However, no data have yet been received on removals from two of the five largest European producers of roundwood: France and Germany.

two of the three largest producers of hardwoods. Turkey, the second largest producer recorded a significant drop. Sweden and Finland both recorded strong increases in removals, by 3.9 million m<sup>3</sup> (6.9%) and 4.7 million m<sup>3</sup> (10.1%) respectively. The 1997 figure for Finnish removals, just short of 60 million m<sup>3</sup>, was an all-time record.

European removals of coniferous logs rose even more strongly than total removals, by 6.4% in total, and by 11.6% and 15.1% in Sweden and Finland: this was due to the generally high levels of production of sawn softwood, which are described in chapter 6 (table 5.1.2). All major European producers of coniferous logs recorded increases. The strong demand

TABLE 5.1.1  
Roundwood removals in Europe, 1995 to 1997

Product	1995	1996	1997	Change 1996 to 1997	
				Volume	Per cent
	<i>(million m<sup>3</sup>)</i>				
Softwood	253.4	238.3	248.5	10.2	4.3
Hardwood	105.9	104.3	105.7	1.4	1.3
Total	359.3	342.6	354.2	11.6	3.4
of which :					
Fuelwood	54.2	56.6	56.1	-0.5	-0.9
Industrial wood	305.1	286.0	298.1	12.1	4.2
of which					
Sawlogs	173.3	163.6	174.1	10.5	6.4
Pulpwood	116.1	106.6	108.9	2.3	2.2
Other	15.7	15.8	15.1	-0.7	-4.4

TABLE 5.1.2  
Removals of softwood logs in selected countries, 1994 to 1997

	1994	1995	1996	1997 <sup>a</sup>	Change 1996 to 1997	
					Volume	Per cent
	<i>(1000 m<sup>3</sup>)</i>					
EUROPE	135476	142627	134540	143199	8659	6.4
of which :						
Sweden <sup>b</sup>	28500	34300	30200	33700	3500	11.6
Finland	22012	21697	20267	23332	3065	15.1
Germany	19741	20314	19362	19362	...	...
France	12815	13407	12727	12727	...	...
Austria	7953	7513	7664	8027	363	4.7
Poland	7726	7656	7542	8022	480	6.4
Czech Republic	5156	5465	5810	6221	411	7.1
Norway	4282	4590	4031	4537	506	12.6
Spain	4675	4375	4183	4183	...	...
United Kingdom	3464	3443	3567	3642	75	2.1
Portugal	3796	3810	3500	3500	...	...
Romania	1800	1974	2479	2720	241	9.7
Switzerland	2802	2820	2215	2392	177	8.0
Other countries	10754	11263	10993	10834	-159	-1.4
Russian Federation	41870	42370	32447	28100	-4347	-13.4
United States	175743	173404	171386	176391	5005	2.9

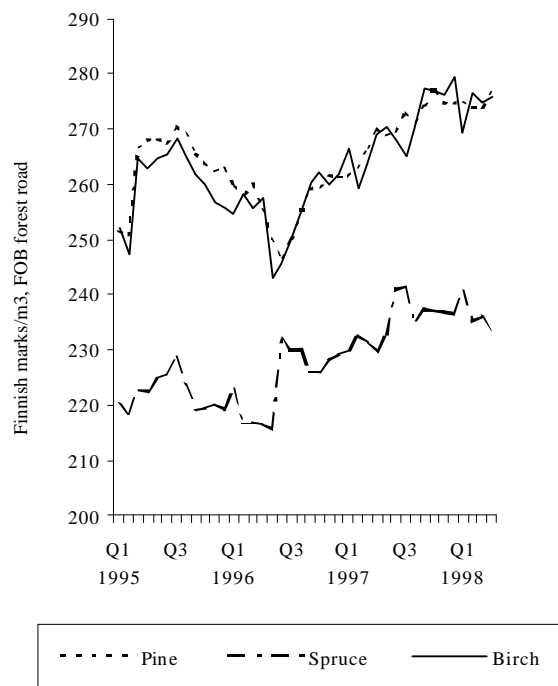
<sup>a</sup> Preliminary.

<sup>b</sup> Felling year.

conditions are reflected in price developments for coniferous logs in Finland and Germany, which recovered from the decline in 1996 (graphs 5.1.1 and 5.1.2).

GRAPH 5.1.1

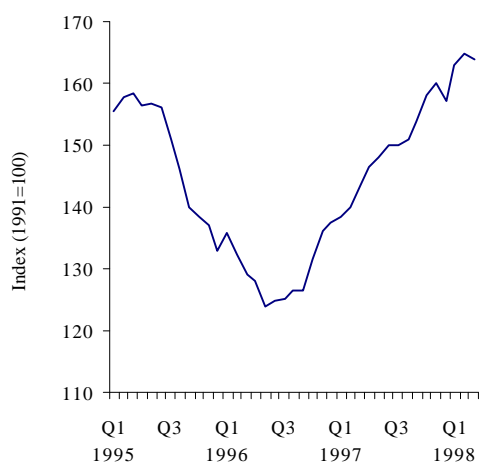
**Finnish log prices from private forests, 1995 to 1998**



Source: Finnish Forest Research Institute, 1998.

GRAPH 5.1.2

**Price indices for spruce logs from public forests in Germany, 1995 to 1998**



Source: ZMP, 1998

In Switzerland, which could be an example to other mature high cost roundwood markets, the advent of efficient (and relatively “high-tech”) processing of smaller diameter logs has rejuvenated the market for spruce and fir logs. Previously, larger logs were preferred, despite their frequent defects of shake and rot which develop with age. Now, engineered wood products like glulam beams and fingerjointed boards have also permitted the utilisation of shorter, smaller diameter logs. *La Forêt* states that these new composite wood products permit high quality construction timber to be obtained from smaller resources and raw materials.

In 1997, Europe’s trade in wood in the rough expanded sharply (table 5.1.3). Exports rose by 2.1 million m<sup>3</sup> and imports by 4.5 million m<sup>3</sup>. The rise in imports concerned mainly the three largest forest products producers, Sweden, Finland and Austria, and were probably concentrated, at least for Finland and Sweden, on pulpwood from around the Baltic Sea (Baltic states, Russia, Germany, Poland). Italian imports, mainly of tropical logs fell quite markedly. For exports, the largest increases concerned Germany and Slovakia, who both increased exports by 0.5 million m<sup>3</sup>.

The complex relationship between processing capacity, foreign markets, domestic removals and roundwood trade is illustrated by developments for Estonia. In that country, the recent increases in sawmilling capacity have led the National Forestry Board to forecast declining future sawlog exports. In 1997 roundwood exports from Estonia were about 3 million m<sup>3</sup>, which were over half (53%) of the annual harvest volume. Estonian roundwood removals advanced significantly in 1997, by 51%, to reach 5.6 million m<sup>3</sup>. Most of the roundwood exports were pulpwood.

In general the Baltic states have become some of the major roundwood exporters in Europe, mostly to Finland and Sweden. Their exports rose again in 1997 by 34% for the group as a whole, with Estonia the largest exporter (table 5.1.4).

TABLE 5.1.4

**Baltic Countries exports of wood in the rough, 1992, 1996 and 1997**  
1000 m<sup>3</sup>

	1992	1996	1997	% change 97/96
Estonia	530	1898	2900	33.3
Latvia	475	1467	2120	44.5
Lithuania	285	952	765	-19.6
Total	1290	4317	5785	34.0

Source: UN/ECE TIMBER database.

TABLE 5.1.3  
Exports and imports of industrial wood in the rough, 1994 to 1997

	1994	1995	1996	1997 a	Change 1996 to 1997	
					Volume	Per cent
	(1000 m <sup>3</sup> )					
<b>EXPORTS</b>						
<b>EUROPE :</b>						
- Coniferous	12036	12668	10848	12261	1413	13.0
- Broadleaved	5415	6853	5373	6085	712	13.2
<b>TOTAL :</b>	17451	19521	16221	18345	2124	13.1
of which :						
Germany	4698	4919	2992	3517	525	17.5
Czech Republic	605	2161	2687	2657	-30	-1.1
France	2433	2475	2227	2325	98	4.4
Sweden	1054	1725	1621	1418	-203	-12.5
Switzerland	1053	1016	979	1147	168	17.2
Slovakia	910	759	529	1031	502	94.9
Belgium-Luxembourg	874	805	748	885	136	18.2
Austria	631	482	625	806	181	29.0
Hungary	451	562	555	701	146	26.3
Finland	1444	865	579	640	61	10.5
Norway	435	437	385	473	88	22.9
Portugal	629	778	452	452	...	...
Other countries	2234	2537	1842	2294	452	24.6
Russian Federation	11117	18374	15915	17700	1785	11.2
Canada	1253	1187	955	721	-234	-24.5
United States	12215	12817	11937	10864	-1073	-9.0
North America	13468	14004	12892	11585	-1307	-10.1
<b>IMPORTS</b>						
<b>EUROPE :</b>						
- Coniferous	19099	20221	17634	20222	2589	14.7
- Broadleaved	21816	25554	18477	20361	1884	10.2
<b>TOTAL :</b>	40915	45775	36110	40583	4473	12.4
of which :						
Sweden	6666	7653	5018	7648	2630	52.4
Finland	6761	9353	6575	6734	159	2.4
Austria	4828	4454	4451	5165	714	16.0
Italy	6068	4936	4936	4504	-432	-8.8
Norway	2617	3717	2476	2844	368	14.9
Belgium-Luxembourg	2817	3141	2391	2823	432	18.1
Spain	1426	2192	1902	2116	214	11.3
France	1989	2345	1601	1784	183	11.4
Germany	2742	1743	1263	1653	390	30.9
Portugal	1105	1632	1065	1065	...	...
United Kingdom	311	662	836	576	-260	-31.1
Turkey	1196	777	992	545	-447	-45.1
Other countries	2389	3170	2604	3126	522	20.0
Canada	5255	6495	6088	6635	547	9.0
United States	797	706	524	582	58	11.1
North America	6052	7201	6612	7217	605	9.2

<sup>a</sup> Preliminary

Part of the large increase in Latvia's exports (44% in 1997) is due to construction of new port facilities by the largest pulpwood producer. The Timber Committee Baltic Countries Forest and Forest Industries Study Tour in 1997 visited the port of Liepaja. According to the Latvian Forest Service, the dilapidated military port has been turned into a free trade zone in 1998 and now pulpwood is shipped from the new facilities.

In summer 1998, the French Office National des Forêts registered price rises at its annual sales of standing timber of about 10% for Scots pine and 3% for beech. Log auctions in the spring of 1998 in France and Germany found many buyers: with strong demand, higher prices were bid.

## 5.2 Developments in North America and around the Pacific

North American roundwood markets in 1997 were subject to two contrasting influences: on the one hand demand from North American industries was strong, and on the other, demand from Japan, which normally imports about 20 million m<sup>3</sup> of roundwood and chips from all around the Pacific (North America, New Zealand, South East Asia, Russia, Australia etc.) fell sharply in the course of 1997. Korea, another major importer of wood in the rough, also experienced a dramatic drop in demand.

United States removals<sup>3</sup> fell slightly, by 4.3 million m<sup>3</sup> (0.7%) to 486 million m<sup>3</sup>, but this includes a drop of over 14 million m<sup>3</sup> in fuelwood removals, and removals of industrial wood, softwood and hardwood, increased. Heavy ice storms in January 1998, covering 50,000 square kilometres in Québec, as well as some neighbouring parts of the United States will result in increased removals for Canada. In the storm zone, the greatest damage was suffered by hardwoods.

North American softwood log markets and trade have been evolving following the steep reductions in harvests from federal lands, chiefly in the United States Pacific Northwest, and the reduced demand from Japan. As a result of the reductions in harvest from federal lands, cutting has increased on industry land (and the area of industry land is increasing as companies ensure supply through purchase of forests). Export-destined logs for Asia are currently being brought back into the domestic markets in the United States.

The downturn in exports to Asia has led to an oversupply of logs on the Pacific coast of the United States and Canada. Sawmills on the Oregon and Washington coastal area have been able to buy low cost raw materials, for example Douglas fir logs, whose export price fell 43%, from \$1,154 per thousand board feet in 1996 to \$654 in the fourth quarter of 1997. There was a slight recovery in early 1998 to \$850, and further increases were expected by some analysts as stocks were brought down. The loss of traditional Asian log markets has meant that coastal sawmills in the United States states of Oregon and Washington have offers of low cost logs from Alaska and Canada too.

Canadian log exports have been negatively affected by the downturn in Asian demand, and now by the oversupply in the United States. British Columbia's log exports to Japan peaked in 1992 at approximately 413,000 million m<sup>3</sup>, but in 1997 they were estimated at less than 47,000 m<sup>3</sup>. With the decline of the Japanese log market, British Columbia exporters turned to the United States market for logs: since 1991, British Columbia log exports to the United States have risen from almost nothing, to 236,000 m<sup>3</sup> in 1996. However, with declining United States log exports in 1997, United States sawmills found a supply source closer to home, and log imports by the United States from Canada fell sharply, to about 106,000 m<sup>3</sup>. To date the remaining United States log imports are still primarily from Canada, but some exploratory purchases have been made from Russia.

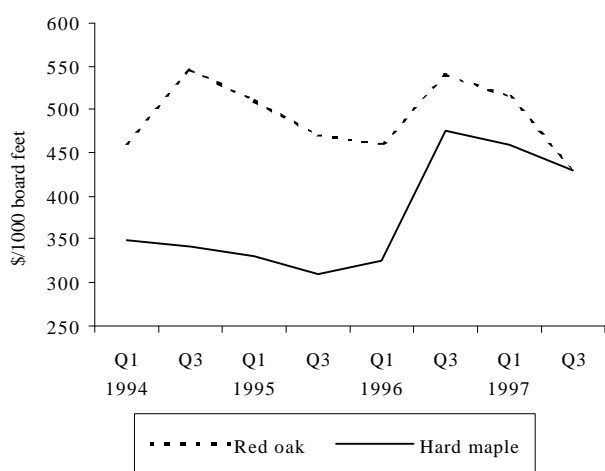
North American exports of industrial wood in the rough fell in 1997 by 1.3 million m<sup>3</sup>: indeed the drop was probably steeper than this indicates, as it was concentrated in the second part of the year, and continues into 1998.

The table in chapter 4 "Japanese log imports" covers all types of logs and shows that Japanese log imports fell by a quarter in value with the most affected suppliers being North America and New Zealand. Russian exports to Japan in 1997 increased 13% in volume and Chilean exports rose strongly, from a low base.

United States hardwood log prices reached new peaks in mid 1996, but fell throughout 1997 for many species (graph 5.2.1). Red oak log prices fluctuated, dropping slightly in 1997, but those for maple rose until they were about the same level as oak. These trends may be attributed to weaker demand for sawnwood of darker species.

<sup>3</sup> No removals data have been received from Canada.

GRAPH 5.2.1  
United States hardwood log prices, 1994 to 1997



Note: Prices paid for red oak and hard maple, grade 1 logs, delivered to sawmills, Doyle log scale.

Source: *Ohio Timber Prices*, Ohio Division of Forestry, 1998.

### 5.3 Developments in Russia

Russian roundwood removals sank to 84 million  $m^3$  in 1997, down by 63% from 1992 when separate statistics became available. The decreases were about equal, at 13% for both softwood roundwood, which fell to 53 million  $m^3$  and for hardwood roundwood, which fell to 31 million  $m^3$ . However, Russian exports of wood in the rough advanced in 1997, by 11%, to reach 17.7 million  $m^3$ , nearly as high as the record level in 1995 of 18.4 million  $m^3$ .

Russian log exports to Japan advanced strongly in 1997, while Japan's imports from all other regions decreased. Japan imported 6.1 million  $m^3$  of Russian logs in 1997, 13% higher than in 1996. With this volume Russia became the second largest source of Japanese logs, overtaking North America, but still behind the Asia Pacific region. The meeting of the "All Japan Russian Logs Dealing Association" in 1998 forecast that Russia would be the largest source of logs in 1998, but on a diminished total log import volume. Because of the rapidly changing situation in Asia, no forecasts are available for the 1998 Japanese log import volumes: however in the first 5 months of 1998, total log imports were down by 31%.

While the volume of Russian log exports to Japan went up by 13% in 1997, their value increased by only 11%. The unit value<sup>4</sup> was \$107 per  $m^3$ , which partly

explains the gains in market share over higher priced logs from North America (\$274 per  $m^3$ ) and Asia Pacific (\$174 per  $m^3$ ) according to *Japan Lumber Journal*.

<sup>4</sup> It should be noted that unit values are a crude method of comparing prices because there is no distinction between qualities of the logs.