2.1 Exports, Production and Prices in the Sawmilling and Plywood Industries

Growth in the construction industry will boost the consumption of sawn softwood and plywood in Western Europe to a record level this year. Due to the growing demand in Europe and Asia, and Finland’s competitive edge, production and exports of Finnish sawnwood will be up in 2000 by about seven per cent, and the export price (in FIM) by nine per cent. Similarly, production and exports of plywood will be up by 14 per cent, although the average price of exports will have increased this year by only two per cent, as the additional demand has been weighted towards softwood plywood.

The growth rate in the construction sector will be somewhat slower in 2001, both in Finland and the rest of Europe, which will also reduce the growth in demand for sawnwood. The growth in construction will nevertheless raise Finnish consumption of sawnwood to almost five million cubic metres. Production, exports and export prices of sawnwood (in FIM) are forecast to increase in 2001 by three per cent. The price rise will be restricted by the increase in the supply of softwood on the European markets, and, for exports outside the euro area, by the predicted strengthening of the euro. Production and exports of plywood are forecast to grow in 2001 by about 13 per cent. The average price of exports will rise by only 1.5 per cent, because the increase in exports will be especially in the more economical softwood plywood.

Consumption of Wood Products in Europe at Record High in 2000

The higher pace of economic growth since late 1999, combined with low interest rates and the increase in consumer confidence, has helped to revive the European construction sector. According to Euroconstruct, the growth in construction activity in the EU countries in 2000 will amount to three per cent. This will stimulate the demand for wood products, raising their consumption to a record level. The Food and Agricultural Organisation of the United Nations (FAO) forecasts that the European demand for sawnwood will increase by 1.9 per cent to 89 million cubic metres in 2000, and plywood consumption by 1.4 per cent to 6.6 million cubic metres.

The growth in consumption has raised the price of softwood plywood and especially of spruce sawnwood. The unit price of exported Finnish spruce sawnwood (in FIM) for the period January-June 2000 was up by 11 per cent on the same period in 1999, while the corresponding figure for pine sawnwood was seven per cent. The price of softwood plywood rose nine per cent in the same period, and the price of birch plywood fell slightly; the average unit price of exported plywood rose overall by one per cent.
Export Growth Mainly Outside the Euro Area

Forty-three per cent of the export volume of Finnish sawnwood is sold within the euro area (the EMU countries). Finnish sawnwood exports to countries outside the euro area have grown considerably in the current year. Exports of sawnwood to the largest of the euro countries, Germany and France, were lower in the first six months of 2000 than in the same period in 1999.

In the first half of this year, sawnwood exports to European countries outside the euro area, including the largest export market, the United Kingdom, were up five per cent on the same period in 1999. The corresponding figure for exports to Asia was 11 per cent. Exports to Africa declined slightly as a result of the reduced exports to Egypt.

Price Competitiveness Boosted by Weak Euro

The orientation of exports towards markets outside the euro area has been stimulated by the growing demand in those markets and the price competitiveness associated with the weak euro. This has been the case especially for exports of spruce sawnwood to Asia, where Japan has been the main customer.

The sawnwood figures in the table comprise both sawn softwood and sawn hardwood. The plywood figures comprise birch plywood, softwood plywood and laminated veneer lumber (LVL). 

* Due to statistical corrections and revisions, sawnwood production for 1999 was found to be 1.0 million cubic metres above the figure presented previously.

** Estimated use = production – exports

Sources: Statistics 1999 (Finnish Forest Industries Federation) and Finnish Forest Research Institute (METLA).
The euro has increasingly been used in invoicing for Finnish sawnwood exports, and today it is estimated that at least half of these invoices are in euros. For exports to the United Kingdom, the pound sterling continues to be used in addition to the euro, and in exports outside Europe the main invoicing currency is the US dollar. Between January 1999 and September 2000 (September 27, 2000), the euro exchange rate weakened against the US dollar by 23 per cent, and against the Japanese yen by 27 per cent. Finnish exports have benefited from this trend, also in relation to competitor countries not belonging to the euro area. Over the period referred to above, the euro has weakened by 25 per cent against the Canadian dollar and by six per cent against the Swedish krona.

### Increase in Supply from Russia and Baltic Countries

The increase in production of wood products in Russia and the rapid drop in domestic consumption since the 1998 economic crisis have meant a rise in exports of Russian sawnwood and plywood. In the first half of 2000, Russian sawnwood exports to Europe grew by 42 per cent, and plywood exports by 36 per cent. In 1999, Russian sawnwood exports to Europe amounted to approximately 1.2 million cubic metres, which was well down on the 1990 figure of about five million cubic metres. Export growth from the Baltic countries, however, has almost filled the gap left by Russia.

According to the Food and Agricultural Organisation of the United Nations (FAO), European sawnwood production in 2000 will be up by slightly more than the increase in consumption. In Continental Europe, and especially Germany, production of sawnwood has increased because of the storm damage that occurred at the end of 1999. In the largest producer countries, namely Germany, Finland and Austria, most of the production growth has gone to meet domestic demand. In Sweden, sawnwood production has actually fallen slightly in the last couple of years. Capacity may fall further, with smaller and older sawmills being closed or repairs and improvements not carried out.

In the United States, the rise in interest rates and the uncertain trend in share prices have dented consumer confidence in the economy, and housing construction starts fell in the second quarter of 2000. As construction activity has fallen, the demand for sawnwood and wood-based panels has slackened, and prices in the summer fell to below the level of last year. Easing the oversupply situation by expanding exports outside North America is difficult because of the strong dollar, and many US producers have already reduced their supply by limiting production. Canadian exports to Europe declined considerably during the 1990s due to the boom in the US economy, and they continue to remain at a low level.
Higher Market Share for European Sawnwood in Japan

The rise in demand for sawnwood in Japan in the 1990s has been very important for maintaining equilibrium and prices in the European sawnwood market, although European exports to Japan (1.8 million cubic metres in 1999) are small in relation to the European consumption of sawnwood. The biggest exporters of sawnwood to Japan, namely the United States and Canada, have lost market share to European producers, whose share of imports to Japan in the first half of 2000 has already risen to 23 per cent. Despite the uncertain trend in the Japanese construction sector, imports from Europe will be up by over 13 per cent in 2000, according to forecasts made in July by the Forestry Agency of Japan.

European suppliers of spruce sawnwood have increased their market share at the expense of North American suppliers, on account of high-quality products and the price competitiveness brought by the weak euro. Finnish exports to Japan have recovered quickly after the dip of 1998, and growth last year amounted to 60 per cent. Growth continued in the first half of 2000, and exports for the year as a whole will probably show an increase of close to one million cubic metres.

Forecasts of export prices for sawnwood and plywood (as percentage changes from previous year*)

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000f</th>
<th>2001f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sawnwood</td>
<td>+0.7</td>
<td>+9</td>
<td>+3</td>
</tr>
<tr>
<td>Plywood</td>
<td>−9.9</td>
<td>+2</td>
<td>+1.5</td>
</tr>
</tbody>
</table>

* Export prices are nominal unit values (in FIM).

Demand for sawnwood and plywood this year on Europe’s export markets is high. The rise in sawnwood prices came to a standstill in the summer, however, partly due to the increased supply from Russia and the Baltic countries. The price of birch plywood has been forced down as a result of the increased supply of cheaper plywood from Asia, Russia and the Baltic countries. Finnish exports to countries outside the euro area are helped by the price competitiveness due to the weak euro. With demand increasing in Europe and Asia, the growth in exports of Finnish sawnwood in 2000 is estimated to be seven per cent, and in plywood exports 14 per cent. The unit price of sawnwood exports will rise somewhat towards the end of the year, bringing the increase for 2000 to about nine per cent. The average price of plywood exports will rise by only two per cent, however, as the price rises and export growth are mainly in softwood plywood.
European Consumption of Sawnwood Still High in 2001

In 2001, European GDP growth weighted according to the distribution of Finnish sawnwood exports will be at least as high as this year. In view of this, the construction forecast issued by Euroconstruct in June 2000, which was based on information for the first part of the year, could be a little pessimistic. It was predicted that construction growth in Western Europe would decline from the three per cent prevailing in 2000 to 1.6 per cent in 2001. The justification was the rise in interest rates, which will gradually begin to reduce construction activity, and the fact that housing supply in many countries is already starting to match the demand.

In Germany, construction activity has dwindled over the period 1996–1998, but is expected to grow in 2000 by 0.5 per cent, and in 2001 by 1.0–1.6 per cent. Germany accounts for almost one quarter of the construction output of Western Europe by value, and so it is of key importance to the development of the European construction industry. Renovation of existing buildings, which is a significant element in sawnwood consumption, is increasing in Europe by about two per cent per year, according to Euroconstruct. This will support the growth in demand for sawnwood. In 1999, renovations accounted for over 36 per cent of total construction volume in Europe.

In Japan, too, accelerating economic growth will increase housing construction and sawnwood consumption next year. If the exchange rate remains favourable, Finnish and other European exports to Japan should therefore increase further in 2001. Such a trend would be favourable at a time when supply growth exceeds demand growth on the European markets.

The balance in the European markets in 2001 will, however, still be affected by the expanded production of sawnwood due to the storm damage of 1999. A further threat is the slackening of demand in North America, which may mean an increase in the supply of softwood plywood and sawnwood to the European market. However, as the dollar is not expected to weaken significantly against the euro, the supply pressure from North America is not likely to increase markedly in 2001. With the growth in the Russian economy continuing next year, it is probable that at least part of the country’s increased production volumes will be consumed on its domestic market. The growth in supplies to Europe from Russia and from the Baltic countries will, however, keep sawnwood price rises in check within Europe.

An increase in the supply of MDF and OSB board in 2001 will further intensify the competition between different products in Europe and thus limit the scope for price rises in sawnwood and softwood plywood. Production capacity for MDF board in Europe will already be up this year, to a total of over 10 million cubic metres. Production of OSB board, a substitute for softwood plywood, will also be up this year, by one fifth. OSB board production capacity is set to triple, rising to 3.5 million cubic metres by the end of 2002, according to the Food and Agricultural Organisation of the United Nations (FAO).

Moderate Increase in Export Prices in 2001

As the growth rate in construction declines on Europe’s export markets, the growth in demand for sawnwood and plywood will slacken off in 2001. Combined with an increase in supply, this will mean greater competition, especially in exports of sawnwood. The export volume of sawnwood and its export price (in FIM) are forecast to rise in 2001 by three per cent, mainly in pine sawnwood. Exports of plywood are projected to grow by 13 per cent, which will again chiefly concern softwood plywood, and the average rise in the export price of plywood will remain at about 1.5 per cent.
Domestic Use of Sawnwood Continues to Grow

Finnish consumption of sawnwood will be up this year, and will continue to grow in 2001, due to the increase in construction activity. The growth in housing construction has been supported by low interest rates, the higher purchasing power of consumers and their confidence in the future, and the increased migration of people and businesses to the growth centres around the country. The European Central Bank’s interest rate rises and the increase in house prices will, however, gradually begin to slow the growth in housing construction at the end of this year and in 2001.

Forecasts published by the Confederation of Finnish Construction Industries (RTK) in September indicate that construction activity (building starts in million cubic metres) will be up this year by almost four per cent, and by 1.3 per cent in 2001. The growth specifically in housing construction will be considerably above these figures: according to the RTK, the volume of housing starts in 2000 will be up by about eight per cent, and next year six per cent. Renovations, which are an important element in sawnwood consumption, account for about 45 per cent of total construction output by value. In 2000, renovations are increasing at a rate of 2–3 per cent, and this will continue in 2001.

If domestic consumption of sawnwood is estimated as sawnwood production minus exports, the figure for 1999 was 4.4 million cubic metres. Estimated in this way, domestic use of sawnwood is forecast to grow in response to the increase in construction activity by about seven per cent in 2000, and by four per cent in 2001. Domestic consumption of Finnish plywood, however, amounts to only one tenth of the total production volume, the rest being exported.

Figures issued by the sawmilling companies show that production capacity of sawnwood in 2000 is estimated at about 14 million cubic metres, which means that the capacity utilisation rate is very high. However, no major investments to increase capacity have yet been announced, although production could be expanded a little by carrying out improvements to existing facilities and by increasing production shifts. Present plywood capacity is about 1.4 million cubic metres, of which 100,000 cubic metres is for laminated veneer lumber (LVL). In 2001, softwood plywood and LVL capacity will rise by about 20 per cent, to almost 1.7 million cubic metres. The growth in capacity will affect production volumes only at the end of 2001.

With the growth in exports and domestic demand, production of sawnwood is expected to be up this year by 7.5 per cent, and plywood production by 14 per cent. In 2001, the growth in exports and domestic demand will decline, bringing the forecast growth in sawnwood production to three per cent, and plywood production to 13 per cent. Most of the increase in plywood production will again be in softwood plywood.

2.2 Exports, Production and Prices in the Pulp and Paper Industry

The distinct upturn in the export markets for Finnish paper products that began at the end of 1999 has continued throughout 2000 and may not peak until 2001. Indeed, record volumes will be achieved for production and exports in the pulp and paper industry in both 2000 and 2001. Production of paper and paperboard products will be up this year by about six per cent, and this trend is also reflected in the prices of paper products. The price of pulp has continued to rise sharply since summer 1999: the rise in average prices (in FIM) for the whole of 2000 is expected to be as much as about 60 per cent on last year’s prices. The rising price of pulp has not been transferred in full to the prices of paper products, which are forecast to rise this year by only 12 per cent. The tight capacity situation for pulp and paper and the strong demand on the world
markets will mean a rise in prices again next year, by about six per cent for pulp and about 12 per cent for paper. Total production in the pulp and paper industry in 2001 will also be up, by over four per cent on this year’s figure. The increase would be even higher were it not for the capacity bottleneck forming in production.

**Barely Any New Capacity, and Demand Exceptionally High**

The world market for the Finnish pulp and paper industry began to recover from the effects of the Asian crisis (1997–1998) only at the end of 1999. In the latter half of the year the price of paper and especially of pulp began to rise significantly and the growth in demand was strong. The impact of the Asian crisis on the paper market is not yet over, however, as the tight production capacity situation affecting the pulp and paper markets this year and in 2001 is in part a result of the crisis. This is because the crisis led to the postponement of new investment in Asia and South America, and therefore there will be very little new production capacity in these markets in the current year or in 2001.

At the same time, 1999 was the first year in the last four decades in which production capacity in the US paper and paperboard products industry actually fell (−0.5 per cent), and no significant addition is due this year or in 2001. On the European markets, too, the increase in production capacity has been smaller than usual. The principal reason is that forest industry companies have concentrated their efforts on mergers in recent years, instead of expanding capacity. The current state of the world market is seen very well in the fact that not one new market-pulp mill is due to start up at the end of 2000 or in 2001.

The lack of planned new capacity for pulp and paper production coincides with a time when the demand prospects for pulp and paper products are exceptionally good. The demand for these products is increasing because the growth in the world economy this year and in 2001 is forecast to be at its highest since the late 1980s. Furthermore, the competitiveness of the Finnish forest industry has improved markedly in relation to the main competitor countries and export markets during the last year, due to the weakening of the euro (see graphs on page 8). It is estimated that almost half of the export income of the Finnish pulp and paper industry is invoiced in currencies other than the euro.

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**The Finnish pulp and paper industry, 1999 (1000 tonnes)**

<table>
<thead>
<tr>
<th></th>
<th>Pulp</th>
<th>% of production</th>
<th>Paper</th>
<th>% of production</th>
<th>Paperboard</th>
<th>% of production</th>
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<tr>
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<td>100</td>
<td>10 324</td>
<td>100</td>
<td>2 623</td>
<td>100</td>
</tr>
<tr>
<td>Domestic use*</td>
<td>5 183</td>
<td>74</td>
<td>965</td>
<td>9</td>
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<tr>
<td>Exports:</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>26</td>
<td>9 359</td>
<td>91</td>
<td>2 214</td>
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<tr>
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<td>21</td>
<td>6 763</td>
<td>66</td>
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<td>71</td>
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<tr>
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<td>0</td>
<td>646</td>
<td>6</td>
<td>88</td>
<td>3</td>
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<tr>
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<td>85</td>
<td>1</td>
<td>43</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>109</td>
<td>2</td>
<td>1 195</td>
<td>12</td>
<td>280</td>
<td>11</td>
</tr>
</tbody>
</table>

*Estimated use = production – exports
Provided there is no oil crisis or some other unexpected factor affecting growth in the world economy, new records will be set in 2000 and 2001 for the value of Finnish pulp and paper industry exports. The limiting factor on exports this year and next will be the tight capacity situation rather than the actual demand for products. The demand and supply situation on the world markets will also be reflected in rising prices. This year, for example, the real export value of pulp and paper products is forecast to rise by 14 per cent on last year, and in 2001 by almost a further 15 per cent. By comparison, the rise in the real value of exports in the pulp and paper industry in 1997, the best year of the 1990s, was more than 17 per cent.

**Pulp Stocks Low**

Both the euro- and dollar-denominated prices of pulp have risen to a fairly high level during the past year: the price of softwood pulp in September was quoted at USD 710 per tonne, which is almost 37 per cent above its level one year earlier; and the price of hardwood pulp has risen to EUR 770 per tonne, a 54 per cent increase on its level one year earlier. The markka-denominated prices have risen by a relatively higher amount, due to the weak euro. In summer 2000, the price of pulp (in FIM) reached the record level of 1995, and prices have continued to rise since then. Average prices for 2000 are forecast to be up by about 60 per cent on the 1999 figures.

The factors behind the price rise have been the favourable level of demand and the low level of stocks as a result of the scarcity of supply. In June, the producers’ NORSAN stocks were at their lowest level for five years, amounting to 1.1 million tonnes. Stocks did, however, increase somewhat during the summer, and in September stood at almost 1.4 million tonnes. A level of 1.5 million tonnes has traditionally been regarded as the equilibrium level for the market. However, the increase in demand has meant that this is not necessarily any longer the case. Utipulp stocks are also relatively low, at almost 1.4 million tonnes of pulp in August, equivalent to only 35 days’ requirements, whereas in August 1999 these stocks were sufficient for 40 days.

Despite the low level of stocks, a large increase in production is not anticipated. According to advance information from the Montreal-based Pulp and Paper Products Council, for example, the average capacity utilisation rate in the NORSAN countries (Canada, Finland, Norway, Sweden and the United States) in September was 93 per cent, which is the same as one year earlier. The NORSAN countries produce almost 60 per cent of the world’s pulp.

The market outlook for pulp is good, although some signs of weakening are in evidence, especially in Asia. The reduced consumption of pulp in China has brought Russian pulp onto the European market as well. The scarcity of supply from both North America and Europe does, however, support high prices. The raw material price index of the Association of European Conjuncture Institutes

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**Volume and real unit value (1989 prices) of pulp exports, 1989–2001** (inflation-adjusted using the producer price index for paper products; estimated change for 2001 is +3 per cent)
(AIECE) also projects a rise in the price of pulp at the end of the year. Indeed, the price of pulp (in FIM) this year should show an increase of as much as about 60 per cent on last year’s figures.

**Pressure to Increase Paper Prices**

The prices for different grades of paper have risen at slightly different rates. The most rapid growth has been in fine paper, where particularly those producers who use market pulp have raised the price to cover their higher costs. As with pulp, the rise in paper prices (in FIM) has been supported by the relative weakness of the euro against the dollar.

The rise in the price of pulp will continue to create pressure to raise paper prices in the future. In September 1999, the pulp/paper price ratio calculated on the respective euro prices stood at 64 per cent for LWC paper, 65 per cent for coated fine paper and 59 per cent for A4 copier paper; the corresponding figures for September 2000 were 95, 85 and 77 per cent. According to market analysts, a ratio of over 80 per cent is not sustainable in the longer term, and eventually either paper prices will rise or pulp prices fall.

Why have paper prices not been raised in line with the pulp price? First, it should be noted that the pulp/paper price ratio has been rising, particularly in the euro countries, whereas in North America the strong dollar has meant that the same degree of imbalance does not exist. The euro area’s non-integrated paper producers buy pulp at dollar prices and so, due to the weak euro, their costs have risen by more than the rise in dollar prices. Passing on these costs to paper prices is difficult with the current level of competition for market share on world markets between integrated and non-integrated paper manufacturers. In Western Europe, for example, the market share of non-integrated producers has fallen from around 60 per cent in 1990 to only about 40 per cent in 2000. If integrated producers keep the price of paper low in relation to pulp, this will be very damaging to non-integrated paper producers. The present situation may indeed lead to profitability problems for non-integrated producers,
the consequence of which may be a further drop in
t heir market share.

Despite this, paper prices can be expected to rise
significantly above their current level. This will
mainly be in response to the following factors:
there are still market-related pressures for further
increases in the price of pulp; demand in the mar-
kets for paper products continues to be strong; and
there is a scarcity of paper supply even though
capacity utilisation rates are high. Furthermore, the
recent rise in the price of oil is leading to a rise in
the costs of production inputs and transportation,
which will in turn increase the pressure for a rise in
paper prices as well. European and North American
producers have in fact already announced that they
are raising the prices of newsprint, fine paper and
paperboard at the end of the autumn. The prices of
paper and paperboard are forecast to rise this year
by about 12 per cent on their 1999 levels.

Record Production and Exports

Production volumes of pulp and paper have been on
the increase in Finland since 1996, and 2000 will be
no exception. Due to a strike in the spring, however,
production of pulp in the first six months of the year
remained at last year’s level. The strong demand for
pulp and the tight supply situation have served to
boost production in the remainder of the year, and
total pulp production for 2000 will be up by about
six per cent on 1999.

Thanks to high demand, production of paper
and paperboard increased in January–June of this
year by over five per cent compared with the corre-
sponding period in 1999. The growth would have
been even higher had the spring strike not reduced
paper production by about 300,000 tonnes. Production
of magazine paper, in particular, has risen, and
the output for January–June this year was up 13 per
cent on the corresponding period in 1999; produc-
tion of newsprint, on the other hand, fell in the first
six months of the year by more than 11 per cent.
With the market outlook continuing to be bright,
the production of paper and paperboard for 2000 is
predicted to exceed last year’s total by 6–7 per cent.

Will the Cycle Peak in 2001?

Economic conditions in 2001 should support con-
tinued growth in demand for exports from the Finn-
ish pulp and paper industry. In the main market
area, namely the European Union, the growth in
national economies will remain high, but in the
United States the economic growth is expected to
turn onto a more normal path after years of excep-
tional growth. In Asia, economic growth will con-
tinue largely at the same high level as this year.

World production capacity of pulp and paper
will not increase significantly in 2001. No major
change is thus expected next year in the current low
level of stocks. The balance in the markets will not
therefore change to any degree, but instead the rela-
tive scarcity in the supply of pulp and paper pro-
ducts may be further exacerbated. The euro is fore-
cast to appreciate slightly next year against the dol-
lar, the yen, pound sterling and the Swedish krona,
but the changes will be small relative to the weak-
ening experienced during the past year (see graphs
on page 8). With the relative competitiveness of the
Finnish pulp and paper industry remaining good next year and the market situation continuing to be favourable, the current business cycle is expected to be at its peak in 2001. It is already predicted that production capacity for paper products will be expanded considerably in 2002.

Pulp exports are predicted to increase in 2001 by about three per cent. Prices will remain quite high, at least in the first part of the year, and the pulp price is forecast to rise by six per cent for the year as a whole. Paper exports will rise in 2001 by about five per cent. Pressures to reduce the pulp/paper price ratio will be amongst the factors leading to a higher rise in paper prices than in the price of pulp. Markka-denominated unit prices of paper are forecast to rise by about 12 per cent next year.

The market situation for paperboard continues to be better than for paper products. Out of the total paperboard production, 16 per cent is consumed on the domestic market, and the proportion exported to Asia is 14 per cent; the corresponding figures for paper are nine per cent and five per cent. The demand outlook for paperboard is exceptionally good because GDP growth in both Finland and Asia in 2001 is expected to be even higher than in the EU countries or the United States. A limiting factor on the production and export growth in the Finnish paperboard industry will again be the capacity shortage – more products could be sold than can be produced. As a consequence, paperboard production and exports are predicted to grow in 2001 by only two per cent. Prices, by contrast, will rise by about 10 per cent.

**Increasing Share of Exports to Spain and the US**

Subtle changes seem to have occurred in 2000 in the export distribution of Finnish paper products. In the two most important export markets, Germany and the United Kingdom, the former is increasing its relative share of Finnish exports, whereas the latter’s share is falling. Based on the trend in the first half of the year, the value of exports to the UK seems to be declining in absolute terms as well. Of the other important export markets, Spain has expanded its relative share of Finnish exports the most. With the Spanish economy prospering, exports of Finnish paper products to Spain grew in...
the first six months of 2000 by about 30 per cent on the same period last year. If the trend continues to the end of the year, Spain’s share of Finnish paper product exports may reach about seven per cent for 2000 as a whole; last year the corresponding figure was about six per cent. The weakening of the euro against the dollar has led to a marked rise in exports to the United States. This year the relative share of Finnish paper exports to the US may rise to almost eight per cent (seven per cent in 1999).

2.3 Costs and Profitability in the Forest Industry

The nominal costs of raw materials, energy and labour in the forest industry are rising this year, but in real terms some of these costs are actually falling. With a moderate cost trend overall, and with rising export prices and a high capacity utilisation rate, profitability in the Finnish forest industry will be up considerably on last year, achieving a record level for 2000. In 2001, the capacity utilisation rate in the pulp and paper industry will rise to 99 per cent, and in sawmilling to 97 per cent. If the cost trend continues to be moderate, the forest industry will again turn in a record profit in 2001.

Rise in Mill Price of Timber in 2000 Remains Small

Stumpage prices will be up in 2000 by an average of 5–6 per cent, although within this figure there are significant differences between the various types of roundwood. The timber costs of sawmills using exclusively spruce will rise in nominal terms by as much as 10 per cent, whereas the price of pulpwood used by the pulp and paper industry will rise by only two per cent. When adjusted for inflation using the wholesale or producer price indices, the price of pulpwood has actually fallen significantly. For plywood mills, the price of birch sawlogs will remain more or less unchanged this year, but the price of spruce sawlogs has risen.

The nominal costs of timber harvesting and long-distance transportation will be up this year by 6–8 per cent as a result of the higher cost of fuel and lubricants and the rise in interest rates. The influence of these two factors in the forest sector’s machinery cost and transportation cost indices is significant, amounting to almost one quarter in the latter index. The nominal cost index for harvesters and forwarders has already risen by six per cent on last year’s figure, and the transportation cost index by an even greater percentage. Changes of this magnitude have not occurred for ten years.

Contracting rates have not yet risen to match the rise in costs. From the forest industry’s perspective, the cost trend (adjusted for inflation using the wholesale or producer price indices) in stumpage prices, timber harvesting and long-distance transportation for the year as a whole has remained moderate. From the contractors’ viewpoint, however, the situation is quite the opposite.

Rising Price of Paper Coating Materials and Fillers

The prices of other raw materials will also increase this year, due to the strong growth in the world economy and the high price of oil. Indeed the prices of kaolin, calcium carbonate and talc, which are important in the manufacture of magazine papers and quality printing papers, have already been raised. If this trend continues to the end of the year, the prices of non-metallic minerals will have increased this year by 3–5 per cent (adjusted for inflation using the producer price index), and the prices of chemicals and chemical products by almost 10 per cent. The nominal prices of both would be at their highest for over ten years.

The increase in the price of paper coating materials and fillers is due to the high demand and the rising costs of oil products, which increases the
costs of extraction, production and distribution. This is of considerable importance to the pulp and paper industry, as kaolin, other non-metallic minerals, starch-based binders, pigments, plastic-based substances and chemicals account for 7–8 per cent of the total costs. For some paper grades, this exceeds the cost of the wood raw material.

The rising price of recovered paper in Central Europe is creating further pressures, although the majority of the recovered paper used in the Finnish production of newsprint, tissue and paperboard is still obtained from domestic sources. In Germany and the United States, the price of recovered paper has been following the trend in market pulp prices for many years, but in Finland and Sweden this connection has been much less pronounced. Due to the rising costs of transportation, recovered paper will become more expensive in Finland, too.

**Moderate Rise in Energy and Labour Costs**

In real terms, the prices of electricity, gas, heat and water are expected to remain more or less unchanged this year, and the cost of electricity may even fall slightly. Nevertheless, there are clear signs that the increases in oil prices are also pushing up the price of natural gas and peat. However, the Finnish forest industry obtains a considerable proportion of its electricity and heat from its own power plants and production processes (e.g. black liquor, sawdust and bark), which serves to promote stability in the energy costs for the industry.

The estimated impact of the spring pay settlements on the pulp and paper industry’s costs in 2000 is about four per cent in nominal terms, and just below four per cent for the wood products industry. Provided there is no upward drift in wages and salaries, the rise in labour costs for the year will be moderate and corresponds with the labour productivity growth in the sector in recent years, or falls just short of it. When adjusted for inflation using the producer or wholesale price indices, wages and salaries even show a slight decrease.

Following corporate restructuring, the forest industry will be able to make savings in the costs of raw materials, distribution, marketing and administration. These cost savings could, at least in principle, be quite large, as, for example, transportation and sales costs represent almost 10 per cent of turnover in the forest industry. On the other hand, price rises in oil products will mean a significant increase in transportation costs for the forest industry’s intermediate and end products.

**High Oil Price Will Increase Cost Pressures in 2001**

The rise in nominal stumpage prices in 2001 is expected to be three per cent, which is slightly less than in 2000. However, the mill price of roundwood used by the industry will rise by more than this next year, because the increased price of fuel and higher interest rates will be reflected in the charges for timber harvesting and long-distance transportation.

In the future, pressures on timber harvesting costs will increase in any case, as the degree of mechanisation in felling cannot be further raised to any significant extent, and the proportion of thinnings will increase. In 1999, the degree of mechanisation used in felling rose to 94 per cent, with the exception of delivery fellings in non-industrial private forests. Opportunities for raising productivity in long-distance transportation have also diminished, and hopes are now pinned on more efficient use of vehicles.

The price trend in other raw materials in 2001 will depend essentially on the prices of oil products. If oil prices stop rising or begin to fall slightly, as predicted by, for example, the Association of European Conjuncture Institutes (AIECE), the pressures to raise raw material prices will be reduced. The prices of oil products are, however, expected to remain at such a high level that, due to the indirect effects, prices of pigments, binders and
chemicals may continue to rise in 2001. The expected strengthening of the euro in 2001 will, however, reduce the cost pressures associated with imported goods denominated in dollars or pound sterling.

The prices of electricity, gas, heat and water, which are also important to the pulp and paper industry, can be expected to rise in 2001, but at a relatively modest rate. The price trend here, too, does depend on oil production volumes, changes in the level of stocks, and the level of consumption in the coming winter. The impact of labour costs in 2001 will depend on the next pay settlement; the Research Institute of the Finnish Economy (ETLA) and the Ministry of Finance predict that the overall effect of the settlement will be 3.5 per cent.

Record Capacity Utilisation Rate in Finland

The demand for end products and the rise in export prices will lift the capacity utilisation rate of the Finnish forest industry to a very high level in 2000. In the pulp industry, the capacity utilisation rate will rise to 97 per cent, in the paper industry to 95 per cent and in the paperboard industry to 99 per cent. The figures would be even higher had there not been a strike in the spring.

The demand for pulp and paper is expected to continue growing in 2001. At the same time, exceptionally little new production capacity will come on stream, especially in Europe. In 2000 and 2001, investment in the paper and pulp industry will be mainly in renewing paper machine production lines, improving the efficiency of production and undertaking other improvements. The capacity utilisation rate of the pulp and paper industry will thus be raised to 99 per cent in 2001. This does not take into account any extra capacity gained from improvements in production efficiency.

The capacity utilisation rate in sawmilling will also remain very high this year, because construction is continuing at a brisk pace both in Finland and in export markets. Investment in the Finnish sawmilling industry in 2000–2001 will be principally in expanding the product range and increasing the output of products with a high added value. Thanks to high demand, the sawmilling capacity utilisation rate is expected to rise to 101 per cent in 2001.

The capacity utilisation rate in sawmilling is, however, more difficult to define than for the pulp and paper industry, on account of the greater flexibility of production. Assuming that the sawmilling industry can raise its capacity by five per cent a year, mainly through small improvements, the capacity utilisation rate would be 96 per cent in 2000 and 97 per cent in 2001.

The Finnish plywood industry has invested heavily during the last ten years. Considerable investment has been made in softwood plywood and in increasing the degree of processing. The same trend will continue in 2000–2001, when plywood production capacity will increase by about 20 per cent, and laminated veneer lumber (LVL) capacity will almost double. Despite the huge expansion, the capacity utilisation rate in the ply-
Record Profit for Forest Industry This Year

Last year, the profits of Finland’s three largest forest companies, Stora Enso, UPM-Kymmene and Metsäliitto Group, amounted to a total of approximately FIM 13 billion (excl. sales profits, extraordinary items and taxes). The rise in export prices, the competitive advantage brought about by the weak euro, and the high production volumes will combine to raise the forest industry’s profits this year to a record level. This is further supported by the fact that most of the industry’s production inputs are of domestic origin or their invoicing currency is the euro. The combined profit from regular operations of the three companies in 2000 is thus expected to rise to FIM 25 billion.

Part of the increase in turnover and the growing profits is directly due to the weak euro. For example, about FIM 2.5 billion of Stora Enso’s increased turnover for 2000 will be purely a result of the weakening euro (if currency hedging is not included and the currency distribution in the company’s turnover is the same as in 1999).

On the basis of information in Stora Enso’s annual reports, it can also be estimated that the weak euro will mean an increase of about FIM one billion in the company’s operating costs for 2000. Calculated thus, the direct net effect of the weak euro on the company’s profit will be positive, at around FIM 1.5 billion.

Assuming that the currency distribution in the turnover of UPM-Kymmene and Metsä-Serla is similar to that of Stora Enso, it can be estimated that the weak euro will have increased the combined turnover of Finland’s three largest forest companies in 2000 by almost FIM 9 billion. The full impact of the improved price competitiveness will, of course, be even greater than this.

In September, Deutsche Bank forecast that the euro will strengthen in 2001 against the US dollar and pound sterling by an average of about six per cent, against the Canadian dollar by four per cent, and the Swedish krona by two per cent. Under the assumptions stated above, it can be estimated that the turnover of Finland’s three largest forest companies will fall in 2001 by over FIM 3 billion as a direct effect of the anticipated strengthening of the euro. On the other hand, operating costs will also fall by FIM 1 billion.

The above figures are only approximations, because in reality the companies’ currency distributions are not the same. In Stora Enso’s operating costs the Swedish krona is more important than it is to the other companies, and for Metsä-Serla (excl. MoDo) the role of the euro is emphasised on account of the location of its production plants and export markets.

Record Profit Trend Will Continue in 2001

The prices of paper and paperboard are predicted to rise slightly more in 2001 than this year, whereas the prices of the production inputs for the pulp and paper industry are expected to rise only moderately. Added to this, the capacity utilisation rate is forecast to rise to a record level. The profit for the Finnish forest industry as a whole in 2001 is therefore expected to improve even further on the figure for the current year.

Sawmilling profits will also be up in 2000, because production will increase to a record level and export prices for sawnwood will rise by nine per cent. The profit level will nevertheless be affected by the price rise of about 10 per cent in the industry’s most important wood raw material, spruce sawlogs. The degree of processing varies...
Cost Structure of the Forest Industry

Jaana Rekikoski and Esa-Jussi Viitala

The cost structure of all the forest industry’s business units in Finland in 1998 is illustrated in the accompanying diagram. The information has been obtained from official and publicly available statistics, mainly from Statistics Finland and the Finnish Forest Research Institute (METLA).

The pulp and paper industry comprises the manufacture of pulp, paper and paperboard as well as paper and paperboard products. The wood products industry, on the other hand, is defined here as consisting of sawing, planing and impregnation of timber; the production of plywood and wood-based panels; and the manufacture of joinery products, wooden packaging and other wood products.

Figures from Statistics Finland show that in 1998, the turnover of pulp and paper industry companies operating in Finland amounted to FIM 84 billion; the corresponding total for wood products companies was FIM 28 billion. This represents a growth in turnover on the previous year’s figures of seven and nine per cent, respectively.

The turnover for each of these industries includes both primary and secondary processing. In the wood products industry, primary processing accounted for 75 per cent of turnover, in contrast to the much higher figure of 95 per cent in the pulp and paper industry. The difference is mainly due to the inclusion of joinery products (including wooden houses) under secondary processing, as this represents a turnover of more than FIM 6 billion. Secondary processing in the pulp and paper industry consists mainly of the manufacture of corrugated board, sacks, paper packaging and wall coverings.

Net profit in both industries in 1998 was positive. Return on capital invested in the pulp and paper industry was about four per cent, and in the wood products industry 11 per cent. In both cases the return was down by approximately one quarter on the previous year.

The proportion of total costs accounted for by the wood raw material itself (stumpage prices, timber harvesting, transportation costs and imported timber) differs greatly in each industry. In the wood products industry it is about one third of all costs, and in the pulp and paper industry, including chips and sawdust, only 10 per cent.

In the pulp and paper industry, fillers, coating materials, pigments and process chemicals accounted for 7–8 per cent of total costs. This proportion will increase in the future as production becomes increasingly oriented towards highly processed products, especially coated magazine and fine papers.

Financial expenses and energy costs constituted a lower proportion of total costs in both industries in 1998 than in 1997. The reasons for this were the rise in company equity ratios, the fall in interest rates and the decrease in the price of electricity. The proportion of pulp and paper industry total costs accounted for by wood raw materials also declined, by more than one percentage point, which was due to the relatively low price rises in pulpwood, chips and sawdust. In the wood products industry, the share of total costs constituted by wood raw materials remained at its previous level.

Other raw materials and supplies constitute a significant share of total costs, especially in the pulp and paper industry. About one third of these costs are for wood-based products, such as chemical pulp, mechanical wood pulp and recovered paper, which are used in secondary processing. Accurate assessment of the quantities and value of wood-based raw materials moving between business locations and within conglomerates is sometimes rather difficult, which may lead to errors in determining this cost item.
Costs in the Pulp and Paper Industry, 1998 (FIM 84 billion)

Net profit 6.2 %
Financial expenses 1.5 %
Social security costs 2.7 %
Salaries 2.7 %
Minerals and chemicals 7.5 %
Other 10.6 %

Depreciation 6 %
Wages 6.6 %
Capital 17.4 %
Labour 12.0 %
Energy 7.9 %
Wood-based 10.5 %
Stumpage costs 25.6 %
Transportation 1.3 %
Harvesting 1.2 %
Imports 2.0 %
Chip and sawdust 1.6 %

Other raw materials and supplies 28.6 %
Other 24.0 %

Costs in the Wood Products Industry, 1998 (FIM 28 billion)

Net profit 4.1 %
Financial expenses 1.0 %
Social security costs 3.5 %
Salaries 2.8 %
Harvesting 4.2 %
Transportation 3.5 %
Imported wood 1.1 %

Depreciation 3.7 %
Wages 9.2 %
Capital 9.8 %
Labour 15.5 %
Energy 2.4 %
Wood-based 6.1 %
Other raw material 34.4 %

Other 20.2 %
Other costs 6.5 %

Transportation and storage 6.9 %
Advertising, sales & marketing 1.1 %
Repairs 2.9 %
Merchandise 1.8 %
Electricity and heat 6.6 %
Other 11.5 %

Sources: Statistics Finland and Finnish Forest Research Institute (Metla).
considerably from one mill to another, and so profits also vary widely in the sector.

The favourable market trend for sawnwood will continue in 2001, but the intensifying competition means that the rise in export prices is forecast to be only modest. With costs rising at the same time, and capacity limits being reached, the profitability of Finnish sawmilling will diminish somewhat in 2001.

The profit trend in the plywood industry will continue to be good in 2000, helped along by the consolidation of prices and the increase in production volumes compared to last year. In 2001, profits in the plywood industry will fall slightly, due to rising costs and a fall in real export prices, partly as a result of the increase in production capacity.

**Big Profits in Pulp, Magazine Paper and Plywood**

Comparing the profitability of different product groups is important to forest companies wishing to concentrate on their core business. Using operating profit as a percentage of turnover (see graphs), the best performance in the last three years has been achieved by magazine paper and plywood. This may explain why the plywood industry has been able to invest so much in expansion in recent years. These investments in new capacity, along with the seasonal variation in production, would then explain the large fluctuations in net profit for the plywood industry. The poorest performance is shown by the sawmilling industry, where operating profit has remained significantly below 10 per cent of turnover.

If the product group comparisons are made on the basis of the return on capital invested reported by the forest companies, the performance rankings do not change noticeably. In 1998 and 1999, the most profitable product groups were magazine paper and plywood (incl. laminated veneer lumber), where the return on capital invested was over 20 per cent. Sawnwood was again the poorest performer, in spite of its low capital needs.

The figures for the first six months of 2000 reveal that the same product groups are still achieving the best results. Nevertheless, the return on cap-
The Finnish Forest Industry

Capital invested in the pulp industry, which is quick to react to economic fluctuations, will be in a class of its own this year: the return for the first six months of the year alone was 30–40 per cent. Only three years ago, by contrast, the return on capital invested in pulp mills was distinctly negative.

**Corporate Restructuring Continues**

Corporate acquisitions and mergers in the forest industry are expected to continue in 2001 as the major forest companies pursue their strategies for consolidating end-product markets. The strong cash flow of these companies and their relatively high equity ratio give them a good foundation for further actions.

Concentration on core business activities will also continue. The most recent example is Metsä-Serla, which bought MoDo’s fine paper production but is simultaneously withdrawing from Metsä Tissue. UPM-Kymmene also sold Walki Sack and part of the business of Rosenlew. The forest companies are also releasing capital by selling their holdings in Transfennica, which specialises in forest industry transportation. Stora Enso has already sold most of the power assets outside its production plants.

As companies search for funding sources to finance corporate restructuring, their attentions will next turn to their own forests. For example, the Swedish company SCA has already announced that it is studying the possibility of corporatising its forest ownership and selling part or all of it to outside investors. In Finland, too, the strategic importance of company-owned forests as a raw material source is diminishing. If the industry were to see the Finnish roundwood market operating smoothly in the long term too, and even during economic downturns, and the uncertainties related to timber imports (especially those from Russia) were to be reduced, then the same kind of arrangements will undoubtedly be seen in Finland as well. Stora Enso has in fact already announced that it is prepared in principle to sell its forests in Finland, on account of their poor return. Considerable sums of money are at stake here, as the value of forests owned by the forest companies in Finland can be roughly estimated at FIM 15–20 billion.