2.1 Exports and Production in the Sawmilling and Plywood Industries

The 2002 figure for total wood product demand in Europe will be only slightly higher than last year, as the construction sector in Western Europe is still weak. Production and exports of Finnish sawn softwood in 2002 will be up by only about one per cent, and the unit price of sawnwood exports will be around two per cent above last year’s level. An increasing proportion of these exports is to markets outside Europe. Production and exports of plywood will be up by about five per cent. However, the average unit price of plywood exports will be down, due to increased exports of the lower priced softwood plywood.

Euroconstruct forecasts only a small increase in the construction sector growth rate in Europe in 2003, as it expects the resurgence in construction to be delayed until 2004. Slow growth in the demand for wood products next year will limit the growth in Finnish sawn softwood exports to two per cent. In the plywood industry the substantial capacity increases of recent years will allow plywood exports to grow by five per cent, to meet the rising demand. Growth in both exports and domestic consumption will raise sawnwood and plywood production. The unit price of sawnwood exports is forecast to rise in 2003 by only two per cent, and the average price of plywood to remain unchanged, due to the abundant supply of wood products. If economic growth in the United States turns out to be below the level expected, this would threaten the demand-supply balance in the European wood products market as well as Finnish exports and export prices.

Construction Recovery Delayed in Europe

Economic growth in Western Europe in the first six months of 2002 did not pick up to the extent widely predicted by the forecasting institutions in autumn 2001. Forecasts by Euroconstruct now indicate that the recovery in European construction projected for 2003 will be delayed until 2004. The meagre growth in the construction sector was evident in the export figures for January–June 2002, which were down on the same period last year. This was especially the case for spruce sawnwood exports, which were down by seven per cent, whereas exports of pine sawnwood remained at approximately last year’s level.

A geographical distinction has emerged in the European construction industry’s growth figures: rapid growth in new building has been typical of the transition economies of Eastern Europe, whereas in Western Europe growth has been concentrated in renovation of existing buildings. According to Euroconstruct’s June 2002 forecast, the number of new housing starts in Western Europe will be down this year by around two per cent, to 1.6 million units. Building renovations, on the other hand, will be up, and already account for 43 per cent of Europe’s construction output by value and half of its
housing construction by value. Indeed, the increase in construction output in Western Europe this year – although only 0.6 per cent – is attributable to the growth in building renovation.

The Food and Agricultural Organisation of the United Nations (FAO) forecasts that sawn softwood consumption in Europe in 2002 will reach 90.8 million cubic metres. The small increase in construction output will boost sawnwood consumption to a level 1.6 per cent above last year’s figure. The construction sector will be affected by uncertainty over the economic situation, however, and so construction output and sawnwood consumption could fall short of the FAO forecast.

**Continued Growth in Finnish Sawnwood Exports to Markets Outside Europe**

Finnish sawn softwood exports in January–June 2002 were one per cent below the level achieved last year. Nevertheless, exports for the full year are projected to be up by one per cent due to a small improvement in demand in the second half of the year.

The importance of non-European markets in Finnish exports of sawnwood has continued to grow. Exports to markets outside Europe in January–June 2002 were up by four per cent, while exports to European markets fell by four per cent on the same period last year.

Finnish sawnwood exports to the United Kingdom, Southern Europe and Africa in the first six months of 2002 were up on the same period last year, whereas exports to Germany, the Netherlands and Japan, consisting mainly of spruce sawnwood, were down. Planed wood accounted for about 11 per cent of Finnish sawnwood exports, and the biggest proportionate increase was in exports to the UK and Japan.

**Exchange Rates Affect Demand-Supply Balance in European Market**

The continued high level of sawnwood exports to non-European markets from Europe’s major produc-
ERS – Finland and Sweden – has been good for the demand-supply balance in Europe. Swedish exports to European markets also increased in the first half of 2002, especially pine sawnwood and primary processed sawnwood products. This was helped by the exchange rate, as the krona is still weak against the euro compared with the average rate for 2000.

In January–September 2002 the euro appreciated by an average of 11 per cent against the US dollar, and nine per cent against the Canadian dollar, thus weakening European competitiveness in relation to North America. Europe’s competitiveness remains relatively good, however, because the euro is still fairly weak compared with its rate in the late 1990s. Housing construction in the United States has continued to grow in 2002, which has maintained the level of sawnwood consumption in the US. European producers’ exports to the United States have correspondingly increased, despite the strengthening of the euro.

Russia’s sawn softwood exports grew by 16 per cent in the first half of 2002 compared with the same period last year. The weakening of the ruble against the euro has also prompted an increase in exports to countries within the European Economic and Monetary Union (EMU). The biggest percentage growth in Russian exports, however, has been to markets outside the euro area, especially the United Kingdom and China. The growth in exports is not expected to continue at the same pace to the end of the year.

Japanese imports of sawn softwood fell in the first half of 2002. Both Europe and North America experienced a fall in their share of Japanese imports, due to the weakening of the yen against the euro and the dollar. Japan’s construction activity has been moderate in view of the country’s very fragile economy. The number of housing starts decreased only slightly in January–August 2002 compared with the same period last year, and no major decrease is expected in the remaining part of the year.

### Sawnwood Price Increases Modest Due to Supply Outstripping Demand

The downturn in the world economy in 2001 was followed by a drop in sawnwood consumption both in Europe and North America. In Europe the decline in construction activity led to a situation of sawnwood oversupply. European production was cut, but by less than the drop in consumption, and the consequent oversupply led to a fall in the average market prices of sawnwood.

The export price of Finnish pine sawnwood in January–June 2002 was one per cent lower, and of spruce sawnwood two per cent lower, than in the same period last year. Nevertheless, taking all Finnish sawnwood exports as a whole, the unit price for January–June was unchanged from the previous year because the exports included a greater proportion of the higher priced pine and planed softwood. The price of spruce sawnwood will be affected by the economic uncertainty and construction recession in its key German market. The price of pine sawnwood, however, can be expected to remain fairly stable, as demand depends to a large extent on the joinery and furniture industries.

In recent months the unit price of Finnish sawn-
wood exports has been creeping upwards, and the average unit price for 2002 as a whole is expected to be about two per cent higher than last year.

Growing Domestic Consumption of Sawnwood

2001 saw a drop in domestic sawnwood consumption to an estimated total of about 4.9 million cubic metres following the decline in housing construction in Finland as elsewhere, due to the poor economic situation. In 2002, however, the growth prospects for domestic consumption of sawnwood and plywood – both dependent on the construction industry – look relatively satisfactory. If the actual growth in housing construction and renovation matches the forecast level, domestic consumption of sawnwood in 2002 will be up by around two per cent.

In the first half of 2002 the total volume of housing construction for which building permits were granted was four per cent lower than in the same period last year. This decline has since levelled off, and the Confederation of Finnish Construction Industries (RT) is forecasting a small increase in housing construction for 2002 as a whole. This is due to the growth in non-subsidised housing construction, stimulated by low interest rates and continued household confidence in personal finances. By contrast, state-subsidised housing construction will be down this year. Order books in the prefabricated housing industry are relatively good, which should mean a modest rise in the construction of single-family houses.

Sawnwood production in January–June 2002 was down by one per cent on the same period last year. According to the August business survey of the Confederation of Finnish Industry and Employers (TT), raw material availability has restricted production in the wood products industry, although availability has improved since the summer due to an increase in sawlog imports and sales of domestic roundwood. Production for 2002 as a whole is expected to be up by one per cent, to 12.8 million cubic metres, due to the slight increase in both exports and domestic consumption.

Increase in Finnish Plywood Exports

Lower growth and the downturn in construction in Western Europe in 2001 had an immediate impact on the year’s plywood consumption, which fell by around two per cent. The FAO forecasts that European plywood consumption in 2002 will remain at approximately last year’s level, at about six million cubic metres. Only a little over half of European plywood consumption is met by domestic producers, which leaves Europe dependent on imports of plywood. Finland is the market leader in the European plywood market, with over one third of all European plywood production.

The biggest plywood consumers in Europe are the United Kingdom and Germany, the latter being Finland’s largest export market. In 2001 the recession in the German construction sector led to a drop of nine per cent in plywood consumption. By contrast, consumption increased in Eastern European markets and Russia, as a result of their above-aver-
age economic growth. Softwood plywood accounted for just over half of European plywood consumption, although this was down by about six per cent on the previous year’s figure. Growth in the consumption of hardwood plywood, which is less reliant on the construction industry than softwood plywood, did not reach the level attained in 2000.

Although European markets still account for almost 95 per cent of Finnish plywood exports, the level of exports to markets outside Europe in the first half of 2002 was up by one quarter in comparison with last year. While European consumption was falling in the first half of the year, Russia expanded its exports especially to markets of the former Soviet Union and to its single most important export market, the United States. US plywood production is in decline, while oriented strand board (OSB) accounts for a growing proportion of the production and consumption of wood-based panels. The supply of sawlogs suitable as raw material for softwood plywood has diminished on the North American market due to the protection of old-growth forests on the west coast.

Total Finnish plywood exports in 2002 are forecast to be up by about five per cent. Production capacity would allow a much greater level of exports, but this would be a risk to the stability of plywood prices in the present market situation.

The price of softwood plywood, like sawnwood, has been affected by the slow growth in the market this year. The price of birch plywood reflects the expansion of supply in Russia and the tougher competition on the European market. The 2002 average unit price of exported plywood will be down by five per cent on account of the weak state of the market in Europe (the main export destination) and the higher export proportion of the lower priced softwood plywood.

**Economic Outlook for 2003 Better Than 2002**

Euroconstruct forecasts that construction in Western Europe will increase by 1.4 per cent in 2003. However, construction growth in Germany, which is critical to exports of Finnish spruce sawnwood, will be delayed until 2004. In 2003 German construction investment is forecast to remain at this year’s level, though residential (the term used in Euroconstruct) construction may even decline (by 0.3 per cent), leaving (residential) construction activity more than 10 per cent below its 1999 level. By contrast, residential construction in the United Kingdom is forecast to grow by 2.4 per cent next year. In the first half of 2002, UK housing starts were as much as 13 per cent above last year’s figure. Residential construction in France and the Netherlands is expected to increase by one per cent in 2003. As construction growth begins to pick up slowly in Europe the demand for wood products will grow slightly more quickly than this year. Repair of last year’s flood damage will also add to the demand for sawnwood and plywood in Central Europe.

Although demand growth will improve the demand-supply balance in Europe to some extent, supply will be plentiful, not least because of the considerable increase in Swedish sawnwood production. The euro is not expected to appreciate much against the dollar, and so supply from outside Europe will not grow to any great extent. If the euro does strengthen significantly, however, it would increase Canadian supply to European markets. Supplies to the European market from both Russia and the Baltic countries have increased in 2002. The higher levels of economic growth in Russia and Eastern Europe compared with Western Europe are also encouraging domestic construction activity and will thus increase domestic consumption of sawnwood and plywood.

In the longer term, competition from the Baltic countries will intensify as they begin exporting kilndried sawnwood and higher value-added sawnwood products. Sawnwood supply from Russia and Eastern Europe will increase in the next few years due to the foreign investment project decisions that will increase production capacity by more than four million cubic metres. The Russian Government’s plans to increase wood processing in Russia will also increase the supply of sawnwood to the European...
market, provided that Russian consumption does not grow at the same rate.

Forecasts for Japan’s housing construction sector, important to the demand-supply balance of European sawnwood markets, indicate a further shrinkage of 1.5 per cent in 2003 (Research Institute of Construction and Economy). Together with the likely strengthening of the euro, this will retard any export growth to Japan. The high quality of European sawnwood nevertheless remains a competitive advantage on the Japanese market in relation to North American unseasoned sawnwood.

Exports of Finnish sawnwood in 2003 are set to grow by approximately two per cent if Euroconstruct’s forecast of slightly higher construction growth holds true and the euro does not strengthen significantly against the currencies of Finland’s main competitor countries. The relatively low increase in demand and the abundant supply will, however, ensure that the unit price of exports rises by an average of no more than two per cent. One factor in the higher unit price will be the slightly larger share of exports accounted for by the higher priced pine and planed sawnwood.

The greatest uncertainty in making forecasts about world markets for forest industry products is the general economic situation. Forecasts of sawnwood exports for 2003 largely depend on the state of the US market, and so the demand-supply balance in the European market remains uncertain. The number of housing starts in the United States is forecast to fall slightly in 2003, and according to assessments made at the September meeting of the Timber Committee of the United Nations Economic Commission for Europe (UN/ECE), sawnwood consumption will also fall, by about two per cent. Uncertainty is further heightened by the imposition of an import duty of 27.2 per cent on Canadian sawnwood imported to the US, introduced in May 2002. In a previous, similar situation the Canadians cut their production in an attempt to raise the price of sawnwood in the United States. The UN/ECE Timber Committee believes that Canadian sawnwood production will be cut slightly both this year and in 2003. Despite this, the pressure to export more to Europe will probably increase a little because Canadian exports to the US and Japan are expected to fall.
Increase in Plywood Exports and Modest Improvement in Prices in 2003

The demand for plywood differs from that for sawnwood because plywood is used not only in construction but also in, for example, the packaging and transport equipment industries. Finnish plywood capacity totals about 1.8 million cubic metres. Softwood plywood capacity has increased most of all, and exports of softwood plywood now account for more than 50 per cent of Finnish plywood exports, as against 16 per cent in the early 1990s. With no shortage of production capacity and with demand growing, plywood exports in 2003 are forecast to rise by five per cent.

The expansion of plywood production in Russia, Eastern Europe and Canada has increased competition on export markets in recent years. Finland’s main competitors in the birch plywood market are Russia and the Baltic countries. The substantial increase in Europe’s OSB and MDF board production capacity is also increasing the competition for softwood plywood and sawnwood. As the export proportion of the lower priced softwood plywood is rising, the unit price of all Finnish plywood exports in 2003 is not expected to exceed this year’s average.

Production Up Slightly in Wood Products Industry

Consumption of Finnish sawnwood is increasingly focused on the building renovation sector, which will grow by 3–4 per cent both this year and in 2003, according to forecasts by the Research Institute of the Finnish Economy. The Confederation of Finnish Construction Industries (RT) forecasts that housing construction will also pick up next year, by about 2.7 per cent. Based on the increase in both construction and renovation activities, the consumption of sawnwood is projected to grow by around two per cent in 2003.

The increase in domestic construction activity and the slight improvement in demand on export markets are expected to boost sawnwood production by about two per cent in 2003, to approximately 13.1 million cubic metres. The forecast figure is still below the production record set in 2000.

The considerable expansion of Finnish plywood capacity, particularly softwood plywood, since the mid-1990s, allows for a major increase in production, should this be desirable on the basis of demand and prices. With this in mind, plywood production is forecast to increase in 2003 by about five per cent.

2.2 Exports and Production in the Pulp and Paper Industry

The market for paper products has remained weak in 2002. In particular, those grades reliant on advertising and publishing have suffered from the slow growth in the economy, and their prices have fallen. Production and exports of Finnish paper and paperboard this year will nevertheless be about two per cent higher than the 2001 figures. The average export price of paper and paperboard products will be down by around seven per cent. Pulp production will be up by about nine per cent, due to the growth in paper production and especially exports. Nevertheless, the average export price of pulp in 2002 will remain about 14 per cent below last year’s level.

The demand for paper is expected to increase gradually in 2003, lifting Finnish paper exports by about 4–5 per cent. With barely any new capacity scheduled to come on stream, the capacity utilisation rate will rise. Export prices of paper are expected to start picking up, but due to the low starting point, the average export price will remain close to this year’s level. 2003 will also see a rise in production and exports of paperboard and an increase in the paperboard export price. Pulp exports are forecast to remain more or less unchanged, whereas the increase in domestic paper production will raise pulp production by about two per cent. Market prices
for pulp are expected to rise gradually as demand grows. The export price of Finnish pulp next year is forecast to increase by about five per cent.

**Demand for Paper Remains Slack**

Finnish paper exports decreased in 2001 as a result of the decline in the demand for paper on export markets. The slack demand has continued in 2002, as economic growth has remained relatively low on the main export markets. Finnish paper exports did begin to recover in the second quarter of 2002, however, up about four per cent on the same period last year, despite the decrease in prices. Demand has remained sluggish though, especially for paper grades dependent on the volume of advertising: newsprint, magazine papers and coated fine papers.

In the first half of 2002, the consumption of printing and writing papers in Finland’s main market, Western Europe, fell by one per cent on the same period last year, according to estimates by Resource Information Systems Inc.

The trends in the paper industry elsewhere in Europe in the first six months of 2002 were similar to those experienced by the Finnish industry. According to the Confederation of European Paper Industries (CEPI), paper and paperboard production in its member countries was about one per cent below the 2001 level in the first quarter of the year. This was predominantly due to the drop in production volumes of newsprint and coated magazine papers, the latter troubled by overcapacity. Production of almost all other paper and paperboard grades was up, and fine papers grew by as much as four per cent. As in Finland, production volumes of paper and paperboard in the second quarter of 2002 exceeded last year’s figures: in Sweden by 4 per cent, France by 3 per cent, Germany by 5 per cent and Italy by 8 per cent. The recovery in paper production has increased the consumption of hardwood pulp in particular, and has reinforced its price.

The late summer floods in Central Europe brought production to a standstill at many paper mills in Southern Germany, the Czech Republic and Austria. The effect of the floods on the paper market in general was only minor, however, as the mills affected were mostly quite small and it was still the holiday season, thus reducing the need to find substitute supplies. The biggest impact was probably the

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**The Finnish pulp and paper industry, 2001 (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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<td>1173</td>
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<td>294</td>
<td>11</td>
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* Estimated use = production – exports
Sources: Statistics 2001 (Finnish Forest Industries Federation) and Finnish Forest Research Institute
month-long closure of a major Austrian liner mill with a daily production of 1 300 tonnes.

**Towards a New Record for Pulp Exports**

The price of pulp has fluctuated during 2002. According to the PIX index of FOEX Indices Ltd, the price of bleached softwood pulp was just below USD 460 per tonne in mid-November, about two per cent less than in January. The demand for hardwood pulp has been stronger than for softwood pulp, especially with the increase in fine paper and tissue production in Western Europe. The price of hardwood pulp has consequently risen; by mid-November it was almost 14 per cent above its January level, and it has surpassed the price of softwood pulp since early June.

Despite the higher demand for pulp, producers have again had to resort to shutdowns in order to prevent oversupply and accumulation of stocks. In January–October 2002, the market pulp capacity utilisation rate of the NORSCAN countries (Canada, Sweden, Finland and the USA), which together supply 60 per cent of the world’s market pulp, averaged 91 per cent.

Pulp stocks in European ports have been reduced during the year, and in October they were one fifth below their level a year earlier. NORSCAN stocks of pulp at the end of October amounted to 1.66 million tonnes, a little over the 1.5 million tonnes considered in recent years as the dividing line between scarce and abundant supplies.

Uncertainty about the world economy will continue to make pulp prices sensitive to changes in demand and stocks. Pulpex futures (the world’s only standard, listed pulp derivatives) indicate a continued decline in the price of bleached softwood pulp to the end of the year. Although trading in Pulpex futures has been very slow, especially in recent times, their rate has been a fairly accurate predictor of trend reversals in the pulp list price around four to eight weeks in advance.

Pulp production capacity will remain more or less unchanged in Europe both this year and in 2003. However, in Brazil a major new production line was brought on stream in May. The facility belongs to the Aracruz company, which supplies pulp to Europe and elsewhere. The new line will eventually be capable of producing as much as 700 000 tonnes of bleached eucalyptus pulp per year. The new line has not yet resulted in oversupply, as this year has even seen a shortage of eucalyptus pulp.

Finnish pulp production was up by seven per cent in the first half of 2002. The growth in domestic consumption has been only moderate, whereas pulp exports have been at record levels. Measured in tonnes, Finnish exports of pulp in the first half of the year were 43 per cent above last year’s level. Exports increased to nearly all the traditional export markets. As a result of last year’s major increase in pulp production capacity, and due to the industry’s abundant stocks of harvested roundwood, Finnish producers were in a position to meet the growing demand for pulp.

Pulp production for the whole of 2002 is expected to be about nine per cent above last year’s total, and pulp exports are expected to be up by about one fifth.
However, the average export price will be approximately 14 per cent below last year’s level.

**Downward Slide in Paper Prices Continues in 2002**

With barely any growth in the demand for paper industry products in 2002, paper producers have been competing for market share by selling paper and paperboard at prices lower than last year. In the first half of 2002 the export price of Finnish paper was about six per cent below the average for the whole of 2001, and the price of many paper grades has fallen. The unit price of newsprint exports fell to a level 12 per cent below last year’s average in the early months of 2002, when the lower prices in recent contracts began to show up in export consignments. The prices of coated magazine papers and fine papers have continued the downward slide that began in 2001. Besides the overcapacity affecting these grades, the low price of pulp has also pushed prices down.

In the first six months of 2002 the average export price of paperboard was more than three per cent below the average for the whole of 2001. However, the price has been improving in later months. In the autumn, many European producers reported increases in sulphate cartonboard prices. Containerboard prices have also been rising in Western Europe following a dramatic jump in the price of recovered paper since the start of the year.

Taking into account the movements in prices that have already occurred, average export prices for 2002 as a whole will remain significantly below last year’s level; the price of paper by about eight per cent, and paperboard by three per cent.

**Newsprint Spreads Gloom Over the 2002 Production Figures**

Newsprint production in Finland in the first half of 2002 was 27 per cent (187 000 tonnes) below the total for the same period last year. Two old newsprint machines, with a combined capacity of slightly under 200 000 tonnes per year, were withdrawn from service this year, and production of other units has also been reduced. Newsprint production is continuing its geographical shift towards the recycled-fibre raw material sources of Central Europe. For example, Myllykoski opened a new newsprint mill in Germany in the summer, and Stora Enso will be starting up a new newsprint/SC paper machine in Belgium in June 2003.

Fine paper production fell considerably in 2001 but recovered in the second quarter of 2002 to a level seven per cent higher than in the same period a year earlier. Exports of coated fine paper were up in the first half of 2002 by about one quarter compared with the previous year, although exports of uncoated grades were down. This reflects the changes in fine paper capacity that occurred last year: two uncoated fine paper machines, with a combined capacity close to 0.5 million tonnes per year, were converted to produce coated grades.

The growth in demand for fine paper is partly because paper wholesalers have been replenishing their stocks, which were quite low at the start of the year. With the export price of coated fine paper falling by almost nine per cent in January–June 2002, it would appear that a strategic shift on the part of producers, from defending prices to defending market shares, was also behind the increased supply.

Although the demand for paper on the export markets is expected to remain comparatively slack at the end of the year too, autumn will see a seasonal increase in the sales of many products. In all, Finnish paper production for 2002 as a whole is expected to be about two per cent higher than last year.

Production of paperboard was up in the first six months of 2002 by three per cent on last year’s figure, and the market outlook for the rest of the year has remained good. The full year’s production is forecast to end four per cent higher than last year.
Demand for Paper Will Recover in 2003 at the Earliest

Expectations of a demand-led recovery in the paper market have been reviewed and now focus on some time later in 2003. As economic growth picks up, the demand for paper and paperboard is expected to start rising gradually. About three quarters of Finnish paper production is consumed in the European Union, where economic growth is estimated to rise by around two per cent in 2003. Growth is also expected to pick up in Asia, an important paperboard market accounting for about 15 per cent of exports.

No major increase is expected in the demand for paper used in advertising and printing, especially if the 2003 forecasts made by institutions specialising in the advertising sector hold true. In its September 2002 forecast, the London-based media communications agency Zenith Optimedia Group predicted that the year-on-year growth in advertising value in 2003 in the main advertising media (including newspapers and magazines) of the five biggest Western European countries will not exceed two per cent. This would not even be sufficient to return advertising expenditure to the 2001 level. The August 2002 forecast of WPP, one of the world’s largest communications groups, was along the same lines in predicting that a resurgence in the media markets will probably not occur until 2004.

European production capacity for printing and writing papers will not increase appreciably in 2003, and so an increase in supply to meet the gradually growing demand will require more efficient use of existing capacity. Newsprint production is the only area in which a small increase in capacity is scheduled.

In the paperboard industry, 2003 will see a considerable increase in waste-based containerboard capacity on the world market, raising the prospect of oversupply. Through product substitution, the impact of this may also be felt in the demand for virgin-fibre containerboard produced in Finland. However, these products account for only about 14 per cent of Finnish paperboard exports by value.
The Finnish paper industry’s competitiveness should remain good in 2003, and production and exports of paper are projected to rise by about four per cent, and paperboard by around two per cent.

As demand grows, a modest rise in paper product prices is anticipated in 2003, alongside the rising price of pulp. There will be barely any rise in Finland’s average export prices, however, as the low initial price level will return towards the level seen in early 2002. The average export price of paper is thus expected to remain almost unchanged in 2003. A modest increase is expected in pulp-based paperboard prices.

**Growth in Pulp Production to Continue in 2003**

Consumption of pulp is on the increase, which bodes well for a gradual improvement in prices, especially as stocks are at fairly low levels. However, if producers do not adjust their output to match demand, pulp stocks could increase quite rapidly again, pushing down prices. Imposing year-round production ceilings through shutdowns is not possible, however, for technical reasons: many Canadian producers have to keep their pulp mills in operation in the winter in order to avoid them freezing up. Seasonal considerations of this kind led to an increase in stocks again last winter.

Eucalyptus pulp capacity will increase in Brazil in 2003. Birch and softwood pulp capacity, on the other hand, will remain almost unchanged, which will improve the situation of the NORSCAN countries.

The export price of Finnish bleached sulphate pulp is projected to rise in 2003 by about five per cent. This is based on the assumption that pulp producers can successfully curb their overproduction, allowing more scope for raising prices as the demand for pulp continues to improve. Pulp exports will probably remain just below their present high

### Forecasts of production and exports in the pulp and paper industry (1000 tonnes); percentage changes from previous year are shown below the respective volumes

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<thead>
<tr>
<th></th>
<th>Production</th>
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<td>2 21 –1</td>
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<tr>
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<tr>
<td></td>
<td>–5 4 2</td>
<td>–4 4 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Forecasts of export prices for the pulp and paper industry (as percentage changes from previous year*)

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulp</td>
<td>–20</td>
<td>–14</td>
<td>5</td>
</tr>
<tr>
<td>Paper</td>
<td>3</td>
<td>–8</td>
<td>1</td>
</tr>
<tr>
<td>Paperboard</td>
<td>3</td>
<td>–3</td>
<td>2</td>
</tr>
</tbody>
</table>

* Export prices are nominal unit values.
level, whereas pulp production, spurred on by domestic demand, is expected to increase by some two per cent.

2.3 Costs and Profitability in the Forest Industry

Production costs in the Finnish forest industry in 2002 will be higher than in 2001 because of the increased labour costs and higher stumpage prices; the costs of other inputs will either be almost unchanged or will be lower than last year. The forest industry’s capacity utilisation rate will be only slightly higher than in 2001, due to the slow growth in demand for end products. Higher costs and the drop in export prices in the paper industry mean that the forest industry’s profitability and results for 2002 will be down on last year’s figures. The profitability of sawnwood is below that for other product groups.

Stumpage prices and labour costs will continue to rise in 2003. Provided that the increase in total costs remains low, the profitability of the Finnish forest industry’s domestic operations is expected to improve as production grows and export prices rise slightly. However, no significant improvement in profitability is anticipated in the sawmilling industry until a distinct rise in prices is seen on export markets. Increased production in the forest industry will raise the capacity utilisation rate to some extent in 2003; in the paper and paperboard industry the rate is expected to rise to 92 per cent.

Moderate Rise in Mill Prices and Labour Costs in 2002

Stumpage prices will be up in 2002 by an average of about 1.5 per cent. In the sawmilling industry the unit cost of roundwood will be up by over two per cent, whereas in the pulp and paper industry it will be almost at last year’s level. Stumpage prices account for approximately two thirds of the mill price.

The nominal unit costs of roundwood harvesting for 2002 will be about 1.5 per cent above the 2001 figure, while long-distance transportation costs will rise by only around 0.5 per cent. Direct and indirect labour costs account for one third, capital costs one quarter and fuel costs 15 per cent, of harvesting and transportation costs. Costs have increased especially as a result of pay rises; by contrast, fuel costs have decreased. Taking all the cost changes into account, the nominal mill price will be up by about 1.5 per cent, and the real price (inflation-adjusted using the wholesale price index) by approximately 2.2 per cent.

The price of recovered paper has remained stable in Finland because recycled fibre is relatively unimportant in Finnish paper and paperboard production, and because the principal supplier of recovered paper, Paperinkeräys Oy, is wholly owned by the major forest companies. By contrast, the price of recovered paper in Central Europe rose sharply in the second quarter of 2002. Only one tenth of the recovered paper used by Finnish mills is imported, however.

Labour costs in the forest industry have risen in 2002 at a more moderate rate than in 2001 due to the lower increment agreed for the second year of the two-year collective agreement. The pay of paper industry employees in the second quarter of the year was about 3.5 per cent higher than the same period in 2001, of which around 2.3 percentage points were accounted for by the agreement increments. In the mechanical forest industry, pay increased correspondingly by about 2.5 per cent, most of which was attributable to the agreement increments. The increase in pay for 2002 as a whole is expected to be of the same order. Labour productivity, however, declined in both 2001 and 2002.

Oil Prices High Towards Year-End

Oil prices rose in the early part of 2002 to a level significantly above last year’s closing low. After a
dip in May, prices began to rise steadily, climbing steeply once more from early August, prompted in particular by the possibility of an attack on Iraq. The pressure to maintain high oil prices was perpetuated by OPEC’s decision at its September meeting not to raise the production ceiling. At its highest, the price of Brent crude approached USD 30 per barrel. Brent futures on the International Petroleum Exchange indicate that oil prices will still be high at the end of 2002. The increase in oil prices across the year as a whole, however, is expected to be fairly small: the Research Institute of the Finnish Economy forecasts that the average oil price in 2002 will be USD 25 per barrel, which is almost three per cent higher than last year’s average.

Among the fossil fuels, natural gas is used the most by the Finnish forest industry in its own power and heat production. The price of natural gas in the first six months of 2002 was clearly below the previous year’s level, and despite the rise of the last few months, the price of natural gas for the full year will probably be down on the 2001 figure. No major changes are anticipated in the prices of peat or bioenergy.

The market price of electricity in the first part of 2002 was significantly below the level of a year earlier. This was the result of lower consumption due to the unusually warm weather and because of the plentiful water reserves in Norway and Sweden. However, water reserves have since dwindled, due to the very dry summer. Futures quoted on Nord Pool, the Nordic power exchange, indicate a rise in electricity prices in the latter part of 2002 to a level slightly above that of last year. Short-term fluctuations in the price of market electricity do not greatly affect the paper industry’s energy bill, however, as much of the industry’s power is self-generated or based on long-term agreements. Furthermore, hedging can be made against the price risk associated with market electricity.

The cost of sea freight has risen considerably from the low level at the start of 2002, as world trade has picked up and prices of oil products have risen. The Baltic Dry Index (BDI), measuring dry cargo spot prices on the busiest shipping routes, has risen by 50 per cent since January 2002, and will remain high to the end of the year. For the full year, however, the price of sea freight may even be down in comparison with last year’s average.

## Chemical and Pigment Prices Almost Unchanged

Pigments such as kaolin, precipitated and ground calcium carbonate, and talc are used as paper fillers and coating materials. As fillers, pigments increase the paper’s opacity, while as coating materials they guarantee a high print quality. The use of pigments is also advantageous due to their low price in relation to fibre raw material.

Imports account for over 65 per cent of pigment consumption by value. All the kaolin and half the ground calcium carbonate are imported. The precipitated calcium carbonate is usually produced at the paper mill using carbon dioxide obtained from a pulp mill and burnt lime, some of which is imported and some produced domestically. As precipitated calcium carbonate is usually produced at the paper mill, its price is based on long-term supply agreements. The pigment industry is very concentrated, and imported pigment is bought from just a few globally operating companies. Finnish pigment production is also partly in foreign ownership.

Pigment prices in 2002 have remained at approximately last year’s level, on account of the tough competition. Pigment prices also depend on oil prices, because energy is used in mining, refining and transportation. Changes in pigment prices affect the costs of coated fine paper in particular, as pigment can account for up to half of the product weight. Pigments account for about three per cent of costs in the pulp and paper industry.

Chemicals and latexes account for about seven per cent of the pulp and paper industry’s costs. The prices of forest industry chemicals are dependent on oil prices, as oil may constitute their raw material (e.g. in latexes used as a coating material) or their...
production may be energy intensive (most other forest industry chemicals). The prices of basic chemicals, on the other hand, continued to fall at the start of 2002, despite the increase in oil prices. Besides their production costs, chemical prices are also affected by the demand situation. The low level of paper production and low paper prices have reduced the upward pressures on chemical prices. The prices of forest industry chemicals will probably start to rise towards the end of the year, as paper production increases slightly and oil prices climb further. Chemical prices in 2002 as a whole are likely to remain below last year’s level, while latex prices will remain unchanged.

Moderate Increase in Costs in 2003

Nominal stumpage prices are set to rise in 2003 by almost four per cent. The rise in the mill price is expected to be somewhat less than this.

The increase in total labour costs will depend on the next collective pay settlement, which will take effect in February 2003. The forecasting institutions estimate that labour costs will rise by about 3–3.5 per cent. After adjustments, this would put the increase in forest industry pay a little above the 2002 figure.

Any assessment of raw material costs in the pulp and paper industry is hampered by the uncertainty over oil prices. Brent futures indicate that oil prices will start falling steadily from the start of 2003, and that the average price for the year will not exceed USD 25 per barrel. The Research Institute of the Finnish Economy also forecasts an oil price of around USD 25 per barrel, which is about the same as this year. If the steeper price trend that began in August 2002 is short-lived, the oil price will not greatly affect chemical and pigment prices. These prices will nevertheless be subject to upward pressure as demand picks up.

The 2003 spot market price of electricity will depend very much on water reserves in the Nordic countries and the level of consumption in the coming winter. Futures prices on Nord Pool indicate a distinct rise in the price of electricity in the early part of 2003 compared with early 2002, due to the scant water resources. Futures prices also indicate that the market price of electricity in 2003 as a whole will be significantly more expensive than this year. An increase of around five per cent in the electricity tax and in the tax on fuels used in heat production will also increase energy costs.

Forest Industry’s Capacity Utilisation Rate Rising

The delayed recovery in demand in 2002 will keep the forest industry’s capacity utilisation rate at about the 2001 level in its Finnish-based operations. In the paper and paperboard industry the capacity utilisation rate this year will be 89 per cent. Paper machines have had to be shut down in 2002 on account of the slack demand. The demand for newsprint and magazine paper, for example, has fallen as a result of the reduction in advertising and publishing. By contrast, the demand for consumer-
driven office papers and packaging board has been growing. The 2002 capacity utilisation rate in the pulp industry will be slightly above the previous year’s level, although still clearly less than 90 per cent, due to the substantial amount of new capacity built in 2001.

The capacity utilisation rate for paper and paperboard is expected to improve somewhat in 2003, when paper exports start to increase and capacity remains unchanged. The utilisation rate is projected to be 92 per cent.

In 2001 the capacity utilisation rate in the sawmilling industry was 94 per cent, according to figures from the Finnish Forest Industries Federation. The 2002 figure will be marginally higher as a result of the slight increase in production, and the rate will improve further in 2003 as production continues to climb. No precise forecasts are given because total production capacity in the sawmilling industry is difficult to determine accurately, and there is no consensus on the figure.

Production capacity in the plywood industry increased again in 2001, when the capacity utilisation rate stood at an average of 88 per cent. By early 2002, capacity had increased to approximately 1.8 million cubic metres, lowering the full year’s capacity utilisation rate to less than 70 per cent, despite the five-per-cent production increase to 1.2 million cubic metres. In 2003, the capacity utilisation rate will increase slightly to 72 per cent, due to the absence of new capacity and a production increase of five per cent.

**Higher Production Will Improve Paper Industry Profitability in 2003**

In 2001 the combined profits of Stora Enso, UPM-Kymmene and Metsäliitto Group were approximately EUR 2.7 billion (before extraordinary items and taxes). This represented a slight drop in profitability since the high of the previous year. The downturn in the world economy reduced demand for the industry’s products and so production levels fell. Prices in the paper industry remained high, however.

Profitability is shown by product group in the accompanying diagram, which represents the entire production of Finnish forest industry companies. The estimates of production profitability for 2002 and 2003 given in the text deal only with Finnish-based production.

The profitability of newsprint production declined significantly in the first six months of 2002, due to lower prices. Nevertheless, this level of profitability was still higher than that for other product groups. Magazine paper profitability also dropped considerably compared with last year. Operating profit was reduced by lower sales prices. Although prices of writing and printing papers have been declining throughout the year, the price level has nevertheless been satisfactory when compared against long-term average prices. The sector has therefore still remained profitable despite the weak demand.

Pulp and paper industry profitability is expected to improve somewhat in 2003 as growing production levels raise the capacity utilisation rate. Profitability improvements will find little support from export prices, however, as nominal export prices for paper are projected to remain almost unchanged in 2003.

**Only Slight Improvement in Sawmilling Profitability in 2002 and 2003**

Profitability in the sawmilling industry will be only a little higher in 2002 than in 2001, due to the low overall increase in export prices. According to the market review *Wood Focus*, the sawmilling industry turned in a significant loss in the first quarter of 2002, although the figure was slightly up on the result for the last quarter of 2001. Profitability did improve in the second quarter, however, as a result of the marked rise in exports. After financial expenses, sawmilling was nevertheless still making a considerable loss. The rise in export prices ensures that profitability in the latter half of 2002 will be slightly better than in the first half.
Cost Structure of the Finnish Forest Industry

Johanna Pohjola

The overall cost structure of the forest industry’s units located in Finland is shown in the accompanying diagram for the year 2000. The pulp and paper industry comprises the production of pulp, paper and paperboard, and paper and paperboard products. The wood products industry comprises sawing, planing and impregnation of timber, production of plywood and other wood-based panels, and manufacture of joinery products, wooden packaging and other wood products.

Total costs in the pulp and paper industry increased by almost nine per cent in 2000, to approximately EUR 12.2 billion, and in the wood products industry by almost 10 per cent to about EUR 4.8 billion. About half of the increase in costs was attributable to the increase in production. In both sectors the growth in wood raw material, energy, transportation and labour costs and in depreciation was slower than the growth in total costs. By contrast, the costs of other supplies, for example, and the pulp and paper industry’s chemical and pigment costs increased more rapidly than total costs. Examining the costs against the previous year’s figures reveals little change in the percentages, although in the pulp and paper industry the growth in the costs of some items differed markedly from the growth in total costs.

Stumpage costs in the pulp and paper industry were almost unchanged, as both the consumption and price of domestic roundwood were almost at the previous year’s level. The total costs of the industry’s roundwood imports rose by 15 per cent due to the marked rise in both the price and quantity of imports. In the wood products industry, stumpage costs increased as a result of the higher price of spruce sawlogs, in particular, and the total costs of roundwood imports were also up on the previous year, due principally to the higher volume of imports.

Felling costs per cubic metre were down by six per cent, which reduced the pulp and paper industry’s roundwood harvesting costs compared with the previous year, despite the increase in standing sales of roundwood and local transportation costs. Roundwood harvesting costs in the wood products industry were slightly up on the previous year’s figures.

The rise in fuel prices led to a clear increase in both transportation and fuel costs, while the increase in the cost of electricity and heat was relatively small.

Any analysis of the cost structure must take into account that the two sectors produce both basic products and processed products, and that the cost distribution differs for each of these. In the sawmilling industry, for example, which is part of the wood products sector, slightly over half of all costs are from the wood raw material (stumpage costs, harvesting, transportation and imported roundwood), and only some 10 per cent is incurred in the form of labour costs.
Sources: Statistics Finland and Finnish Forest Research Institute

**Pulp and Paper Industry 2000**

- Wood raw material: 14.2%
- Energy: 9.0%
- Chemicals and pigments: 10.9%
- Other costs and supplies: 44.0%
- Labour: 14.4%
- Depreciation: 8.4%

- Stumpage costs: 4.8%
- Harvesting: 1.5%
- Transportation: 1.6%
- Imported wood: 2.6%
- Chips and sawdust: 3.8%
- Pigments: 3.1%
- Chemicals: 6.9%
- Salaries: 3.3%
- Social security costs: 3.3%
- Wages: 7.9%
- Electricity and heat: 7.0%
- Fuels: 2.0%
- Other supplies: 15.5%
- Advertising, sales and marketing: 1.3%
- Repairs: 3.8%
- Merchandise: 5.5%
- Transportation and storage: 9.1%
- Depreciation: 8.4%

**Wood Products Industry 2000**

- Wood raw material: 38.0%
- Energy: 2.5%
- Other costs and supplies: 38.5%
- Labour: 16.7%
- Depreciation: 4.3%
- Stumpage costs: 27.8%
- Harvesting: 4.4%
- Transportation: 3.8%
- Imported wood: 2.0%
- Other supplies: 15.6%
- Advertising, sales and marketing: 0.9%
- Repairs: 1.6%
- Transportation and storage: 8.4%
- Wages: 9.8%
- Salaries: 3.2%
- Social security costs: 3.6%

Sources: Statistics Finland and Finnish Forest Research Institute
The capacity utilisation rate in the sawmilling industry will improve in 2003, as production is expected to grow by about two per cent. Sawnwood prices will be up by about two percent, but production costs are also expected to rise. The price of softwood sawlogs is expected to increase by about three per cent. In fact, no significant improvement is anticipated in the sawmilling industry’s performance until prices improve considerably on the export markets.

In the plywood industry profitability has been affected this year by a reduction in export prices and in capacity utilisation rates. Production costs have also increased, for example as a consequence of the rise in stumpage prices. Profitability will be down for softwood plywood in particular, as the export price in the first six months of 2002 fell by eight per cent on last year’s figure. Softwood sawlog prices will also have risen by an estimated 2–3 per cent this year, depending on the tree species. In 2003 the average export price of plywood will remain at this year’s level while at the same time sawlog prices will rise, thus adversely affecting profitability in the plywood industry. The capacity utilisation rate, on the other hand, will improve slightly.

**Sawmilling Industry Turns to Russia and the Baltic Countries**

Corporate restructuring is continuing at a steady pace in the forest industry. The most significant corporate acquisition was the purchase of the German company Haindl by UPM-Kymmene in November 2001. This increased UPM-Kymmene’s market share considerably in newsprint and magazine papers and reinforced the company’s position as a leading global manufacturer of printing papers. Annual synergy benefits in production, logistics and purchasing are estimated at EUR 70 million by 2004. UPM-Kymmene also improved its position on the self-adhesive labelstock market by acquiring the MACtac pressure-sensitive materials business for its own Raflatac subsidiary from the US-based Bemis Company Inc. The deal made UPM-Kymmene the second largest producer in this field on the US market.

Investment by the Finnish sawmilling industry is currently being targeted mainly at Russia and the Baltic countries. Besides the proximity of raw materials and markets, this also assists Finnish companies in their roundwood procurement, even...
for plants located in Finland. Lower prices are a further benefit. Among the Finnish companies, Stora Enso is especially active, investing in five new sawmills in Russia, Latvia and Lithuania by 2006. The increase in production capacity will be almost one million cubic metres, of which 200,000 cubic metres will come on stream in 2003. UPM-Kymmene will also start up a new sawmill next year, with a capacity of 200,000 cubic metres. Besides investing, Finnish companies are also reinforcing their positions through corporate acquisition. Stora Enso has signed a letter of intent to buy shares in Estonia’s largest sawmill company, AS Sylvester, and this share purchase is expected to be completed by the end of 2002.

Ownership restructuring has also taken place in the Finnish sawmilling industry, where Metsäliitto Osuuskunta acquired a one-third holding in Vapo Oy from the state in spring 2002. Vapo includes Finland’s fourth largest sawmilling company, Vapo Timber Oy, which has a combined sawmill production capacity of almost 800,000 cubic metres per year. Metsäliitto also has the right of pre-emption on any state shares sold at a later date.

Stora Enso corporatised its forests in 2002 and is selling off part of its shareholding to release capital for core business activities. A total of 600,000 hectares of Finnish forest land and related business operations were sold in early July to Tornator, a newly established company owned by Stora Enso. The intention is to sell most of Tornator’s shares to institutional investors before the end of 2002.