2. The Finnish Forest Industry

2.1 Exports and Production in the Sawmilling and Plywood Industries

A five per cent drop in Finnish sawnwood production and exports is forecast for 2001 as a result of the reduction in demand for sawnwood in Europe. Due to the fall in demand and the oversupply situation, more exports will go to markets outside Europe, and the average export price is forecast to be six per cent below last year’s figure. Plywood exports will grow by about four per cent and production by about the same amount. The average plywood export price is forecast to drop this year by three per cent, mainly due to the decrease in the price of birch plywood.

With only very modest growth expected in the European construction sector next year, the growth in Finnish sawnwood production and exports in 2002 is forecast to be no higher than around two per cent. Sawnwood supply on the industry’s export markets will continue to be high next year and demand will rise only a little, which means that sawnwood export prices are forecast to rise by only one per cent. Plywood exports and production will increase in 2002 by an estimated 12 per cent as substantial new production capacity comes on stream. The average price of plywood will fall by four per cent, as the additional exports will be weighted towards the more economically priced softwood plywood.

Demand for Wood Products Declines in Europe

The June forecast by Euroconstruct showed that growth in overall construction output for the whole of Western Europe this year will slow to 1.3 per cent. Housing construction is forecast to shrink by over two per cent. In Germany, which is the most important market for Finnish spruce sawnwood, overall construction output will drop this year by a total of over two per cent and housing construction will plummet by over seven per cent. The Food and Agricultural Organisation of the United Nations (FAO) predicts that sawn softwood consumption in Europe this year will fall by over four per cent and plywood consumption by about five per cent. Currently, it appears that world economic growth will be noticeably lower than earlier anticipated, making the Euroconstruct forecasts too optimistic.

Recession in German Construction Sector Reduces Finnish Exports of Spruce Sawnwood

Although the export volume of Finnish sawn softwood and planed wood (including finger-jointed sawnwood) in the first six months of the year remained almost unchanged from last year, the export destinations and the composition of export orders were affected by the slowing of demand growth. The contraction in demand in Europe was compensated by additional exports to markets outside Europe. Whereas export volumes to European
markets in January–June fell by about four per cent, those to markets outside Europe grew by over one per cent. In the first half of the year almost one third of exports were to countries outside Europe.

The downward trend in the construction sector in Germany particularly affected exports of spruce sawnwood: exports for January–June were about seven per cent down on the corresponding period last year. By contrast, exports of pine sawnwood grew by almost one per cent on last year’s figures.

Processed sawnwood exports (planed and finger-jointed sawnwood) have fared better than exports of unprocessed sawnwood. Exports of processed products in the first six months of the year were up by about one fifth on the previous year, and the figure for the full year is expected to exceed 1 million cubic metres. The majority of the processed products exported were planed spruce. The most important export markets were the United Kingdom, Japan, Germany and the United States.

In plywood exports, the slowdown in the European construction sector has affected softwood plywood in particular, exports of which fell in the first six months of the year. Birch plywood exports have risen by over 12 per cent, but the price has fallen due to tougher competition. In total, exports of plywood and laminated veneer lumber (LVL) in January–June were about five per cent higher than the same period last year.

### Europe’s Sawnwood Exports to Japan Continue to Grow

The increase in sawnwood production in Europe and the growth in sawnwood imports last year were already leading to an increase in the volume of sawnwood supply in European markets. Together with the drop in demand, this triggered a decrease in the price of sawn softwood. The slide in prices on the European market has led Finland and its competitor countries to direct exports to markets outside Europe. Japan and, to a growing extent, also the United States has acted as a useful balance in the export markets.

The weakening of the Swedish krona has considerably improved the price competitiveness of Swedish producers on the export markets. This was not yet visible in Swedish sawnwood export deliveries in the early part of the year, but in the light of

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<th>The Finnish sawmilling and plywood industries, 2000 (1000 m³)</th>
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*Estimated use = production – exports.

Sources: Statistics 2000 (Finnish Forest Industries Federation) and Finnish Forest Research Institute (METLA).
export sales figures and the growing production volumes, Swedish exports will do better in the latter part of the year than Finnish exports. The growth in Russia’s sawnwood exports appears to have slowed in January–April, while the trend in the Baltic countries has been mixed: Latvia’s exports suffered from unfavourable exchange rates in the first part of the year, whereas Estonian exports increased by over 10 per cent. The supply of plywood is expected to grow this year both from Russia and the Baltic countries.

Around half of Japan’s sawnwood imports are from North America, while imports from Europe have now risen to one quarter. The factors behind this success are the weakness of the euro and the consistent quality of European sawnwood. The Forestry Agency of Japan predicts that sawnwood demand and sawnwood imports will fall in 2001 in the wake of the drop in building construction. The reduction in imports projected for the second half of this year will particularly affect imports from North America and the Pacific region, whereas imports from Europe are expected to rise by seven per cent and from Russia by almost 13 per cent.

North American sawnwood production has been dropping since last year. With the construction trend remaining favourable, this has supported the price of sawnwood. Prices have also been kept high this year by the uncertainty stemming from termination of the 1996 US-Canada Softwood Lumber Agreement. In August, the United States imposed a preliminary countervailing duty of just over 19 per cent on sawnwood from western and central Canada. In addition, a preliminary decision to impose an anti-dumping duty averaging 12.6 per cent on all Canadian softwood lumber exports to the United States was announced at the end of October. A final decision on both the countervailing and anti-dumping duties is not expected until January 15, 2002 at the earliest. Many Canadian sawmills have reduced production, and Canada estimates that its exports this year will be down by five per cent largely as a result of this trade dispute with the United States.

Fall in Finnish Export Volumes and Prices in 2001

In January–August the drop in demand led to a fall of 11 per cent in export sales of Finnish sawnwood and planed wood compared to the same period last year. Deliveries of export orders will therefore be down in the second half of the year. In all, export volumes of sawnwood and planed wood are forecast to shrink this year by about five per cent on last year’s figures.

The unit price (in FIM) of Finnish sawnwood exports in the first half of the year fell by almost five per cent, split fairly evenly between pine and spruce sawnwood. The profitability of sawnwood production also fell. The industry imposed production limits this year in an effort to relieve the oversupply situation on the export markets and to support the price of sawnwood. The average sawnwood export price this year is forecast to be about six per cent lower than last year, due to the oversupply and the sluggish demand. Plywood export growth this year will be slower than last year, at
about four per cent. The growth in plywood supply from Eastern Europe has intensified competition still further and the average unit price of plywood exports this year will drop by three per cent, largely due to the fall in the price of birch plywood.

**Exports Up Slightly in 2002**

According to the June forecast by Euroconstruct, the growth in overall construction will pick up slightly in Western Europe in 2002 when the economic recovery takes hold. There will also be an improving trend in housing construction, producing a slight increase in the demand for wood products. In Germany, however, no growth is envisaged on the construction market in 2002 and the value of overall output including new homes is expected to decline further. Housing construction on the Japanese market, important for maintaining stability in Europe’s sawnwood markets, is forecast to decline next year by over one per cent (Research Institute of Construction and Economy). This drop is small, however, and will probably not affect European exports to the Japanese market.

The stability of the European market for wood products is affected not only by demand on the Japanese market but also directly and indirectly by the US dollar exchange rate and construction activity in the United States. The favourable trend in the North American construction sector has boosted sawnwood demand on the domestic markets, reducing exports to Europe. This trend has been reinforced by the dollar exchange rate against the euro. The US countervailing and anti-dumping duties imposed on Canadian sawnwood may, however, increase Canadian producers’ interest in European markets. The attraction of these markets may not be sufficient though unless there is a significant rise in sawnwood prices in Europe or a substantial strengthening of the euro. The strengthening of the dollar, on the other hand, has improved the competitiveness of many European countries on the US sawnwood market and enabled an expansion of exports there.

Both Russia and the Baltic countries have the potential to increase exports of sawnwood and plywood to Europe, although lower prices have meant that exports this year have not grown at the same rate as last year. Swedish producers can also be expected to increase their exports if the krona continues to weaken.

In all, the sawnwood market is expected to improve slightly during 2002, although the record levels of 2000 will not be reached. European production of sawnwood will decrease slightly according to FAO estimates. Finnish sawnwood exports are expected to increase by about two per cent in response to the modest growth in the European construction market and the general economic recovery. Plywood export volumes are forecast to rise by 12 per cent as substantial new production capacity comes on stream. Again there will be little change in export prices because in spite of lowered production in Europe, supply will still be abundant and demand will only edge upward by a small amount. Pressure on plywood and sawnwood prices will
also be caused by an increase in the supply of substitute products in the form of OSB and MDF. The average sawnwood export price (in FIM) will rise by only one per cent, whereas the average plywood export price will fall by four per cent, partly due to the increasing share of the more economically priced softwood plywood.

### More Production Capacity in the Plywood Industry

The Finnish construction industry consumes about one third of domestic sawnwood production. The promotional campaigns for sawnwood in recent years have been successful in increasing the use of domestic sawnwood in construction. Changes in the structure of the economy and the concentration of companies in the main growth centres around the country have reinforced migration patterns and the demand for business premises and housing construction.

According to the October forecast of the Confederation of Finnish Construction Industries (RTK), building construction will grow by two per cent in 2001 but next year will be almost four per cent down on this year’s figure. The Confederation estimates that building renovations, which are important for sawnwood consumption, will account for 45 per cent of total building construction value. Growth in building renovations is expected, on average, to be quicker and more even than growth in new construction. Renovations are forecast to be up by five per cent both this year and in 2002.

Domestic sawnwood consumption (equal to production plus imports, less exports and increases in stocks) grew last year to 4.8 million cubic metres. It is forecast to increase by about two per cent this year, but to shrink by three per cent in 2002 as building construction subsides. Plywood production mostly goes for export, with only 10 per cent or more remaining in Finland.

The expansion of plywood production capacity has led to almost a doubling of plywood production in the period 1990–2000. Substantial new capacity will be added this year and in 2002. The biggest single investment has been at the Schauman Wood Oy mill in Pellos, raising softwood plywood production capacity by 180 000 cubic metres. Finnforest is also expanding its laminated veneer lumber (LVL) production capacity at Punkaharju by 70 000

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### Forecasts of production and exports in the sawmilling and plywood industries (1000 m³); percentage changes from previous year are shown below the respective volumes

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

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<td>Plywood</td>
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* Export prices are nominal unit values (in FIM).
cubic metres. These, together with smaller investments, will raise Finnish plywood and LVL production capacity by over 300,000 cubic metres by the end of next year.

Sawnwood production in Finland this year is forecast to be 12.6 million cubic metres, down more than five per cent on last year, on account of the slackening demand on export markets. As the export markets pick up somewhat, production is forecast to grow by two per cent in 2002. The additional plywood production capacity comes too late to have an appreciable effect on this year’s production figures. Plywood production is forecast to show a growth this year of just below four per cent. In 2002, plywood production will be up by almost 12 per cent.

2.2 Exports and Production in the Pulp and Paper Industry

The Finnish pulp and paper industry is already feeling the effects of the faltering demand for paper products this year. Production and exports of paper and paperboard will fall by about six per cent. Pulp prices have been dropping since the start of the year, and the average pulp price for the full year will show a drop of one fifth on the very high level of 2000. By contrast, average paper prices this year will be four per cent above last year’s level, due to the favourable trend in the first part of the year and the production shutdowns.

In 2002 the demand for paper will pick up slightly, leading to an increase of about two per cent in production and exports. Paperboard production and exports are also expected to increase somewhat. Production of pulp is forecast to grow by almost six per cent and pulp exports by close to one fifth. Substantial new pulp and paper capacity is being added this year, at a time when demand is still fairly slack. Although the pulp market is expected to gradually recover next year, average pulp prices will be down by almost nine per cent, due to the low price level at the start of the year. An increase in paper prices will not be possible, as the supply of paper will increase next year by more than the growth in demand. The average export price of paper in 2002 will be almost two per cent below this year’s average, despite the increasing share of high value-added products. The export price of paperboard is forecast to drop by about four per cent. Paperboard prices will be under pressure as a result of the relatively low pulp price.

Increase in Capacity, Drop in Demand

The Finnish pulp and paper industry had a record year in 2000. With growth continuing for a fourth year in succession, the industry’s capacity utilisation rate was extremely high (excluding the April strike), and both pulp and paper turned in record production figures. However, at the end of the year economic growth slowed in the United States and then in Europe and Asia, affecting the demand for forest industry products in the main markets. This was already evident in the production figures for the early part of 2001.

No signs of recovery in the world economy are expected in the coming few months, which means there is no prospect of an improvement in the demand for pulp and paper products at the end of the year. Next year, demand is projected to grow slightly as economic growth on export markets picks up, although sales may be at prices below this year’s average.

Market pulp and fine papers have been affected the most by the economic downturn. Always sensitive to cyclical fluctuations, the price of pulp began to plunge at the start of the year. The forecast of a 2.5 per cent growth this year and next year in market pulp capacity worldwide (Salomon Smith Barney) is fairly modest, but in the present economic situation this will exacerbate the oversupply of pulp and reduce its price. Fine paper prices have also
fallen, but a full collapse has been averted by the production shutdowns. According to Resource Information Systems Inc., however, these shutdowns have caused Europe’s biggest fine paper producers to lose market share to non-integrated producers, who have been ready to pass on part of the pulp price reduction to fine paper prices.

Production capacity for paper and paperboard products is also set to increase. Substantial investment projects have been carried out in Europe that increase coated printing paper capacity. Coated printing papers are an important element in Finnish paper exports. The growth in European paperboard capacity, on the other hand, is biased towards grades based on waste paper, which do not compete directly with the higher quality pulp-based paperboard produced in Finland. Due to substitution between products, however, the additional paperboard capacity will affect Finnish paperboard producers.

Unfortunately for Finnish exports, the market outlook is least favourable for products in which the Finnish paper industry has invested substantially in recent years, namely coated printing papers. The importance of these products in the Finnish paper industry has continued to grow this year. Both UPM-Kymmene and M-real have converted one of their fine paper machines from uncoated to coated grades and Stora Enso also plans to expand its coated fine paper capacity at the end of the year, when it overhauls one of its machines. Together these projects will increase coated fine paper production capacity by about 700,000 tonnes, one third of which is a net increase in paper capacity. In Europe as a whole, a total of 1.1 million tonnes of new coated fine paper capacity will come on stream by the end of 2001. Coated magazine paper capacity in Europe is also growing quite quickly. By the beginning of 2002, LWC capacity in Western Europe will be more than 10 per cent higher than in mid-2000. Under the current economic conditions the additional supply of coated magazine and fine papers cannot be absorbed into the market without price reductions. The capacity utilisation rates will thus remain low.

Growth in the demand for paper and paperboard is forecast to remain weak until the world economy begins to recover. The outlook for European producers is also affected by the euro exchange rate against the US dollar. Although only one fifth of the Finnish pulp and paper industry’s export value in 1999–2000 was from trade outside Europe, exchange rate fluctuations do have indirect effects. If the euro strengthens, the subdued level of Euro-

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*Estimated use = production – exports
The strengthening of the euro may also increase imports to Europe from elsewhere in the world. The biggest newsprint exporter to Western Europe is North America. Canadian newsprint deliveries to Western Europe rose only slightly in January–July this year, despite the sharp curtailment in newsprint demand in the United States since the start of the year. As the euro strengthens, Canadian producers could increase their exports to Europe.

Producers’ Pulp Stocks Returned to Normal Level – Demand Continues to be Low

Consumers’ Utipulp stocks amounted to about 1.1 million tonnes in September. This level of stocks, equivalent to about 31 days’ use, can be considered low.

Producers’ pulp stocks remained high this year until September, when they returned to a more normal level of 1.55 million tonnes. However, this figure is still some 10 per cent above last year’s level. Due to the imposition of production limits, producers’ stocks were reduced over the summer months, which is exceptional in relation to previous years. The measures aimed at controlling stocks are, however, not expected to support pulp prices until the paper markets recover, because the additional capacity means a plentiful supply of pulp.

Export prices of Finnish pulp reached a peak in December 2000, after which they have continued to slide until September. According to the PIX index of FOEX Indexes Ltd, the mid-September dollar price of softwood pulp was 37 per cent lower than at the start of the year. At USD 450 per tonne, this was the lowest quote since 1993. Although euro-denominated prices have been falling at about the same rate, the situation has been more serious for North American pulp producers than for European producers on account of the weak euro. The Finnish export price of bleached softwood pulp did not apparently sink below its 1989–2000 nominal average (approx. FIM 2680 per tonne) until September, having already dropped below the corresponding inflation-adjusted average (using the wholesale price index) in August.

Most Finnish pulp mill production is consumed by the companies themselves at their plants in Finland and abroad. The price of market pulp has therefore been of most significance in recent years as a production input indirectly affecting paper and paperboard prices. A link has been observed, for example, between the export prices of pulp and fine paper, which appears to be holding despite the concentration trend amongst fine paper producers. The export price of Finnish bleached sulphate pulp in recent years has been an average of 65 per cent of the fine paper price. In June, the price dipped slightly below this level as pulp prices fell more sharply than paper prices. At the end of 2000 the corresponding figure was exceptionally high, at over 80 per cent.

Sulphate pulp capacity has been increased in Finland this year by about half a million tonnes. In
addition, a new CTMP line with a capacity of 210 000 tonnes per year has been installed. In Finnish paper and paperboard production, pulp capacity is growing much faster than pulp demand. There is thus considerable scope for an increase in export deliveries once the market situation allows.

In the first six months of this year Finnish pulp production fell by 4.2 per cent. With domestic pulp consumption falling, the producers could in theory have increased their pulp exports. However, exports fell by as much as 13 per cent in the first part of the year, much more than the drop in production. Deliveries to the companies’ own plants abroad were reduced because production was also cut in these mills. If the production of market pulp had continued unchanged, stocks would have increased and the drop in pulp prices would have accelerated, which would have also had an adverse effect on paper and paperboard prices.

Finnish pulp production and exports are forecast to shrink this year by almost eight per cent on the 2000 figures. The average sulphate pulp export price will remain about one fifth lower than the exceptionally high level of last year.

Export prices of Finnish paper and paperboard in the first half of 2001 were significantly higher than the averages for 2000. The export price of several products has even risen since the peak at the end of 2000. Demand for newsprint and uncoated magazine paper, for example, was still strong in Europe in the first part of the year. In the first six months, newsprint prices were 14 per cent and magazine paper prices about six per cent above last year’s averages. The export prices of these products have remained fairly stable during the year because of long-term supply agreements. By contrast, fine paper prices began falling at the start of the year because of the weakening demand and the drop in pulp prices. The main producers reacted to the situation by implementing substantial production cuts. As a result, fine paper prices for the first six months were actually 10 per cent higher than in the corresponding period last year, and were also above the 2000 average.
Paperboard export prices in the first half of the year were eight per cent above the prices in the same period last year. However, there were differences between products in this very diverse product group. Export volumes and prices of paperboard used in making corrugated board, for example, dropped substantially.

Average paper and paperboard prices in 2001 will be higher than last year: paper prices will be up by four per cent and paperboard prices by five per cent. The contributory factors are the encouraging price trend in the first part of the year, the long-term supply agreements and the production shutdowns.

The accompanying diagrams illustrate the trend in average export prices and real average prices of Finnish paper and paperboard. The rising trend in paper prices also reflects the increasing emphasis in production and exports on higher priced products. This emphasis will continue in 2002.

### Production Limits in 2001

The economic slowdown on export markets this year has been accompanied by a significant drop in paper and paperboard production. Paper production volume fell by an overall two per cent in the first half of the year and export volume by three per cent on the corresponding period in 2000 (although the comparison period included a strike by paper mill workers). Correspondingly, paperboard production fell by 1.5 per cent and exports by almost 1 per cent. The value of paperboard exports rose by eight per cent.

The drop in paper production and exports in the first half of the year was largely attributable to fine paper. Production of fine paper plummeted by 13 per cent. This dramatic reduction was due not only to repair shutdowns but also voluntary production shutdowns, with the aim of alleviating the oversupply and the pressure on prices associated with the falling demand. The three largest Finnish forest companies shut down some of their production in the early part of the year and announced that they were anticipating shutdowns later in the year too.

The demand outlook for the second half of the year has further weakened on account of the falter-
ing economic growth in Western Europe. Besides fine papers, there have also been price-cutting pressures in other product groups, especially coated magazine papers. In August, newsprint production also fell, after remaining high in the first part of the year. With the trend for the rest of the year being distinctly weaker than in the early months, Finnish paper production and exports for the full year are expected to be almost seven per cent below the peak of 2000. Paperboard production and exports are forecast to be down by about 1.5 per cent.

Demand Will Increase Slightly in 2002

As growth in the world economy begins to pick up next year, the demand for paper and paperboard products is also expected to improve somewhat. Paper production and exports are forecast to increase next year by about two per cent, and paperboard production and exports by about 1 per cent. Finnish pulp and paper industry production next year will nevertheless be well short of the record level achieved in 2000.

The conditions do not exist for an increase in prices because supply is rising faster than demand. Prices in 2002 will therefore remain below this year’s average. Despite the increasing share of high value-added products, the average export price of paper industry products is expected to be down by almost two per cent next year. In paperboard, the additional production capacity in Europe and the low prices for pulp and waste paper used as raw materials will create pressure for a cut in prices. Paperboard prices are therefore expected to fall by about four per cent next year.

The major forest companies are expected to continue next year with their policy of production limits to support paper prices and prevent the kind of tumble in prices seen in previous situations of weak demand. Although there is additional paper production capacity that would allow a considerable increase in production and exports, an increase in supply would be at the expense of prices. A comparable situation was experienced in the first half of 1996, when fine paper prices collapsed following the plunging price of pulp.

As the demand for paper picks up next year, pulp production is forecast to climb by almost six per cent. With half a million tonnes of additional sulphate pulp capacity installed this year, however, the capacity utilisation rate will remain low. Pulp consumption in Finnish paper and paperboard mills will not rise at the same rate as production, and so pulp exports are projected to increase next year by almost one fifth.

A number of market sources have predicted that the bottom of the pulp downturn has been reached. Indeed, some price increases were seen in October. However, a significant improvement in pulp prices cannot be expected until some time next year, because market pulp production capacity is increasing and paper markets are still not expected to improve in the remaining months of this year. Due to their low starting point, pulp export prices in 2002 are expected to be almost nine per cent below this year’s average. Once the world economy and forest industry product markets recover, there will be considerable scope for an increase in pulp production.

2.3 Costs and Profitability in the Forest Industry

Cost trends in the Finnish forest industry this year will not be uniform. Electricity and labour costs will rise considerably, whereas the mill price of timber will fall and the prices of non-metallic minerals and chemicals will remain unchanged. The forest industry’s profitability will be significantly down on last year’s record level, as a result of the low capacity utilisation rate and the higher costs of production inputs. The profits of the three largest Finnish forest companies before extraordinary items and taxes will drop to approximately FIM 15 billion. Next year, production and exports will grow slight-
ly, but real export prices will be down on the current year’s average. The capacity utilisation rate will again be below 90 per cent. Provided that raw material and labour cost increases remain moderate in 2002, the Finnish forest industry’s profits are expected to decrease only slightly on the level recorded this year.

Mill Price of Timber Drops in 2001

Stumpage prices will fall this year by an average of four per cent, although there are appreciable differences between the various types of roundwood. The biggest reduction (six per cent) is in the price of pulpwood used by the pulp and paper industry. By contrast, the timber costs of the plywood industry, which consumes a considerable amount of birch, will remain unchanged. In the sawmilling industry, timber costs will drop this year by an average of 2–4 per cent as a result of the fall in softwood sawlog prices in the summer. Whether inflation-adjusted by the wholesale or the producer price index, the changes are of the same order of magnitude.

The nominal costs of timber harvesting and long-distance transportation will increase this year by about three per cent. The reasons for this include the pay increase for harvester and forwarder operators and timber transporter drivers. Their pay will increase this year by a total of about three per cent, based on a two-year agreement. Direct and indirect pay costs are a significant component in both the forest sector machinery cost index and the transportation cost index, accounting for about one third of these index figures. Taking all the cost changes into account, the mill price of timber in Finland will fall this year by an average of about three per cent on last year’s figures.

The price of recovered paper on the domestic market has remained stable. This is because recycled fibre is relatively unimportant in Finnish paper and paperboard production, and because Paperinkäys Oy, which procures and supplies recovered paper, is wholly owned by the big forest companies. By contrast, the price of recovered paper in Central Europe has fallen considerably in the current year along with the decrease in newsprint and paperboard production. In Central Europe, price fluctuations in recovered paper have followed the trend in pulp prices and have thus been considerably more pronounced than in the Nordic countries.

Electricity Prices Rising

Electricity, gas, heat and water prices are expected to rise this year by almost 10 per cent in real terms. The market price of electricity, in particular, rose substantially in the first part of the year. This was due mainly to an increase in electricity consumption and the reduced level of water resources in Sweden and Norway compared to previous years. On the basis of futures quoted on Nord Pool (the Nordic power exchange), it can be assumed that electricity prices will also remain relatively high in the remaining months of this year, despite the increase in Nordic water resources in the autumn.

The high level of self-sufficiency in energy in the Finnish forest industry helps to keep energy costs stable. The major forest companies obtain a considerable share of their electricity and heat from their own power plants and production processes. Stora Enso, for example, reports that it obtains around 40 per cent of its energy needs from the power plants associated with its production units. UPM-Kymmene values its energy assets highly, reporting that it is almost self-sufficient in electricity (including its associated companies) and obtains 55 per cent of its heat energy from black liquor, bark and other biofuels. M-real also has mill power plants producing 70 per cent of its electricity, and wood-based fuels are clearly the most important source of heat energy for the company in Finland.

Many sawmills are also self-sufficient in heat energy. The energy they need for drying wood and heating buildings is obtained from bark and sawing and trimming waste (e.g. sawdust and dried chips).
The share of biofuels in the forest industry’s heat and electricity production in Finland will increase further once all the new bio power plants are up and running.

Pressures to increase energy prices have been alleviated by the fall in demand as a result of the economic slowdown and by the stabilisation of crude oil and natural gas prices and the slight strengthening of the euro. The Association of European Conjuncture Institutes (AIECE) forecasts that the average dollar price of crude oil this year will be 12 per cent below last year’s figure. The Brent futures on the International Petroleum Exchange also anticipate a stabilisation of oil prices. Amongst the other forms of energy, the US dollar price of coal is expected to rise this year by six per cent. No major changes are anticipated in the price of peat or bioenergy.

Taking into account wage adjustments and specific factors concerning each mill, the impact of the collective pay settlement on the costs of the pulp and paper industry in 2001 is estimated to be 4–5 per cent. The impact on costs in the wood products industry is slightly less. The increase in labour costs corresponds to the increase in labour productivity that occurred in the sector in 1999 and 2000. However, if the comparison is only with the year 2000, the rise in labour costs is 1–2 per cent above the increase in labour productivity.

**Moderate Price Trend in Paper Coating Materials and Fillers**

The slowdown in economic growth and the drop in oil prices have led to a reduction in many raw material prices. This is also the case for non-metallic minerals, of which kaolin, calcium carbonate and talc are the most important for the pulp and paper industry. These are used in paper manufacture either mixed with wood fibre as a filler or spread on the paper surface as a coating pigment. Fillers and coating materials are used to improve surface quality, optical characteristics and printability and constitute about 30–40 per cent of the content of ordinary magazine paper (SC and LWC). In the most highly processed paper grades, which are often coated several times, the percentage may exceed that of wood raw material.

Although mining activity and treatment processes consume energy and the rising oil price last year led to a temporary increase in raw material transport costs, the worldwide slowdown in demand will ensure that there is no change in the inflation-adjusted (using the producer price index) price of non-metallic minerals this year. In real terms, the prices of chemicals and chemical products will also remain unchanged this year because of sluggish demand and cheaper oil. Many paper and pulp chemicals are derived from petrochemical processes and therefore their prices depend heavily on the oil market. These include bleaching chemicals, coating chemicals, starch binders, latex binders, adhesives and special chemicals.

Price movements in non-metallic minerals, chemicals and plastic-based substances can have a major impact on profitability in the Finnish pulp and paper industry. The industry’s annual consumption of non-metallic minerals, for example, is worth more than FIM 1.6 billion. The above-mentioned materials together account for 7–8 per cent of the pulp and paper industry’s total costs, which is about the same proportion as energy costs.

**Shipping Costs and Synergy Benefits**

Costs of shipment by sea have fallen significantly this year as the growth in world trade has slowed and the prices of oil products have dropped. The Baltic Dry Index (BDI), which gives spot prices for dry cargoes on the busiest shipping routes, has already slumped this year by almost 40 per cent. The index has only been this low once in the last ten years, in the mini recession of 1998. Provided that the oil price does not begin to climb significantly, the cost of shipment by sea is expected to remain fairly low in 2002.
Mergers and acquisitions in the forest industry have brought an opportunity to make savings in raw material costs, administration and the distribution, sale and marketing of end products. These cost savings could be substantial, at least in principle, because transportation and sales costs, for example, represent almost 10 per cent of the forest industry’s turnover.

The forest companies themselves estimate that there are very considerable synergy benefits to be gained from the restructuring in the industry. Stora Enso, for example, has estimated that the synergy benefits of the Stora and Enso merger plus the acquisition of Consolidated Paper will boost the company’s operating profits over the period 1999–2002 by a total of almost FIM 6 billion. ‘Rationalisation of production’ was cited as the most important source of synergy. In 1999, Stora Enso’s operating profit before non-recurring items was approximately FIM 7.8 billion.

**Moderate Cost Trend in 2002**

Nominal stumpage prices in 2002 are forecast to remain at this year’s level. No increase is expected in the mill price of timber either, provided that there are no appreciable increases in diesel and fuel oil prices.

The trend in the costs of other raw materials in 2002 also depends heavily on the oil price. If this stabilises at the OPEC target level of USD 22–28 a barrel, then no major changes are expected in the price of non-metallic minerals and raw materials derived from petrochemical processes. The Association of European Conjuncture Institutes (AIECE) forecasts that the US dollar price of crude oil will fall next year by five per cent and that the price of coal will remain unchanged. A strengthening of the euro in 2002 would also reduce the cost pressures on other imported production inputs denominated in US dollars and pound sterling.

Electricity, gas, heat and water prices will depend to a great extent on Nordic water resources, oil production figures and power consumption in the coming winter. The impact of labour costs will depend on the outcome of the next round of collective pay negotiations. Detailed agreement on the pulp and paper industry’s settlement will be reached at the start of next year. The Research Institute of the Finnish Economy (ETLA) forecasts that labour costs will rise next year by an average of 4.2 per cent.

**Sharp Fall in Utilisation Rates**

The Finnish forest industry’s capacity utilisation rate will be down considerably this year, following the drop in demand for end products and the production shutdowns. In the pulp industry the rate will sink to 83 per cent, and in the paper and paperboard industry to 88 per cent. The rates have not been this low since 1996.

The situation in the paper industry market is expected to remain difficult in 2002, as economic growth in the main export countries will continue to be slow. Coated fine papers will also be affected...
by the introduction of new production capacity in Europe during next year. Newsprint prices in Europe may be under pressure next year from a possible increase in imports from Canada if the US economy does not pick up and the dollar weakens.

In the sawmilling industry, the capacity utilisation rate this year will fall back to 89 per cent, due to the drop in production caused by the slowdown in demand. In 2002, the rate is expected to remain at around the same level. The capacity utilisation rate in the Finnish plywood industry will reach 90 per cent this year, but next year the increase in production capacity and the weak construction sector will reduce the rate to 87 per cent.

Forest Industry Profits Down Substantially

Last year the combined profits of Stora Enso, UPM-Kymmene and Metsäliitto Group were approximately FIM 23 billion (before extraordinary items and taxes). This year the figure will be considerably lower. Operating profit in the early part of the year was still as high as last year, mainly due to high paper prices, but from the second quarter onwards the figure has fallen as a result of the drop in end product prices and the lower capacity utilisation rate. Profits for the full year are forecast to be down by one third, to approximately FIM 15 billion.

The deterioration in profitability has been particularly marked in fine paper production and in the production units in North America. From the second quarter onwards, there has also been a slide in the profitability of other paper grades and in exports to the main European markets, which account for 75–80 per cent of turnover at Stora Enso and UPM-Kymmene, and as much as 84 per cent at Metsäliitto Group.

The nominal prices of paper and paperboard in 2002 are forecast to drop by 2–4 per cent and pulp by nine per cent in relation to the average for the current year. Paper and paperboard production, on the other hand, is expected to increase somewhat.

Provided that the pulp and paper industry’s production input costs rise only moderately in 2002, the Finnish forest industry’s profits will fall very little from the current year’s level.

Profits in the sawmilling industry will generally be very low this year, due to the rising costs of production inputs and the drop in sawnwood prices. Profitability will, however, vary considerably within the industry, because the degree of processing differs greatly from one producer to the next. Sawnwood export prices are expected to rise by only 1 per cent next year. No change is anticipated in the mill price of softwood sawlogs, the industry’s most important raw material. If labour costs continue to rise, the sawmilling industry’s profits will remain low next year too. In the plywood industry, profitability is expected to deteriorate further in 2002, due to the declining capacity utilisation rate.

Biggest Profit in Printing Papers

Profitability in the production of magazine papers and newsprint will be moderately good this year, mainly due to the price increases introduced at the start of the year. Newsprint has done especially well, partly because there has been no increase in production capacity in Western Europe this year.

The situation in fine papers is distinctly less favourable. The profitability of coated fine paper production has dwindled considerably as a result of the slackening demand, users switching to cheaper grades and the increase in coated fine paper production capacity. Uncoated fine paper has fared somewhat better, as production capacity in Western Europe has shrunk this year by seven per cent, and in the world at large by almost two per cent.

The most difficult situation seems to be in the sawmilling industry, where profitability has subsided as a result of the rise in raw material, energy and labour costs and the slowdown in construction. The industry has also been affected by the weakening of the Swedish krona against the euro by over 10 per
The Finnish Forest Industry

Profitability in the plywood industry is also falling, due to various factors including the construction slowdown in Germany, the industry’s main market, and the uncertain outlook in the transportation industry. The profitability of birch plywood production is also affected by price competition from the Baltic countries and Russia and the oversupply caused by additional capacity. Plywood production capacity in Finland has almost tripled in the last ten years, to about 1.5 million cubic metres.

Can Forest Industry Profits Be Predicted from Share Prices?

The simple analysis presented in last year’s Economic Outlook suggested that the Helsinki Exchanges forest industry index has acted quite successfully as an indicator of the expected profits (before sales profits, extraordinary items and taxes) of the three biggest Finnish forest industry companies. The greatest success was in anticipating the profits of these companies six months ahead. The correlations also indicated that stock market investors focus on the short-term: they place more emphasis on the forest companies’ next three interim results than the present results. Does this still hold true in a year in which the HEX Portfolio Index has slumped by over 30 per cent?

A fresh analysis shows that the relationship appears to have changed a little. Forest company profits have followed a different path during the year than that taken by the six-month lagged HEX forest industry index, and neither did the index indicate the sharp change of direction in forest company profits in the way that occurred in 1999 and 2000. This may be because for quite some time the markets maintained their belief in a rapid recovery of the world economy (and thus also in forest company profits). A further reason may be the lacklustre trend in alternative investment targets, especially the electronics and telecommunications sectors, which increased the interest of investors in traditional sectors such as the forest industry.

In practice, forest company share prices have also been affected by many other factors besides the forthcoming interim results. These include corporate acquisitions, purchase and cancellation of the companies’ own shares, changes in the ownership base, share issues, equity ratios and interest rates.

Forest industry operating profit by product group from 1st quarter 1997 to 2nd quarter 2001. Sources: UPM-Kymmene, Stora Enso, M-real and Finnforest annual and interim reports
Restructuring in the Sector Will Be More Difficult

Mergers and acquisitions will continue in the forest industry but the pace will be considerably slower due to the changed economic situation and competition regulations. Metsäliitto Group has recently been very active in acquisitions: M-real has acquired the German company Zanders Feinpapiere, following its earlier acquisition of Modo Paper; and Finnforest, specialising in mechanical wood processing, has acquired a majority of the Norwegian company Moelven. Along with the acquisitions, M-real and Finnforest have also invested heavily in new capacity and higher value-added products.

Following its powerful expansion, Metsäliitto Group’s equity ratio has already dropped to 32–35 per cent in spite of efforts to improve the situation with a share issue in spring 2001 and the sale of its holding in MD Papier to Myllykoski. These actions brought in about FIM 3.5 billion.

Metsäliitto’s acquisitions have further reinforced the position of fine paper production and mechanical wood processing within the Group’s core business. Their share of turnover is already almost two thirds if wood procurement and wholesaling are excluded. This has increased the company’s risks significantly, because fine paper prices have traditionally followed pulp prices and the mechanical forest industry has also been very sensitive to cyclical fluctuations.

In the future, competition regulations will increasingly form a barrier to mergers and acquisitions. In newsprint, for example, the five biggest producers already account for 80–90 per cent of production capacity in Western Europe. Concentration in other highly processed paper grades is beginning to reach similar levels. If UPM-Kymmene’s Haindl deal succeeds as planned, the five biggest producers will have 85 per cent of the magazine papers market, 78 per cent of the coated fine papers market and 68 per cent of the uncoated fine papers market. In magazine papers, the two biggest producers (UPM-Kymmene and Stora Enso) would command 50 per cent of the European market. Competition regulations and a strong US dollar will, in future, increasingly direct the attentions of European paper companies towards Asia.
The Cost Structure of the Finnish Forest Industry
Jaana Rekikoski

The overall cost structure of all Finnish forest industry units located in Finland for 1999 is shown in the accompanying diagram. The pulp and paper industry comprises the production of pulp, paper and paperboard as well as 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.

Figures from Statistics Finland show that in 1999 the turnover of wood products companies operating in Finland grew by more than four per cent to over FIM 29 billion, and the turnover of pulp and paper industry companies by 0.5 per cent to almost FIM 85 billion. Production of sawnwood was up by over 3.5 per cent and plywood by 8.5 per cent. At the same time, however, there was a drop in profitability in the wood products industry: the return on capital invested fell to 9.5 per cent from the previous year’s 11 per cent. Production of paper and paperboard in 1999 climbed by almost two per cent to new record levels, and the return on capital invested rose from four per cent to almost seven per cent.

In both sectors, labour costs accounted for about the same share of the total as in 1998. The higher price of oil increased fuel costs in the pulp and paper industry by 17 per cent, but this was compensated by a fall in the cost of electricity and heat. Total energy costs in the pulp and paper industry actually dropped by over eight per cent and accounted for seven per cent of total costs, compared to almost eight per cent the previous year.

The forest industry consumed a total of 68.8 million cubic metres of roundwood in Finland in 1999. Consumption of imported timber grew by eight per cent to 11.7 million cubic metres, whereas consumption of domestic roundwood remained more or less unchanged from the previous year, at over 57 million cubic metres. Stumpage costs in the pulp and paper industry fell by almost three per cent, following a drop in the price of domestic pulpwod, although as a proportion of total costs they remained unchanged. Imported timber costs in the pulp and paper industry also fell by eight per cent due to lower prices.

In the wood products industry the costs of both domestic and imported wood increased. Domestic roundwood costs rose mainly because of the higher price of spruce sawlogs. Consumption of imported timber almost doubled on the previous year; the total expenditure on imported timber rose from about FIM 300 million to FIM 450 million. The proportion of imported timber in the total costs of the wood products industry rose by half a percentage point.

Timber harvesting costs per cubic metre rose by two per cent in 1999. This, and the increase in wood consumption and in the relative proportion of stumpage sales, resulted in increased harvesting costs for the industry, although as a proportion of total costs they were unchanged.

Any analysis of the cost structure must take into account that the sectors include the production of both basic products and processed and converted products, and that costs are distributed differently in 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 timber), and only 10 per cent or more is incurred in the form of labour costs.
Costs of the Pulp and Paper Industry, 1999 (FIM 84.8 billion)

- Capital: 17.4%
- Other costs: 23.7%
- Labour: 11.8%
- Energy: 7.4%
- Other raw materials and supplies: 28.3%
- Wood raw material: 11.4%

Costs of the Wood Products Industry, 1999 (FIM 29.2 billion)

- Capital: 9.1%
- Other costs: 29.8%
- Labour: 15.2%
- Energy: 2.3%
- Other raw materials and supplies: 17.9%
- Wood raw material: 34.8%

Sources: Statistics Finland and Finnish Forest Research Institute (METLA).