2.1 Production and Exports in the Sawmilling and Plywood Industries

The strong demand for sawn softwood and the periodic scarcity in its supply due to fluctuations in sawlog availability have led to an unusually high rise in sawnwood prices in many European countries. Forecasts indicate that housing construction in Western Europe will peak in 2007, and that the growth in housing production will start to slacken before the end of the year, in which case the over-supply of sawn softwood will force prices down in the latter part of 2007. The unit price of Finnish sawnwood exports will nevertheless be about 20% higher for the year than in 2006. Sawnwood production is expected to be up by about 6% in 2007, due especially to the high domestic demand, whereas exports for the year will be around the same level as in 2006.

The forecast contraction in housing construction in 2008 will reduce sawnwood demand and heighten competition in Western Europe. Consequently, a slightly declining price trend for sawnwood is expected in 2008, and the unit price of Finnish exports will be about 4% below the average for 2007. There is, however, a possibility that the reduction in sawnwood demand could be larger than expected, in which case the drop in export prices would be even greater. With a fall in housing production, sawnwood demand will also be down on the domestic market, and production will decrease, though still remaining above the 2006 level.

Buoyant demand for plywood has raised the export prices of Finnish softwood and birch plywood, bringing the overall unit price of plywood exports in 2007 to a level about 3% higher than the previous year. A similar percentage increase applies to the volume of plywood production and exports, the increase largely concerning softwood plywood. In 2008, the drop in housing construction will mean a slight fall in plywood demand, and so the unit price of Finnish exports is expected to remain at around the 2007 level, which will also be the case for production and export volumes.

Growth in Sawnwood Demand Tails off as Housing Construction Slows Down

In 2006, strong GDP growth and still relatively low interest rates on the European export market boosted housing construction by more than anticipated. Construction was also helped by the mild weather, which extended the construction season beyond its normal duration. A total of 102 mill. m$^3$ of sawn softwood was consumed in Europe in 2006, representing a growth of 4% on the previous year’s figure. Besides new housing construction and renovation of existing buildings, the level of sawnwood demand is also affected by demand from the furniture and transport packaging sectors. In Finland, the increased demand for sawnwood and other wood products in 2007 has been due
in particular to the growth in detached housing construction.

Forecasts indicate that housing construction in Western Europe will peak in 2007, with a growth of 0.6% for the full year. The rise in interest rates and the high level of house prices will gradually begin to dampen the demand for housing and thus new construction before the end of the year, but will probably be more apparent in the construction figures for 2008. This will also mean lower growth in the consumption of wood products. In Germany, the number of building permits issued for new homes in January–May 2007 was about 40% below the equivalent figure a year earlier, and in France the first half of the year saw a drop of about 6% in new housing starts in relation to the previous year. In Finland, the corresponding figure was a drop of 12% and in Sweden a drop of about one third.

Outside Europe, building starts for the first half of 2007 in Japan were down a little on the previous year, and this was followed by a sharp downturn in July. In the United States, the decrease in construction is continuing and the sawnwood market has consequently been weak. The number of construction starts in 2006 fell by 13%, and the drop in 2007 is expected to be even greater.

In 2008, a decrease in new housing construction will occur in most Western European countries and in the United States and Canada. According to Euroconstruct’s June 2007 forecast, the decline will be an average of about 1% in Western Europe. Nevertheless, construction will be up in Germany, for instance, which accounts for about one fifth of Western Europe’s housing construction. In Eastern Europe (Czech Republic, Hungary, Poland, Slovakia), the rapid growth in construction is continuing, although volumes are still relatively small. Forecasts indicate that housing construction in Finland will be down by about 2%. The decrease in sawnwood demand in new housing construction in Europe will nevertheless be partially compensated by building renovations, which will be up by around 2%. The forecast levels of sawnwood demand and prices may fail to materialise if the construction slump in the United States and the lending crisis in US housing loans start to significantly reduce US GDP growth. The effect of this would also spread to Europe and cause a larger drop in construction and sawnwood demand than anticipated.

Oversupply Pushes Prices Down

In Europe, the busy construction sector and the temporary shortage of sawnwood due to the fluctuations in sawlog supply have led to an unexpectedly high rise in sawnwood prices. The monthly unit price of Finnish sawnwood exports has risen by about 44% between December 2005 and July 2007. The rise has been greater for pine than for spruce sawnwood. In Central Europe, the supply of spruce has been more plentiful than pine, due to the large volume of fallen spruce in the January storms.

The trend in housing starts in the first half of 2007 in Western Europe indicates that the growth in sawnwood demand will begin to tail off before the end of the year. In Finland, according to the August 2007 Business Tendency Survey by the Confederation of Finnish Industries (EK), the wood products
industry expects the general economic situation to weaken in the coming months. The change in the euro-based HWWA index (timber 63x75 mm, fob, Sweden) in June–August 2007 suggests a slowing of the rise in sawnwood market prices.

It is estimated that in the first half of 2007, Germany, Austria and the Czech Republic produced 2.5–2.8 mill. m³ more sawnwood than normal, partly because of the January storm damage. If Europe’s production is unrestrained in the latter part of the year and if sawlog supply remains at its present level, the oversupply will create downward pressure on sawnwood market prices. This situation will be exacerbated by the fact that high prices have boosted the production of sawnwood in Europe. Market prices are consequently expected to be declining towards the end of 2007.

The volume of sawnwood available in Europe has increased not only as a result of higher production but also due to the drop in exports to the United States. Exports to the US have become less profitable because of the strengthening of the euro against the dollar and the drop in US sawnwood prices. On the European market, the supply of sawnwood, especially construction grades, has increased from Central Europe and from Canada. The supply of better quality Nordic and Russian sawnwood has been less plentiful, which has helped maintain the prices of higher quality grades. With many end-users switching to lower priced grades, the downward pressure on higher quality sawnwood grades is rising.

In January–July 2007, the average price of Finnish sawnwood exports was 27% higher than for the same period a year earlier. The rise in the nominal average price for 2007 as a whole is expected to be slightly lower, at 22%, because competition is likely to drive down prices in the last quarter of the year. Taking into account the forecast for the wholesale price index, the rise in real prices will be about 18% in 2007.

The slackening in housing construction in Western Europe forecast for 2008 will reduce sawnwood demand and, if supply remains high, lead to a fall in prices, especially in the first part of the year. The ups and downs of the sawnwood market have previously followed the general economic cycle. In Europe, for example, large price rises have been followed by a sharp drop in prices as demand contracts more quickly than supply (see the featured topic by Hänninen and Viitanen). The average price of Finnish sawnwood exports last rose in 1997, by a year-on-year total of approximately 20%, before dropping by about 10% in 1998, when the Asian financial crisis led to lower economic growth worldwide. The nominal average price of Finnish sawnwood exports in 2008 will be about 4% below the 2007 level. The reason for this relatively moderate forecast is the assumption that sawlog supply will decrease in Central Europe in the second half of the year, and that this would then limit sawnwood production once the storm-damaged wood has been used up. The substantial increase in sawmilling capacity over the past 10 years has boosted the demand for sawlogs in Europe, and so there could be a scarcity of good-quality sawlogs, in particular. There is also the risk that prices could fall by more than anticipated if there is nothing to limit production or if the slackening in housing construction is greater than forecast. The main uncertainty in this concerns the interest-rate policy to be pursued by the European Central Bank.
Decrease in Finnish Sawnwood Exports to Western Europe

As Finnish sawnwood production volumes have declined in recent years, exports to Western Europe have been falling, reducing Finland’s market share of Western Europe’s sawnwood imports from 20% in 2000 to about 15% in 2007. The share held by competing producer Sweden has remained at around one third, although in the first half of 2007, Sweden’s exports to its traditional European markets were down on the same period the previous year. The Baltic countries have increased their output of higher added-value sawnwood products, and their market share in exports of low added-value sawnwood, which grew considerably in the 1990s, has already begun to decline, despite the increase in export volumes. Russia’s market share has grown to almost 15% and its export volumes are continuously rising. Germany, which has become Europe’s biggest sawnwood producer country, increased its deliveries to other European countries by more than one third in the first half of 2007. US producers have also increased exports to Europe slightly in the first six months of the year, in parallel with the rising competitiveness caused by a fall in the US dollar rate against the euro.

The strong rise in sawlog prices throughout Europe has reduced the benefit of higher end-product prices to sawnwood producers. In the first quarter of 2007, softwood sawlog prices were up by 27% in the Nordic countries and 36% in Eastern Europe in comparison with the same period a year earlier, according to Wood Resource Quarterly. Sawlog price fluctuations in different countries in the Baltic Sea region are starting to look rather similar in terms of timing and direction.

Finland’s total sawnwood exports in January–July 2007 were approximately 4% below the figure for the same period in 2006. Although exports of pine sawnwood were up by 5%, the overall decrease in sawnwood exports was due to the 11% drop in spruce sawnwood exports. Export volumes declined to Finland’s traditional major buyer countries in Western Europe: the United Kingdom, France and Germany. Outside Europe, exports to Africa and the Middle East were up, due to the high demand for pine sawnwood in Algeria, Tunisia and Saudi Arabia. Finnish sawnwood exports to Japan, which is Finland’s second largest export market after the UK, were up by 3% in the first half of the year, compared with the same period in 2006. The profitability of exports to markets outside Europe is affected by the strengthening of the euro against invoicing currencies. In the period January–September 2007, the euro strengthened by an average of 8% against the US dollar and 11% against the Japanese yen, compared with the same period in 2006. A decrease in housing construction will be a further factor contributing to lower sawnwood demand in Japan in the second half of 2007.

In Finland, the rise in sawnwood prices has considerably boosted the profitability of sawnwood production and exports, following the poor profitability of recent years. The increase in domestic demand has held back export growth, as a result of which exports for 2007 will be at about the same level as...
in 2006. In 2008, the demand on export markets is expected to be slightly down, and sawnwood prices are consequently expected to decrease. Export volumes from Finland are forecast to drop by about 4% for the year. Having Finnish-owned sawmilling capacity in other countries (e.g. about 1 mill. m³ in Russia) will allow operators to plan production differently, as domestic production can be replaced by production in units outside Finland.

**Demand on Export Markets has Boosted Pine Sawnwood Production**

In January–July 2007, Finnish sawnwood production was about 6% above the figure for the same period a year earlier. The differences between tree species were quite considerable, however. For pine sawnwood, there was an increase in production of about 9%, due to a more favourable market for it in Europe than that for spruce sawnwood, and because of the good level of domestic demand. Production of spruce sawnwood was up by about 6% in the first half of 2007, supported by domestic demand. In terms of the raw material price in relation to the end-product export price, spruce has been in a less favourable position than pine. The reduction in spruce sawlog imports in the first half of the year has heightened the demand for domestic spruce sawlogs and, correspondingly, has raised the price for them. Total sawnwood production for 2007 is expected to be up by about 6% on the 2006 figure.

The combination of high sawlog prices, oversupply of sawnwood on export markets and uncertainty over the short-term price trend for sawnwood has, since the summer, led to announcements of temporary cuts in sawnwood production at some Finnish sawmills. A deterioration in sawmilling profitability is expected, as sawnwood prices are falling and the sawlogs purchased at top prices are starting to arrive for milling. Weaker profitability can gradually be expected to limit sawnwood production. In 2008, the profitability of sawnwood production will drop further due to lower end-product prices at the same time as production costs are rising. Although domestic sawlog prices are expected to fall, other production costs will increase. A reduction in exports and domestic demand will mean a decrease in sawnwood production of about 4% in 2008.

**Strong Demand on Plywood Market**

The consumption of Finnish plywood on the European export market in 2006 was approximately 7.6 mill. m³, which was about 1% up on the previous year. This increase was attributable to the growth in construction and a recovery in the furniture industry. The growth in consumption of other wood-based panels in 2006 was even higher, for instance almost 3% for OSB board. The plywood market is small in relation to the markets for other wood-based panels or sawnwood. With its production of 1.4 mill. m³, Finland is the largest plywood producer in Western Europe. Birch plywood accounts for slightly less than half of Finnish production.

Europe’s net import of plywood has grown continuously in recent years, and the biggest source in 2006 was Russia, which has expanded its production and exports of mainly birch plywood in the last few years. China has also increased its market share in Europe, and especially in Germany. Competition is toughest in the cheapest construction grades. The

![Graph: Volume and unit value of plywood exports, 1996–2008 at 2006 prices (wholesale price index)]
supply of these grades from South America has also increased, particularly from Brazil. The competition for high-quality Finnish birch plywood comes principally from Russian plywood. Smaller quantities of birch plywood are also supplied to the European market from the Baltic countries.

Cyclical fluctuations on the plywood market have been less dramatic than on the sawnwood market because plywood has a greater diversity of uses than sawnwood. Europe also produces less plywood than it consumes, and so overcapacity is not the problem that it is on the sawnwood market. The rise in the unit price of plywood exports has been more moderate than that for sawnwood. The average plywood export price in January–July 2007 was 3% higher than a year previously. Most of Finland’s plywood exports are destined for Western Europe, where GDP growth is still likely to be fairly high in 2008. The volume of Finnish plywood exports will be up in 2007 by about the same amount as in the first part of the year, i.e. about 3%, and the nominal unit price of exports will be up by about the same percentage, on average. However, taking account of the forecast for the wholesale price index, the real unit price will be down by about 0.5%.

In birch plywood production, a raw material shortage may limit production and export volumes in autumn 2007 and in 2008, as imports of birch sawlogs from Russia have fallen by almost half in the first six months of the year. Despite the abundant birch sawlog reserves in Finland, replacing imports entirely with domestic roundwood could be difficult on account of the structure of the country’s forests. With a slackening in the construction sector leading to lower growth in plywood demand, 2008 will see a slower increase in softwood plywood exports and in their average price. Production and exports in the Finnish plywood industry as a whole, and the average export price, will be close to their 2007 levels.

### 2.2 Production and Exports in the Pulp and Paper Industry

GDP growth in the world economy in 2007 has again been strong, and, as a consequence, the consumption of paper has increased in Europe by an average of 2–3%. Despite this, it has been difficult to introduce price increases, and the actual prices for the year have been lower than anticipated. This is due to the overcapacity still prevailing in the sector. The average export price of paper in 2007 is forecast to be about 1% below the previous year’s level, despite the slight rise in export prices in recent months. Besides low prices, the paper industry’s profitability in 2007 has been adversely affected by the sharp rise in costs, especially the costs of roundwood and pulp.

Provided that the problems in the US economy do not appreciably weaken the growth outlook for the world economy, the export demand for Finnish paper should be reasonably high in 2008 as well, and the potential should be there for increasing production and exports. The European market is nevertheless a mature market, with only a moderate increase in paper consumption likely. Both the production and export of paper are expected to be up by 2% for the full year 2007.

Production and export growth in 2008 will depend on being able to pass higher costs on to prices. There are likely to be opportunities for this, as the rise in raw material costs is also a problem for other producer countries, and Europe’s oversupply will have been reduced through production unit closures. The average export price of paper and paperboard is forecast to be on a rising track, pushed up by costs, resulting in an average increase of 2% on the 2007 figure.
Consumption Picks up in Europe

The growth in paper consumption in Europe, the main market for the Finnish paper industry, has been very slow throughout the present decade. With capacity increasing at the same time, the paper industry – both in Finland and elsewhere in Europe – has suffered from oversupply. However, in 2006 there was a significant change for the better, with an increase in Europe’s paper consumption, production and exports. Paper consumption in Europe grew by an average of 2%, and the rate of increase was significantly higher than this in many countries (e.g. an average of 2.6% in the member countries of the Confederation of European Paper Industries). At the same time, consignments of paper from Europe to destinations elsewhere in the world were up by 6.8%, and imports from outside Europe were down by about 10%.

Europe’s oversupply has also been alleviated by the rapid demand growth in Eastern Europe and Asia. In Russia, for instance, the combined per-capita consumption of paper and paperboard was up by 11% in 2006. Although Russia’s own paper, paperboard and pulp production has grown steadily since the late 90s, the growth has been slow, and the need for imports remains. In China, too, the demand for paper has grown rapidly (at a rate of about 13% in recent years), and China has become the world’s second biggest paper producer and consumer, after the United States. If China’s paper consumption growth continues at the same rate as in the past 10 years, it is estimated that China would account for about 40% of the entire world growth in paper and paperboard consumption in the next decade. The increase in China’s paper consumption will be so rapid that even the growth in its own paper production will not be enough to eliminate China’s need for paper imports for a long time to come.

Expected Price Rises Did Not Materialise

In Europe, the trends in paper consumption and prices in 2007 have varied noticeably from one grade to another. Figures from the Association of European Publication Paper Producers (Cepiprint) and the European Association of Fine Paper Manufacturers (Cepifine) show that the change in estimated consumption of printing and writing papers in Europe in January–July 2007 was as follows: newsprint consumption up 0.3%, coated magazine paper up 3% and fine paper up 2%. By contrast, consumption of uncoated magazine paper was down by about 3%.

World market prices of paper began to rise slightly in 2005, and this was expected to continue
The Finnish Forest Industry in 2007. However, more significant price rises had to wait, and the increases introduced in 2007 have been smaller than anticipated. This has been due to the overcapacity which still prevails. The Confederation of European Paper Industries reports that Europe’s paper capacity was reduced in 2006 by only 0.2% on the previous year’s figure. Although the number of mills has fallen by 2.5% in the same period, the capacity of the remaining mills has been expanded.

In order to improve profitability, Finnish paper producers also began to reduce their capacity in 2006, altogether by more than 600 000 tonnes. Production units have been closed during 2007 as well, and Finnish producers have decided to close mills located outside Finland, too. UPM, for example, took the decision to close its Canadian coated magazine paper mill at Miramichi for 9–12 months starting in late August 2007, while M-Real closed its Sittingbourne fine paper mill in the United Kingdom in early 2007, as well as two fine paper machines at Gorhrsühle in Germany and the Wifsta fine paper mill in Sweden. Stora Enso sold off the mills it had acquired in North America and announced that it would concentrate on the European market, while seeking growth in Russia, China and South America.

Magazine papers account for more than half (2006: 56%) of Finland’s paper exports. The price trend in magazine paper has been weak, with the average unit price of exports in January–July 2007 being about 4% lower than for the same period a year earlier. Many attempts have been made to raise prices in the past two years, but with poor success. Instead, the average price of newsprint and fine paper exports in the first half of 2007 was at approximately the level of a year earlier.

In North America, contrary to developments in Europe, both the demand for and production of paper and pulp decreased in 2006 and the first half of 2007. This has primarily been due to the downturn in the housing market and the consequent slowdown in GDP growth. The latter has been reflected in the advertising market and the consequent reduction in demand for newsprint and magazine papers. According to the independent forest industry information provider RISI, the amount of advertising space in magazines in the third quarter of 2007 was about 2% less than the average for each of the first two quarters of the year. Advertising has also been increasingly switched to on-line media.

The strengthening of the euro in conjunction with the slackening of consumption on the US domestic market means tougher competition on the European paper market, because imports to the euro area from the US are increasing. Imports of US newsprint to Europe were already up by about 16% in the first half of 2007.

In Asia, the demand for printing and writing papers has continued to grow in 2007 as well. The increase in production capacity has, however, led to an oversupply of coated fine paper in Asia. China, for example, is no longer a buyer but a net seller of coated fine paper.

The demand for printing and writing papers, and for other paper grades too, in the second half of 2007 is forecast to remain about the same as in the first six months. Production and exports of Finnish paper are expected to be up in 2007 by an average of about 2% in relation to 2006. Paperboard production increased more than the production of
paper products in the first half of the year, because the upturn in the economy boosted the demand for packaging industry products and thus paperboard. Production and exports of paperboard are forecast to be up by about 5% in 2007.

The average unit price of Finnish paper exports in the first six months of 2007 was approximately 2% below the comparable figure a year earlier. Despite the favourable economic outlook and the fact that the prices of many paper grades look like rising slightly in the latter half of the year, the average price of paper in 2007 is forecast to be up only marginally on the level of the first six months, finishing at just 1% or so below the 2006 figure.

**Pulp Demand Growing and Prices Up**

Despite the closure of paper mills in Europe, paper production and the demand for pulp have risen. The supply of pulp, on the other hand, has fallen, because pulp-and-paper conglomerates have ceased business and pulp mills have closed. According to the Confederation of European Paper Industries, pulp capacity in Europe was reduced in 2006 by about 0.5%, and the number of mills by 1.9%. The effect of this on the market has been to increase the price of pulp in a situation where the demand for pulp has remained strong and buyers’ stocks have been low.

The euro PIX price of softwood pulp in late August 2007 was about 5% higher, and that of hardwood pulp about 3% higher, than at the start of the year. Further price increases are also anticipated, even though paper prices are at a standstill. This situation may allow an increase in market pulp production, at least for a certain period. The market outlook could, however, deteriorate relatively soon, as new pulp capacity is on its way. In autumn 2007, a new pulp mill came on stream in Brazil (Suzano, capacity 900 000 tonnes), and another is soon to start up in Uruguay (Metsä-Botnia, capacity 1 mill. tonnes). The bulk of this production is planned for import to Europe.

Finnish pulp production for 2007 is forecast to be at the previous year’s level, but pulp exports will be down by about 10%, due to the increase in domestic paper production. By contrast, the average price of pulp exports is forecast to be up by around 8%.

**Potential for Growth in Production and Exports, but Price Rises Imperative**

Provided that the problems in the US economy do not appreciably weaken the growth outlook for the
The Finnish Forest Industry

The export demand for Finnish paper should be reasonably high in 2008 as well, and the potential should be there for increasing production and exports. The European market is nevertheless a mature market, with only a moderate increase in paper consumption likely. Both the production and export of paper are expected to be up by 2% in 2008, and the production and export of paperboard by 3%. The forecast for paper production and exports is based on the assumption that export prices can be increased, thus avoiding the possible adverse effects of capacity cuts. An increase in paper production on the domestic market will increase the need for pulp, and so pulp production is forecast to grow in 2008 by about 3%, and pulp exports by around 5%.

Profitability in the paper industry has remained weak for a number of years. Besides low prices, the paper industry’s profitability in 2007 has been adversely affected by the exceptionally sharp rise in all its costs, especially the costs of roundwood and pulp. The unusually short winter felling season in Northern Europe led to a roundwood shortage and a rise in roundwood prices, which has affected not only Finnish producers but others too. Pressure for higher pulpwod prices has been felt throughout Central Europe on account of the increased energy use of wood, and there have also been various production difficulties in both Asia and North America. In Indonesia, fellings have come to a standstill across large areas as investigations are begun into the legality of felling virgin forest. In the United States, the decrease in construction has been reflected in sawmill production and in deliveries of sawmill chips to the pulp industry, while in Canada a strike by forest workers and machinery operators in British Columbia has led to a shortage of roundwood.

Cost pressures have caused many companies to announce price rises during autumn 2007. Success in increasing magazine paper prices in particular is very important for the profitability of the entire paper industry. Attempts to raise prices may well find support in the fact that the high prices of roundwood and pulp are a problem for the whole sector. In addition, the high price of market pulp will also compel even the small producers, who rely on purchased pulp, to join the move to increase prices.

The export price of Finnish paper in 2008 will be affected particularly by the price negotiations conducted at the end of 2007, which will decide the prices for longer term supply agreements. The forecast of continued GDP growth in the world economy, together with the cost pressures common to all European producers, will mean that the prospects for price increases in 2008 are better than in 2007. The average price of paper and paperboard exports is forecast to show a rising trend, pushed up by costs, and prices are expected to be up by about 2% on the 2007 level. The export price of pulp is forecast to continue rising, at least in the first part of 2008, bringing prices for the year as a whole to a level about 5% up on the 2007 average. The price forecasts are based on the assumption that no significant changes occur in the euro rate against the US dollar and other key currencies.

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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<td>2528</td>
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<td>2389</td>
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<td>11630</td>
<td>10401</td>
<td>10600</td>
<td>10800</td>
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<tr>
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<td>3130</td>
<td>3220</td>
<td>2552</td>
<td>2680</td>
<td>2760</td>
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Forecasts of export prices for pulp and paper products (as percentage change from previous year)*

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<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
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<tr>
<td>Chemical pulp</td>
<td>11 (452 €/tn)</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Paper</td>
<td>0 (590 €/tn)</td>
<td>–1</td>
<td>2</td>
</tr>
<tr>
<td>Paperboard</td>
<td>1 (670 €/tn)</td>
<td>–1</td>
<td>2</td>
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* Export prices are nominal unit values.
2.3 Costs and Profitability in the Finnish Forest Industry

Considerable differences in profitability trends are evident in the various sub-sectors of the forest industry in 2007. In the wood products industry, the strong demand and increased prices for its products, particularly sawnwood, have pushed profitability to new heights, whereas profitability in the pulp and paper industry will be slightly down on the 2006 figure as a result of the weak price trend in certain paper grades, especially magazine papers, and the rise in production costs. Action is being taken in the sector to improve efficiency and thus profitability.

In relative terms, the biggest rise in the forest industry’s costs in 2007 is in roundwood costs. However, the impact of the strong increase in stumpage prices on roundwood costs and the forest industry’s profitability is not immediate but involves a certain time lag. This impact, and the drop in sawnwood export prices, will be visible as a deterioration in the wood products industry’s profitability before the end of the year and during 2008. The rise in roundwood costs will also affect profitability in the pulp and paper industry, although in relative terms its impact will be less than the direct and indirect cost impacts of other raw material prices, especially crude oil. With paper prices expected to start rising very slightly, the pulp and paper industry’s profitability should rise a little in 2008 in comparison with 2007.

The unprecedentedly high supply of domestic roundwood will ensure the forest industry’s roundwood procurement needs are satisfied in 2007 and the first six months of 2008. The decrease in roundwood imports means that greater importance will be attached to domestic roundwood supply within the forest industry’s roundwood procurement. However, the question of whether the Finnish forest industry can obtain a sufficient supply of competitively priced domestic roundwood to ensure its business viability will again arise in the latter half of 2008 at the latest.

Profitability in the Wood Products Industry Greater than in the Pulp and Paper Industry

According to the figures for operating profit as a percentage of turnover given in the financial statements of the largest Finnish forest industry corporations (Stora Enso, Metsäliitto and UPM), profitability in the wood products industry in 2006 was the highest so far in the present decade. Moreover, profitability has continued to improve markedly in the first half of 2007. The main contributory factor has been the sharp rise in export prices for sawn softwood since late 2005. The trend in the export price for plywood has also been favourable (in June 2007 this was 4.8% higher than the average for 2006), which has therefore also had a positive impact on income and profitability in the wood products industry.

Based on the financial statements database maintained by Statistics Finland (which covers small and medium-sized companies) and the figures for operating result as a percentage of turnover derived from it, profitability in the wood products industry has nevertheless been a little weaker than might have been anticipated on the basis of the figures for operating profit as a percentage of turnover reported by the wood products industry businesses of the three largest forest industry corporations. Taking the small and medium-sized companies into account is very important, not least in the sawmilling industry, where sawmills not belonging to any of the three major corporations together account for a considerable proportion (about 40%) of Finland’s sawnwood production. According to the Statistics Finland database, the wood products industry’s profitability in 2004 and 2005, measured in terms of operating result as a percentage of turnover, was negative, whereas that of the wood products businesses within the major corporations, measured as operating profit as a percentage of turnover, was distinctly positive. Despite this, the trend in each of these statistics has been very similar, and so it must be assumed that when the latest figures are published the Statistics Finland data will also indicate that the sector’s profitability has improved in 2006 and again in 2007.
The Finnish Forest Industry

Operating result as a percentage of turnover is based on adjusted financial statements, while operating profit as a percentage of turnover (shown in the accompanying diagram without extraordinary items) is based on unadjusted financial statements, which means that in terms of their calculation basis, they are not fully comparable measures of profitability. Furthermore, the Statistics Finland database incorporates only the operations of production units located in Finland, whereas the financial statements of the major forest corporations also include all operations outside Finland.

In order to improve pulp and paper industry profitability, the major Finnish forest industry corporations have all introduced measures to boost efficiency, including resorting to capacity reductions for the purpose of improving the market for certain paper grades. Measured in terms of operating profit as a percentage of turnover, the pulp and paper industry’s profitability was at its poorest in 2004, after which it began to pick up but suffered a setback in 2005, when stoppages led to production and turnover falling short of their targeted levels. In 2006, profitability improved by almost 3 percentage points on the 2005 level, measured as operating profit as a percentage of turnover. However, figures for the first part of 2007 suggest an interruption in this favourable trend, at least for the time being. The decline in profitability has been caused by the unexpectedly weak trend in export prices of certain paper grades, notably magazine papers. Market developments have been disappointing in North America, in particular, where the poor financial performance of Finnish-owned paper industry units has in turn affected the overall profitability of the pulp and paper industry businesses of the major forest industry corporations. The strengthening of the euro has also sharpened competition in the pulp and paper industry’s main market, Europe, which has not improved the prospects for raising paper prices.

Differences in profitability do, however, exist among the different parts of the pulp and paper industry. The market for pulp and fine papers, for instance, has been favourable, and this has improved the profitability of their production. Nevertheless, the various parts of the wood products businesses belonging to the major forest industry corporations have, on average, been more profitable than pulp and paper manufacture during 2007.
Rapid Increase in Roundwood Costs Threatens Profitability in the Wood Products Industry in Particular

Profitability in the wood products industry has improved in 2007 as a result of the favourable market and consequent growth in income. The improved profitability is nevertheless being eroded by the rise in roundwood costs. Roundwood costs traditionally consist of the following: the stumpage costs of domestic roundwood; roundwood harvesting and transport costs; imported roundwood; and the pulp and paper industry’s woodchips and sawdust costs. Together these account for more than 30% of the wood products industry’s total costs, with stumpage costs being the largest single item, at almost 22% of total costs. In the sawmilling industry, roundwood costs account for over half, and stumpage costs for about 35%, of total costs.

In August 2007, the average nominal stumpage price for both pine and spruce sawlogs in Finland was 45% (about EUR 23/m³) higher than a year earlier. On the assumption that other costs have remained unchanged, these higher sawlog prices have increased costs in the wood products industry by an average of more than 10%, and in sawmilling by about 17%. At the same time, however, the unit price of sawn softwood exports has risen by over 30%. This differential between product price increases and cost increases has meant a sharp rise in profitability in the entire wood products industry, and the sawmilling industry has been able to afford the high stumpage prices on account of the favourable market. By contrast, plywood production (the principal use for birch sawlogs) has not experienced the kind of boom seen in sawmilling, and the rise in birch sawlog prices has been considerably less dramatic than that for softwood sawlogs.

The rapid improvement in profitability in sawmilling and the entire wood products industry in the first half of 2007 is also attributable to the fact that the highest agreed stumpage prices will not materialise in the form of increased roundwood costs until about six months have passed, because of the difference in timing between agreeing roundwood sales and the actual felling and final payment. The profitability figures for the wood products industry for 2007 as a whole may not therefore reach the levels suggested on the basis of the figures for the first six months. The time lag involved in translating the rise in stumpage prices into roundwood costs also incorporates a certain risk: a rapid fall in demand and prices on the sawnwood export market would lead to a sharp deterioration in profitability for the entire wood products industry, because sawlogs purchased at top prices would then be processed into products to be sold at prices below their previous level.

Rise in Roundwood Costs also Evident in Pulp and Paper Industry

The combined roundwood costs of the pulp and paper industry account for about 14% of total costs, with stumpage costs comprising almost 4%. The stumpage price of pulpwood in August 2007 was between 13% and 30% higher than a year earlier, depending on the tree species in question. The overall cost impact of the rise in stumpage prices on the pulp and paper industry will be approximately 0.5%, assuming that other costs remain unchanged. Imported roundwood accounts for a significant share of the pulp and paper industry’s costs: 20% of roundwood costs and 2.7% of total costs. In relative terms, the rise in import prices of different species of pulpwood has even been greater than that for domestic stumpage prices. In June 2007, the border price of the pulp and paper industry’s most important category of imported wood, birch pulpwood, was 25% higher than a year previously. The corresponding figure for spruce pulpwood was 36%, and pine pulpwood almost 60%. The impact of this on the total costs of the pulp and paper industry is therefore just as great as the impact of the price rises for domestic roundwood. Woodchips and sawdust account for as great a share of roundwood costs in the pulp and paper industry as stumpage prices, though the rise in woodchip and sawdust prices has
been less than for roundwood. The price of imported woodchips, for example, was about 8% higher in June 2007 than a year earlier.

Roundwood costs comprise not only the price of the wood itself but also the considerable costs of harvesting and transport, which together account for about one fifth of roundwood costs in the wood products industry and about a quarter of the pulp and paper industry’s roundwood costs. Harvesting and transport costs are strongly related to fuel prices, which in 2007 have remained more or less at the record levels seen in 2006. The relative impact of these costs on the industry’s total roundwood costs has thus been smaller than in 2006. The higher price of roundwood, however, has pushed up total roundwood costs in 2007 by considerably more than the increase in other cost items, in both the wood products industry and the pulp and paper industry.

Relatively Steady Trend in Other Costs

In the pulp and paper industry, the costs of raw materials other than wood account for a considerable proportion (about a quarter) of total costs. The prices of these materials (e.g. various minerals and chemicals), which are needed mainly in pulp production and bleaching and in paper production and coating, have been steadily rising in the present decade. For example, the import prices of non-metallic minerals, of which the pulp and paper industry is a major importer, rose in 2002–2006 by an average of 6% p.a., and this rate of increase has also continued in 2007.

Labour costs account for about one sixth of total costs in both the wood products industry and the pulp and paper industry. Regional and sectoral data held by Statistics Finland show that the combined nominal pay and social security costs of white-collar and blue-collar employees in the pulp and paper industry grew by 4.3% between 2005 and 2006. This increase in labour costs would have been higher without the reductions made in the number of white-collar employees in connection with re organisations. In the wood products industry, labour costs rose by an average of 4.9% in 2005–2006, though there were considerable differences within the sector. For instance, in the production of plywood and other wood-based panels and in the manufacture of joinery products, the rise in labour costs was approximately 8%, whereas in the sawmilling industry there was no increase at all, but instead even a decrease in real terms. This is largely explained by the fact that the sawmilling industry’s workforce shrank by 3.4%, the job losses mainly concerning white-collar employees, as was the case in the pulp and paper industry.

Energy costs account for about 3% of total costs in the wood products industry and almost 10% in the pulp and paper industry. The majority of energy costs are for electricity, the market price of which fluctuates in response to factors such as the prevailing water resource situation in Norway and the price of carbon dioxide emission allowances. In 2007, Norway’s water situation has been good and the price of emission allowances has collapsed, and so the rise in electricity prices has been kept in check. The price of electricity is nevertheless expected to increase again with the new emissions trading period at the start of 2008, by even as much as several dozen per cent. The high degree of energy self-sufficiency (in power and heat) of the major Finnish forest industry corporations will, however, considerably reduce the severity of the cost impact of such wide fluctuations in the market price of electricity. There are nevertheless differences in the extent of self-sufficiency in electricity between the major forest industry corporations. While almost half of the entire Finnish forest industry’s electricity is self-generated, the figure for the Finnish operations of UPM, for instance, is 100%.

The price of crude oil is reflected both directly and indirectly in the forest industry’s costs, for example via energy produced using fuel oil, the cost of harvesting and transporting wood raw material, the transport and manufacturing costs of other raw materials (especially chemicals), shipping costs of end products, and many other cost items. In the pulp
and paper industry in particular, the indirect effects of crude oil prices on total costs are very significant. Forecasts suggest, however, that the strongest rise in oil prices has already passed. Due to rising global demand and production disturbances, the price of oil (Brent USD/barrel) rose by 40% in 2004–2005, and by about 20% in 2005–2006. The average oil price in 2007 is forecast to be up by at least 2% on the previous year’s average. In 2008, the dollar price of oil will be up by about 6% on the 2007 figure, although its euro price will rise by a smaller percentage.

With the exception of roundwood costs, the cost trend in the forest industry in 2007 has been particularly steady, and this should be the case for 2008 as well. The uncertainties regarding this forecast concern the price and availability of wood raw material and the price of electricity and crude oil. The threat of Russian roundwood imports drying up means that roundwood availability could become a more critical cost factor in the second half of 2008. This could then lead to shutdowns and thus a fall in the capacity utilisation rate, thereby affecting the forest industry’s profitability.

**Favourable Market Boosts Forest Industry Profitability**

An important factor in the improved profitability of the wood products industry has been the drive to improve production efficiency, both in the major forest industry corporations and in small and medium-sized companies. The considerable improvement in profitability now evident is, however, primarily due to the favourable state of the market, though this is forecast to take a downward turn. The growth in sawnwood export prices is expected to tail off in late 2007 and then to become negative in 2008. This, combined with the rapid increase in roundwood costs, will have an adverse impact on profitability in the wood products industry, which in the first half of 2007 was still at a record high.

For the pulp and paper industry, demand on export markets is also a key factor in the profitability trend. In 2007, the unexpectedly weak price trend for magazine papers has had an adverse effect on profitability throughout the sector. The slight increase anticipated in paper export prices in 2008 should improve profitability in the sector, but if it does not prove possible to pass the increase in costs on to product prices, the downward trend in the pulp and paper industry’s profitability will continue.

The opportunities for cost cutting in a mature sector such as the forest industry are restricted, and there is limited scope for passing rising costs on to the prices of standard products. Moreover, the resources allocated for developing new innovations are few, and the likelihood is small that new products would succeed on a large scale. The potential for influencing profitability in the sector through internal action is therefore limited, especially in the short term. Profitability in the short term is in fact determined primarily by the state of the market for forest industry products at any given time – 2007 is a good example of this. However, action taken within the sector can and must look towards nurturing a favourable profitability trend that extends beyond market cycles, thereby securing the viable operation of the Finnish forest sector in the future.