The representatives of the forest industry production plants who answered the survey estimated that the coming year’s purchase volumes of domestic sawlogs and particularly imported wood will exceed last year’s figures. In contrast, the respondents reckoned the purchase volumes of domestic pulpwood to be smaller in 2000 than in 1999.

Thirty-seven per cent of forest owners, which is almost the same number as last year, intend to sell timber in the coming year. Farmers intend to effect the greatest number of timber sales, whereas intentions to sell are smallest among pensioners and forest owners from Northern Finland. Over 70 per cent of forest owners intend to invest in timber production in 2000.

Unlike a year ago, the majority of respondents representing forest industry production plants forecast a decline in stumpage prices next year. However, as in previous years, the majority of forest owners expected the stumpage prices to increase, although not by as much as they estimated last year.

Implementation of the Survey

The survey is designed to examine the forest industry’s and forest owners’ expectations of the development of business cycles in the roundwood market.

The data for the survey was collected by means of postal questionnaires in August and September. These questionnaires concerning the forest industry were sent to 220 roundwood-using production plants and sawmills in Finland with an annual output of at least 5,000 m³.

Ninety-one answers were received from forest industry by the stipulated deadline, of which 75 were from the plywood industry and sawmills. The number of answers from the pulp, paper and paperboard industries was only 16 due to a lack of response from large forest industry groups’ local plants. In consequence, the results mostly represent the views of the plywood industry and medium-sized sawmills on the roundwood markets. The plywood mills and sawmills which answered the questionnaire represent about 45 per cent, and the pulp and the paper and paperboard mills about 11 per cent of the total outputs of their respective sectors. In processing the results, the distribution of quantities and prices were weighted with the volume of output.

---

1 The roundwood market business survey is an independent part of the Forest Sector Economic Outlook. Its results have not been used as a basis for the forecasts presented elsewhere in this publication. The survey is based on a postal questionnaire sent to timber market participants in August and September. The other results and forecasts in the Forest Sector Economic Outlook are founded on the demand for Finnish forest industry products and the roundwood supply situation, as well as the underlying international and domestic business cycles up until the end of October.
Due to the great number of forest owners, the survey of their expectations was based on a sample of one thousand forest holdings throughout the country which was selected by means of simple random sampling. The questionnaire was sent to the owners of the sampled holdings, and by the due date, 531 forest owners had returned the form completed in such a way that it could be accepted as data for the survey. The responses contain an unusually large number of large forest holdings and so-called family holdings. In other respects, however, the survey results correspond fairly well to the most prominent characteristics of Finland’s private forest ownership. The results were computed by weighting the distributions of quantities and prices with the area of forest land.

The survey results do not indicate to what extent the purchase volumes of imported wood or the amount of silvicultural and forest improvement works, for example, are forecast to change. Instead, they show how many respondents among the forest industry representatives and private forest owners expect changes in these phenomena. However, the nature of the changes also provides a basis for estimating the changes in volumes. Moreover, when interpreting the results of the survey, the temporal quality of these phenomena must be emphasised: the conclusions reached in the roundwood market business survey are based on temporal changes in the same phenomena for which data is gathered in August and September each year.

4.1 Stumpage Price Expectations

The timber market participants’ estimates on stumpage prices in 2000 are clearly further removed from each other than in the previous three years. In the case of the forest industry, the stumpage price expectation balance figure is –27, which means that, unlike in the previous three years, the majority of respondents from the forest industry’s production plants expect stumpage prices to fall rather than rise in the coming year (Figure 22). The expectations of a decline in stumpage prices are particularly emphatic in the case of pulpwood.

The balance figure of the forest owners’ expectations of stumpage prices is +14. This means that, as in the previous years, there are more forest owners who feel inclined to expect a rise in next year’s stumpage prices rather than the contrary. In comparison with last year, however, the balance of stumpage price expectations is smaller, which indicates that expectations of rises in next year’s stumpage prices are more moderate this year. This is mostly due to the fact that the number of forest owners expecting an upward trend in pulpwood prices has decreased from last year.

There are differences in the stumpage price expectations between different regions and forest-owner categories. The number of forest owners from Northern Finland expecting a rise in sawlog prices is greater than average, but, on the other hand, they are less likely than average to expect a decline in pulpwood prices. Pensioners constitute the group that is the most inclined to expect an increase in sawlog prices, whereas wage and salary earners expect the
least in this respect. Pensioners also have the highest expectations for a rise in pulpwood prices. The two groups who least expect pulpwood prices to increase are the wage and salary earners and parties to inherited estates.

4.2 The Forest Industry’s Wood Procurement

The respondents representing forest industry production plants estimated that the purchase volumes of domestic roundwood will show an upward trend compared to this year. Purchases are reckoned to increase by between two and ten per cent. The balance figure, or the difference between the number of respondents expecting sawlog purchase volumes to go up and the number of respondents expecting them to go down, is +16 (Figure 23). Last year, the corresponding balance figure was +11, which means that next year’s sawlog purchases are expected to exceed last year’s volumes. Respondents also reckoned that pulpwood purchase volumes will increase from the current year, but the balance figure of purchase volumes (+13) is smaller than last year. Estimated on the basis of changes in balance figures, the forest industry will, compared to the current year, buy more domestic sawlogs but less domestic pulpwood in 2000.

Wood Imports Continue to Increase

Almost every second respondent reported that their production plant had used imported wood in the current year, and clearly over half of the respondents reported that their plant was going to use it in 2000. About one in three respondents representing production plants which use imported wood estimated that the purchase volumes of imported wood would remain at the current year’s level in 2000. Less than a third of the respondents estimated that imported wood purchase volumes would increase by between two and ten per cent, whereas almost 40 per cent reckoned that their growth would amount to over ten per cent compared to the current year’s volumes.

Since the balance figure of imported wood purchase volumes is markedly larger than last year, it can be expected that, in comparison with the current year, the purchases of imported wood will escalate in 2000.

As in the previous years, the majority of this year’s respondents do not expect 2000 to bring many changes in the quantities of roundwood stocks at mills, by waterways, at railway sidings and roadside landings compared to this year. One tenth of the respondents estimated that the stocks will be reduced, but an equal number expects them to increase. Six per cent of the respondents thought it likely that pulpwood stocks will decrease. Last year’s balance figures expressing the changes in sawlog and pulpwood stocks were somewhat smaller than this year,
so, judging by the changes in these balance figures, the forest industry’s roundwood stocks are likely to grow in 2000 compared to the current year.

4.3 Forest Owners’ Timber Sales and Investments in Timber Production

Twenty-five per cent of forest owners have sold timber at least once, and another fourteen per cent intend to sell wood by the end of the current year. Thus, well under half of the forest owners, which is considerably less than last year, have sold or intend to sell wood in 1999 (Figure 24).

In Western and Northern Finland, timber sales are occurring less frequently than on average this year. This applies also to the forest holdings owned by wage earners, pensioners, parties to inherited estates, and syndicates. In contrast, farmers are selling timber more frequently than on average also in the current year, which is partly due to the fact that their forest holdings are larger than average in size.

In the current year, site-productivity taxation and the recommendations of Forest Management Associations have played a greater role in timber sales decisions than last year. In contrast, the development of roundwood prices and the need for silvicultural works on forest holdings have had less effect on decisions to sell timber this year than last.

Timber Supply Will Decrease Slightly

In 2000, 37 per cent of forest owners intend to sell timber. A year ago the percentage of forest owners intending to sell timber in the following year was over 40. The inclination to sell is below average among forest owners from Northern Finland, parties to inherited estates, wage earners and pensioners. Farmers, however, intend to sell more timber than on average; 60 per cent of them are planning to effect timber sales in 2000.

Forest owners who have already sold timber in the current year, or intend to sell timber next year, if not earlier, estimate that sawlog sale volumes will decrease next year in comparison with the current year (Figure 25). The balance figure, or the difference between forest owners who think sawlog sale volumes will increase and those who expect them to decrease, is –25, whereas last year’s corresponding figure was –26. Judging by these figures, there will be no major changes in sawlog supply in 2000 compared to the 1999 supply. Next year, supply will be stronger than average in Western Finland, and weaker than average among wage and salary earners and farmers.

The sale volumes of pulpwood are also estimated to decrease in comparison with the current year’s volumes. The balance figure is –13, whereas last year’s figure was –6. On the basis of this change in the balance figure, pulpwood supply is estimated to

![Figure 23. Proportions of Forest Owners who have already sold or intend to sell timber in the current year, or who intend to sell timber in the following year (each figure from the respective preceding year, development between 1993 and 1999).](image)
shrink in 2000 compared to the current year’s supply.

Estimates on regional variation in pulpwood sale volumes resemble the regional variation in sawlog sale volumes. In terms of owner categories, however, it is noteworthy that supply will be stronger than average among holdings owned by farmers and pensioners, and weaker than average among holdings owned by wage and salary earners in 2000.

**Investments in Timber Production Expected to Remain at the Current Year’s Level**

The record-high felling volumes of the previous couple of years are also reflected in the investments in timber production in private forests. As last year, an average of 60 per cent of forest owners have already carried out, or intend to carry out or commission silvicultural or forest improvement works. In Northern Finland, however, only half of the forest owners have invested in timber production. In addition, such investments have been less frequent than average on inherited estates and those owned by pensioners. In contrast, about 70 per cent of forest owners in Eastern Finland and almost 80 per cent of farmers have already invested or intend to invest in timber production in 1999.

Over 70 per cent of forest owners intend to make investments in timber production in 2000. One year ago, the number of forest owners intending to invest in timber production in the following year was almost the same. Moreover, the variations between different regions and forest-owner categories also resemble last year’s situation: farmers were more inclined than average to invest in timber production, whereas the inclination to do so was below average among forest owners in Northern Finland, parties to inherited estates, and pensioners.

*Figure 24. Forest Owners’ Estimates of the Following Year’s Sale Volumes of Sawlogs and Pulpwood in 1999 and 2000.*

*Figure 25. Forest Owners’ Estimates of the Following Year’s Need for Forest Improvement Works between 1993 and 1999.*
According to the estimates of forest owners who intend to carry out silvicultural or forest improvement works this year or the next, the difference between increase and decrease in work input volumes, in other words the balance figure, is +21 (Figure 25). One year ago the balance figure was +25, and in the preceding five-year period it ranged from −1 to +3.

Judging by the change in the balance figure, forest owners will carry out an equal amount of silvicultural and forest improvement works on average in 2000 as this year. Next year, the amount of silvicultural and forest improvement works will exceed the average level in Eastern Finland, and in the holdings owned by inherited estates and farmers, whereas in Western and Northern Finland and in holdings owned by pensioners, they will remain below average.
Authors

Editor
Riitta Hänninen, D.Sc.(For.), *researcher*

Authors
Jukka Aarnio, M.Sc.(For.), M.Sc.(Econ.), *researcher*
Pertti Elovirta, M.Sc.(Soc.Sc.), *researcher*
Paula Horne, (M.Sc.), *researcher*
Susanna Laaksonen-Craig, (Ph.D.), *researcher*
Jarmo Mikkola, *ADP planner*
Pekka Ollonqvist, D.Sc.(Econ.), *research specialist*
Ville Ovaskainen, D.Sc.(For.), *research specialist*
Jaana Rekikoski, B.Sc.(For.), *research assistant*
Pekka Ripatti, D.Sc.(Soc.Sc.), *researcher*
Yrjö Sevola, Lic.Sc.(For.), *research specialist*
Tuija Sievänen, M.Sc.(For.), *researcher*
Esa Uotila, M.Sc.(For.), *researcher*
Jussi Uusivuori, (Ph.D.), *researcher*
Esa-Jussi Viitala, M.Sc.(For.), *researcher*
The System of Forecasting Business Cycles in the Forest Sector (MESU) - research project

Purpose

- To produce the Finnish Forest Sector Economic Outlook
- To develop models for forecasting Finnish forest industry exports
- To develop roundwood market forecasting models
- To produce market reviews on the Finnish forest sector
- To develop and maintain the MESU database

Staff

Project leader: Lauri Hetemäki, D.Sc.(Econ), research specialist

Researchers: Riitta Hänninen, D.Sc.(For.)
Susanna Laaksonen-Craig, (Ph.D.)
Anne Toppinen, D.Sc. (For.)
Jussi Uusivuori (Ph.D.)

ADP planner: Jarmo Mikkola
Project secretary: Pirjo-Riitta Lind

For further information, please see http://www.metla.fi/mesu/