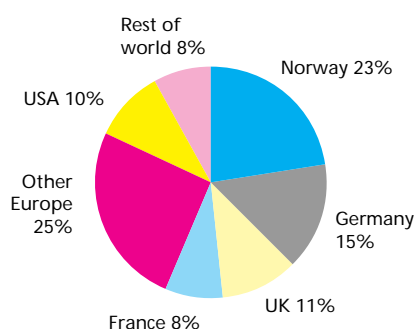


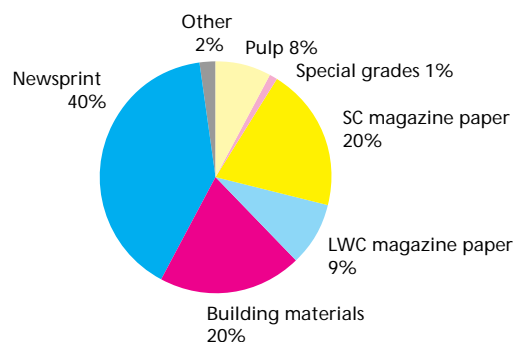
## Main figures per Area

		1997	1996	1995	1994	1993	1992	1991	1990	1989
<b>Area Paper</b>										
Operating revenue	NOK million	9,284	9,493	8,066	5,831	4,731	4,773	5,855	6,733	5,768
Operating profit	NOK million	1,134	2,078	1,708	454	469	95	656	721	398
Operating margin	%	12.2	21.9	21.2	7.8	9.9	2.0	11.2	10.7	6.9
<b>Area Fibre</b>										
Operating revenue	NOK million	1,376	1,222	2,171	1,498	1,052	1,202	1,247	1,709	2,025
Operating profit	NOK million	49	-127	682	178	-187	-176	-164	327	615
Operating margin	%	3.6	-10.4	31.4	11.9	-17.8	-14.6	-13.2	19.1	30.4
<b>Area Building Materials</b>										
Operating revenue	NOK million	2,667	2,579	2,333	2,048	1,704	1,688	1,725	1,960	1,911
Operating profit	NOK million	-16	27	96	146	85	64	9	107	93
Operating margin	%	-0.6	1.0	4.1	7.1	5.0	3.8	0.5	5.5	4.9

Operating revenue per market



Operating revenue per product



## 1997 Highlights

### Price decline caused weaker result

Prices of paper and pulp fell during the first quarter of 1997. This led to a reduction in operating profit from NOK 1,916 million in 1996 to NOK 1,083 million in 1997.

### Record paper output

In 1997 Norske Skog produced - for the first time - more than two million tonnes of printing paper. New output records were set at the printing paper mills Norske Skog Skogn, Norske Skog Follum, Norske Skog Golbey and Norske Skog Bruck.

### Expansion of Norske Skog Golbey

Norske Skog decided in April to expand Norske Skog Golbey by installing a second paper machine, with capacity of 330,000 tonnes per year. This will give the mill a total capacity of nearly 600,000 tonnes. The new machine is scheduled to come on stream in first quarter 1999.

### Growth in sawn timber

In September, Norske Skog took over Hedalm Trelast's three mills in Hedmark county. These companies, which form part of our subsidiary Forestia AS, have a total annual turnover of about NOK 250 million.

### Major investments at Norske Skog Tofte

Norske Skog decided in October to invest NOK 600 million in a comprehensive upgrade of Norske Skog Tofte, during the period 1997-2001. This will, among other things, increase the mill's capacity from 360,000 tonnes of bleached sulphate pulp to 420,000 tonnes.

### Cogeneration plant at Skogn

Industrikraft Midt-Norge DA, which is owned by Norske Skog (40%), Elkem (40%) and Statoil (20%), notified the authorities in November of its plans to build a cogeneration plant at Norske Skog Skogn.

### Expansion in Eastern Europe

In November, Norske Skog took over the ROTO newsprint mill (Norske Skog Steti) in the Czech Republic. The mill's capacity is 100,000 tonnes, and this is now being increased to 120,000 tonnes.

### Reorganisation of the building materials business

To create the conditions for more independent development of these activities, Norske Skog's building materials business was reorganised in 1997 into two subsidiary companies: Forestia AS (sawn timber and board) and Norske Skog Flooring AS (flooring products).

### Concentration on core areas

During 1997 Norske Skog disposed four units which lay outside the Group's core areas: the workshop business Folla Tech, and the building materials outlets Namsenbygg, Lundby Bruk Brumunddal and Lundby Bruk Rena, with a total turnover of about NOK 50 million.



*An increased demand for information is one result of modern mass culture. At the same time, both technology and economic developments have made it possible to meet this demand, among other things through special publications devoted to music, IT and lifestyle.*

## Aims and tasks in 1998

### Improved logistics and sales support

Norske Skog is working to become more competitive. During 1998 it will begin utilising GLOSS (Global Logistics and Sales Support) to achieve a more customer-friendly, streamlined and cost-efficient planning of sales, production and distribution of printing paper. The project has a budget of NOK 100 million.

### Organisation

Norske Skog will start a three-year efficiency programme - Norske Skog 2000 - in 1998. The programme will incorporate all current and new improvement activities at business centres and joint projects, in order to exploit Group synergies. The aim is to achieve the Group's target for return on total assets of 13% by the year 2000 - and, at the least, to achieve this as an average throughout an economic cycle.

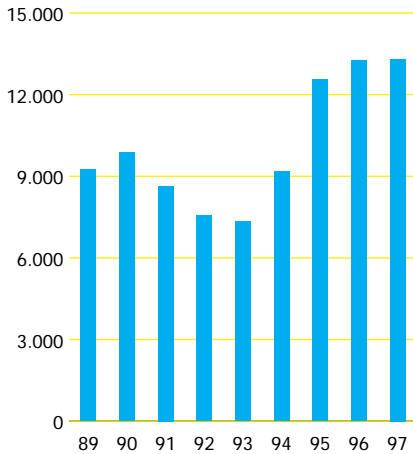
### Projects

In addition to the expansion of Norske Skog Golbey, with PM 2, and the upgrading of Norske Skog Tofte, Norske Skog is building a new waste treatment plant at Norske Skog Follum, and undertaking a major rebuilding of PM 5 at Norske Skog Saugbrugs. The two last-mentioned projects will be completed during 1998. Total investments in 1998 at Norske Skog's mills in Norway and abroad will amount to just over NOK 3 billion.

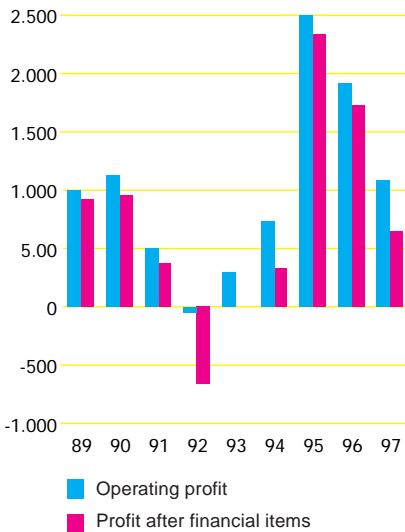


## Board of Directors' Report

Consolidated operating revenue  
NOK mill.



Consolidated profit  
NOK mill.



### The year 1997

The 1997 result was marked by significantly lower prices for printing paper than in 1996, while at the same time pulp prices remained low. During the second half-year the supply/demand balance on paper markets became satisfactory, but the pulp market remained unstable.

The trend towards structural changes in the forest industry continued during 1997. These changes led to greater concentration and larger players, with a focus on core areas and the global market. Norske Skog intends to participate in this trend. The Group is well prepared to do so, both financially and organisationally.

In 1997 Norske Skog decided on acquisitions and investments in new plant which increase the Group's printing paper capacity by 20% or nearly 450,000 tonnes/year. At the same time, new business opportunities were evaluated.

During 1997 Norske Skog's building materials business was restructured and organised into two wholly-owned subsidiaries, Forestia AS and Norske Skog Flooring AS. This makes it possible to invite other owners to participate in these companies. These moves enable Norske Skog to focus increasingly on pulp and paper. Meanwhile, the subsidiaries are better placed organisationally to focus more strongly on their core areas, and to compete more efficiently within their respective sectors, and increase profitability.

In 1997 Norske Skog sold four small units - which lie outside the Group's core areas - with a total annual turnover of NOK 50 million.

### Result and dividend

High output and slightly higher pulp prices in the second half-year did not offset the decline in printing paper prices during the first quarter. The Group's pre-tax profit for 1997 was NOK 652 million. The corresponding

figure for 1996 was NOK 1,732 million.

The Group's operating revenue reached NOK 13,312 million (NOK 13,265 million). For printing paper - which accounts for about 70% of the Group's operating income - price levels on local markets were, for much of the year, about 25% below 1996 levels. The loss of income which this entailed was partly offset by an increase in volumes.

Operating profit was NOK 1,083 million (NOK 1,916 million). The trend over the year was favourable for paper, and the final quarter showed a marked improvement, compared with the first quarter. The trend continued into 1998, and increases in paper prices were put into effect from the New Year. Following a temporary improvement during the autumn, pulp markets again weakened towards the end of 1997, primarily because of high inventories.

Price levels for the Group's main products were lower than the average level over an economic cycle. Operating margin was 8.1% (14.4%), which is not satisfactory. Cash flow from operations was NOK 1,615 million (NOK 2,616 million). Return on total assets reached 7.8% (14.1%), which is markedly below the Group's requirement for a 13% return on capital, on average, over an economic cycle. Return on equity was 7.1% (18.6%).

Net financial items amounted to minus NOK 455 million in 1997 (minus NOK 262 million). Lower net interest costs of NOK 196 million (NOK 285 million) were due to lower interest rates and lower debt. Exchange rates fluctuated widely in 1997. Currency losses debited to the accounts including unrealised losses amounts to NOK 269 million as of 31.12.1997. This must be seen in the context of increased operating income owing to higher prices. At the same time, currency-related reserves not

credited to the accounts totalled NOK 62 million (NOK 81 million).

Tax costs for the year were NOK 62 million, corresponding to 9.5% of pre-tax profit. This low tax rate mainly reflects a one-time effect on the accounts connected with the introduction of a new system for taxing electricity generating plants in Norway.

Net profit, after tax and minority interests, was NOK 590 million (NOK 1,317 million). Earnings per share were NOK 16.40 (NOK 40.38).

The Board proposes a dividend of NOK 7.00 per share, unchanged from 1996.

### Capital developments, financing and investments

Norske Skog further strengthened its financial position during 1997. At the end of the year the Group's equity capital stood at NOK 9,064 million and its equity to assets ratio at 52.4% (45.9%). This favourable development reflects profit from operations and the conversion of bonds to shares.

The Group's net interest-bearing debt dropped from NOK 4,827 million as of 31.12.1996 to NOK 4,145 million at the end of 1997. The ratio of net interest-bearing debt to equity was 0.46 (0.63).

At the end of 1997 liquid assets stood at NOK 853 million (NOK 1,088 million). Unutilised drawing rights totalled NOK 5,106 million at the end of the year.

Investments in new plant and equipment, totalling NOK 1,814 million in 1997, were concentrated on the Group's printing paper mills, and its board and flooring activities. The largest projects were a new biological waste treatment plant and a new bio-fuel boiler, at Norske Skog Skogn, and Norske Skog Golbey's PM 2.

The Group decided during 1997 to expand Norske Skog Golbey by installing a second paper machine (PM 2), scheduled for start-up during first

quarter 1999. Total investments involved are NOK 2.8 billion, and NOK 672 million of this had accrued by the end of 1997. The mill's capacity will increase by 330,000 tonnes to about 600,000 tonnes/year. The project will make Norske Skog Golbey one of the world's most efficient paper mills, and it strengthens the Group's position as a leading, low-cost supplier of high-quality printing paper.

In November, Norske Skog took over the ROTO newsprint mill (Norske Skog Steti) in the Czech Republic, for NOK 200 million, on a debt-free basis. The mill has a capacity of 100,000 tonnes/year, which will be increased to 120,000 tonnes. The acquisition provides a good basis for further activity in Central and Eastern Europe.

Norske Skog will invest NOK 200 million during 1998/99 in streamlining the Group's administrative routines, particularly in the areas of marketing and distribution. The projects envisaged offer good profitability, providing a basis for the development of efficient management systems and administrative routines, and will give the Group competitive advantages in the market.

The Group's IT systems are being checked to ensure that the millennial change will be satisfactorily dealt with. Norske Skog Research is going through the control and regulation systems on the production side. Together this will also mean a renewal and standardisation of Norske Skog's IT infrastructure. The aim is to ensure that necessary adaptations are made in IT systems critical to the Group's activities.

### Shareholder structure

Norske Skog's ownership structure is stable, and several of its largest shareholders increased their stake in the company during 1997. Foreign investors held 21.6% of total shares as of 31.12.1997 (22%).

The proposed dividend for 1997

corresponds to a pay-out ratio of 43% for 1997, and makes the average pay-out ratio 20% over the past five years. It is Norske Skog's goal to pay a dividend that will give its shareholders a reasonable proportion of profits over the whole of an economic cycle, while at the same time maintaining and strengthening the Group's ability to finance future development out of its own resources.

As a consequence of the conversion of bond loans to shares, share capital rose during the year by NOK 111 million to NOK 764 million as of 31.12.1997. The number of shares is 38.2 million, comprising 28.8 million A shares and 9.4 million non-voting B shares.

A foundation was established in 1997 to sell shares to employees. A total of 17,540 shares were sold to employees in 1997.

At the end of 1997 the company's market capitalisation was NOK 8,100 million. A total of 30.5 million Norske Skog shares were traded on the Oslo Stock Exchange during 1997.

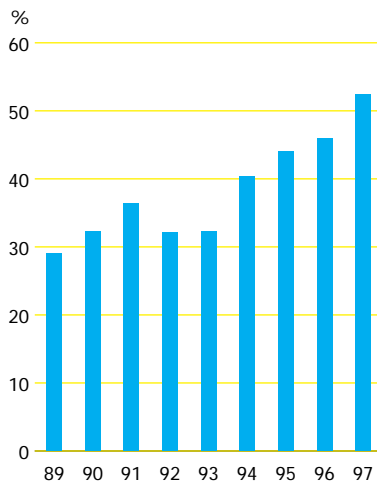
### Paper

Norske Skog's paper mills achieved an operating profit of NOK 1,134 million in 1997 (NOK 2,078 million). Total operating revenue reached NOK 9,284 million (NOK 9,493 million).

Production of newsprint, SC magazine paper and LWC magazine paper at the Group's mills was high in 1997, reaching a record level of 2,143,000 tonnes - including the affiliated company A/S Union (Union Co.). This is an increase of 9% from 1996.

The situation for newsprint was affected by a 15-20% price decline at the turn of the year 1996/97, caused by high stocks and a degree of overcapacity in 1996. Increased consumption in Asia and the US during the year, made it possible to raise prices on these markets in the second half-year, while prices in Europe remained unchanged, owing to annual contracts.

### Equity to assets ratio



### Growth per year in gross domestic product (GDP)



Source: OECD

Favourable economic trends in the major industrial countries have led to increased demand for newsprint. At the end of 1997 there was high capacity utilisation in both the European and north American newsprint industries. Price negotiations at the turn of the year led to price rises on all markets apart from the UK, where the trend of the exchange rate for the pound led to a small downward adjustment of the price in GBP.

Norske Skog Golbey's PM 2 - which is scheduled for start-up during the first quarter of 1999 - is the only new newsprint machine being built in Europe. Given demand growth in the trend area of 2-3% per year, it is assumed that the balance between European supply and demand will continue tight during the next couple of years - although this could be affected by developments in other areas such as Asia and North America.

Magazine paper prices fell at the turn of the year 1996/97, and for SC the decline was 15-20%. The situation stabilised somewhat in the first quarter, and during the summer demand improved for both SC and LWC. This made it possible to implement price increases for LWC, following a significant fall in 1996. Prices for SC were stable for the year as a whole in Europe, while small price increases were achieved in the US.

Capacity utilisation in the European magazine paper industry was considerably higher in 1997 than in 1996. During the final quarter, demand for magazine paper rose further. The favourable price trend for LWC continued, therefore, both during fourth quarter 1997 and in January 1998. For SC, too, price increases were achieved with effect from and including the first quarter of the present year.

### Fibre

The result trend for the Group's pulp mills was affected by the fact that the market provided opportunities for somewhat higher production and a slow improvement in prices, but the

latter are still at a low level. Operating result was NOK 49 million (minus 127 million). Total operating revenues reached NOK 1,376 million (NOK 1,222 million).

At New Year 1996/97, NORSCAN stocks stood at 1.9 million tonnes, and prices for long-fibre sulphate pulp reached a low of USD 520/tonne in March.

Order inflow revived during the summer, stocks declined, and during the autumn it was possible to increase the price to around USD 600/tonne for long-fibre sulphate pulp. At the turn of the year the price was USD 580, but NORSCAN stocks were still very high - 1.75 million tonnes.

The CTMP pulp situation in 1997 was marked by great imbalance between supply and demand, and very low prices. The markets for this type of pulp largely follow the trend of sulphate pulp, but with relatively larger fluctuations.

### Building materials companies

Norske Skog's building materials companies had a total operating result of minus NOK 16 million in 1997 (plus NOK 27 million). Total operating revenues were NOK 2,667 million (NOK 2,579 million).

### Forestia AS

There was good demand for sawn timber both in Norway and on export markets for much of the year. This made it possible to increase prices and maintain a high level of output. During the autumn the international sawn timber market grew considerably weaker.

With effect from 01.07.1997 Norske Skog took over Hedalm Trelast's three mills as part of the restructuring and further development of its sawn timber activities.

For board, market conditions were stable throughout the whole year. The new particle board line at Brasker- eidfoss was started up in April, and time was spent, during the year, on making the line operate as efficiently as possible. Norske Skog expects that

in 1998 it will have Europe's most efficient, high-quality particle board activity.

#### *Norske Skog Flooring AS*

During 1997, prices of laminated flooring products came under steadily increasing pressure. The launch of Alloc flooring demanded considerable resources and investments. That put an extra load on this product area. Toward the end of the year, productivity and quality were significantly improved. The product is still in the introduction phase, and among other things, a new, modified production line was started up. Together with a further development of the organisation, this has laid the foundation for marked expansion in 1998/99.

Demand for parquet flooring was good in 1997, and production capacity was fully utilised.

#### **Resources**

Supplies of raw materials to Norske Skog's mills were satisfactory in 1997. Purchases totalled 7.3 million cubic metres of timber and sawmill chips and 336,500 tonnes of waste paper. Of this, 6.7 million cubic metres of timber were bought for the Group's mills in Norway. Norske Skog Hurum received 3,400 tonnes of milk cartons. Also in 1997 harvesting in Norwegian forests was well below the industry's raw material requirements, and timber imports accounted for 27% of total purchases. Some 35% of pulpwood requirements - 1.7 million cubic metres - was imported. Import availability was good.

Supplies of waste paper to the Group's printing paper mills on the Continent were good. Norske Skog's agreement with the Environment Ministry has helped stimulate marked growth in paper collection in Norway, and has made it possible to find outlets for waste paper on a difficult export market.

Energy use by Norske Skog's mills totalled 11,454 GWh in 1997 (10,708 GWh). The Group has covered its requirements for electricity for its

mills in Norway through long-term agreements, and will be affected only to a small extent by short-term fluctuations in the power market. More than 80% of Norske Skog's thermal energy requirements are met from its own production of bioenergy, and recycling.

Norske Skog must have long-term security concerning future supplies of electric power to its mills in Norway. The Group has therefore approved a plan of action incorporating the following main elements:

- industrial contracts with Statkraft
- access to direct imports
- increased reliance on bioenergy for heating
- meet more of our needs from own sources.

The power supply/demand balance in Norway will grow tight in the coming years. Norske Skog believes that gas resources must be utilised to boost power supplies. Norwegian industry must be given opportunities to use Norwegian gas in its value creation, like its competitors elsewhere in Europe.

Together with Elkem and Statoil, Norske Skog has established a company, Industrikraft Mid-Norge DA, to build and operate a high efficiency, gas-based cogeneration plant in connection with its newsprint mill at Skogn. An application for permission to build will be prepared during the first half of 1998. Plans envisage a facility able to produce 5.6 TWh/year.

#### **Environment**

Norske Skog continued its active participation in efforts to promote the environment-friendly qualities of timber and the certification of forestry, via the broadly-based "Living Forest" cooperation programme.

With the projects which were completed in 1997, all of Norske Skog's printing paper mills have now installed biological treatment of process water. Water consumption is being steadily reduced, and the ultimate goal is to achieve closed water systems.

The problem of production waste generated by the Group's mills - primarily bark, sludge and remnants of fibre - has largely been solved. This waste is used as biofuel in the mills' own energy production.

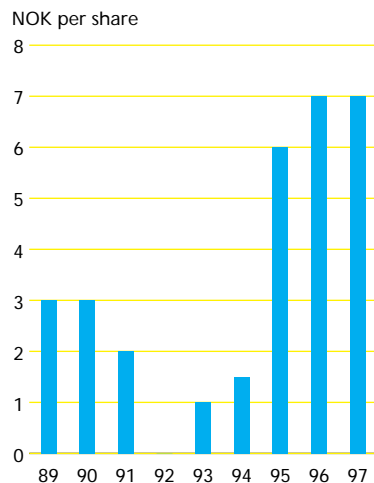
The Group's mills use very small amounts of fossil fuels in their processes. Emissions of greenhouse gases are consequently limited, and if measures should be introduced to curb climate gases they will be unlikely to entail major environmental investments at Norske Skog's mills. In connection with its "Tofte 400" project, Norske Skog Tofte will take further steps to limit emissions of noise, odour and dust.

Taking into account projects completed and those in the planning stage, Norske Skog will soon have implemented all the major investments in the environmental sector which are currently envisaged. From now on, the emphasis will be on further improving processes and on operating plant as efficiently as possible, both as regards environmental impact and resource use.

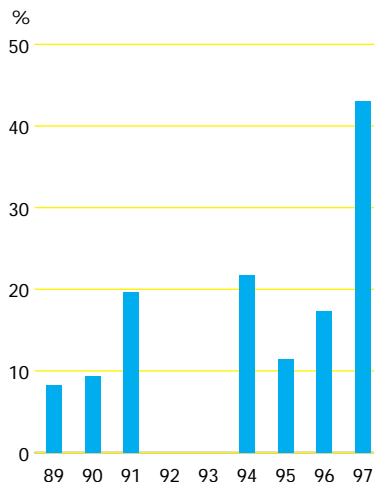
Environmental investments at Norske Skog's mills totalled NOK 344 million in 1997.

In 1997 Norske Skog Saugbrugs and Forestia Van Severen achieved both EMAS approval and certification in accordance with the ISO 14001 international standard for environmental management. Norske Skog Bruck and Forestia Kvam were certified in accordance with ISO 14001. Several other mills are in the process of introducing corresponding systems.

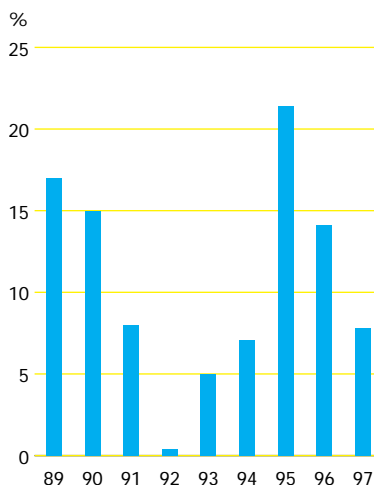
### Dividend



### Pay-out ratio



### Return on total assets



### Research and development

In 1997 Norske Skog approved a long-term plan for Norske Skog Research 1997-2001 and a development plan for the period to 2005. They envisage that this activity should continue to be product- and process-oriented, that it should help improve market acceptance of Norske Skog's products, reduce production costs and ensure that the Group's activities and products are environment-friendly. Research and development should make significant contributions to at least three specific technical innovations during the course of a year. These should make a precisely defined contribution to Norske Skog's operating result.

During 1997 efforts in the pulp and paper area have been concentrated both on improving existing processes and products and on developing new ones. Projects in 1997 included the development of the new printing paper product NORSET at Norske Skog Follum, the rebuilding of paper machine PM 5 at Norske Skog Saugbrugs, and planning connected with the new paper machine at Norske Skog Golbey.

### Personnel and the working environment

At the end of 1997 Norske Skog had 5,986 people on its payroll (5,965). Of these, 1,280 (1,000) were employed outside Norway. Total wages and social expenses in 1997 were NOK 1,961 million (NOK 1,859 million). The steady growth in Norske Skog's activities abroad is making new demands on our personnel policy. To meet the need for flexibility and mobility, a system called "Goal-oriented management and employee development" has been developed in cooperation with the companies in the Group. It will be implemented in 1998.

One hundred and fifty of the Group's senior management and trade Union officials participated in a programme aimed at creating a shared understanding of Norske Skog's ambi-

tions, its strategic plan and the plan's consequences. Another aim of the programme was to support the introduction of new technology and the standardisation of work processes in the Group.

At several of the Group's companies, major organisational development projects have been launched.

The number of injuries resulting in time off work at the Group's companies, per million hours worked, was 19 in 1997 (23). Absenteeism due to illness was 6.3% of time worked (5.5%). These figures are unsatisfactory, and in 1998 Norske Skog will focus strongly on HES (health, environment and safety) to improve the figures for injury and absenteeism due to illness.

In 1997 Roy Borgersen, Arne Rødø and Arnt Saelor left the Board. They were replaced by Kjell Hansen, Roy Eilertsen and Gisle Hegstad. The Board thanks the departing Board members for their work for Norske Skog.

Details of the shareholdings of the company's elected officers and the administration are given on page 63 and 64.

The salary and other remuneration paid to the President and CEO amounted to NOK 1,894,627. The President and CEO has an agreement entitling him to up to three years' salary after leaving the company.

Remuneration of the Corporate Assembly and Board members amounted to NOK 494,250 and NOK 833,000 respectively.

The 1997 audit fee for Norske Skogindustrier ASA amounted to NOK 1,537,000. Other audit fees amounted to NOK 385,000 in 1997.

1997 was a demanding year for the entire Norske Skog organisation, and one which called for great efforts. The Board thanks all Norske Skog employees for their valuable contributions to Norske Skog's development in 1997, as in previous years.



### Future prospects

At the start of 1998 there is good demand for newsprint and magazine paper on our markets, and this favourable market situation is expected to continue through the year.

The market pulp situation is marked by over-capacity and some decline in prices during the first quarter of 1998. The outlook is more uncertain than for printing paper, but there are expectations of some improvement as early as the second quarter.

The economic crisis in parts of Asia is, however, an element of uncertainty among the otherwise favourable prospects for 1998.

Norske Skog expects a better overall result in 1998 than in the previous year.

### Application of profit

Norske Skogindustrier ASA made a profit for the year of NOK 532 million.

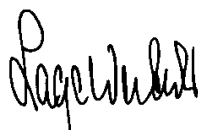
#### It is proposed to apply the profit as follows:

Profit for the year	NOK 532 million
Available for application	NOK 532 million

#### Proposal for application:

To legal reserve	NOK 68 million
To distributable reserve	NOK 26 million
Group contribution	NOK 171 million
Dividend to shareholders	NOK 267 million
<b>Total applied</b>	<b>NOK 532 million</b>

Lysaker, February 11, 1998



Lage Westerbo  
Chairman



Jon R. Gundersen  
Vice Chairman



Roy Eilertsen



John Frøseth



Kjell Hansen



Gisle Hegstad



Jan Reinås



Eivind Reiten



Halvard Sæther

# Accounts 1997 Consolidated

## PROFIT AND LOSS ACCOUNT

<i>NOK million</i>	<i>Notes</i>	<b>1997</b>	<b>1996</b>	<b>1995</b>
<b>Operating revenue</b>	1	<b>13,312</b>	13,265	12,548
Cost of materials	2	6,121	5,564	5,252
Wages, salaries and personnel expenses	3,4	1,961	1,859	1,568
Other operating expenses	5	3,007	2,706	2,396
Ordinary depreciation	16	1,140	1,132	832
Restructuring expenses		0	88	0
<b>Operating expenses</b>		<b>12,229</b>	11,349	10,048
<b>Operating profit</b>		<b>1,083</b>	1,916	2,500
Share of profit in affiliated companies	13	22	74	60
Net financial expenses	6	-455	-262	-225
<b>Profit before minority interests and taxes</b>		<b>650</b>	1,728	2,335
Minority interests		2	4	1
<b>Profit before taxes</b>		<b>652</b>	1,732	2,336
Taxes	7	-62	-415	-637
<b>Profit for the year</b>		<b>590</b>	1,317	1,699
Earnings per share		16.40	40.38	52.39
Earnings per share fully diluted		16.40	35.89	45.99

## STATEMENT OF CASH FLOW

### Cash flow from operating activities

Cash generated from operations		13,169	13,885	12,181
Cash used in operations		-10,920	-10,514	-9,395
Financial revenue received		130	133	258
Financial expenses paid		-454	-366	-482
Taxes paid		-310	-522	-7
<b>Net cash flow from operating activities</b>	8	<b>1,615</b>	2,616	2,555

### Cash flow from investment activities

Investments in operational fixed assets		-1,814	-1,053	-926
Adjustment for investments without cash-effect		219	0	0
Sales of operational fixed assets		44	21	20
Long term investments		-97	-309	-672
Net financial investments		27	-27	23
<b>Net cash flow from investment activities</b>		<b>-1,621</b>	-1,368	-1,555

### Cash flow from financial activities

New long-term debt		287	227	1,097
Repayment of long-term debt		-1,893	-1,392	-2,621
New short-term debt		3,455	3,614	1,126
Repayment of short-term debt		-2,970	-3,443	-1,182
Dividend paid		-228	-196	-48
Converted bonds <sup>1)</sup>		1,106	0	16
Share issues		0	4	89
<b>Net cash flow from financial activities</b>		<b>-243</b>	-1,186	-1,523
<b>Total change in liquid assets</b>		<b>-249</b>	62	-523
Liquid assets as at January 1		1,102	1,026	1,533
Liquid assets as at December 31		853	1,088	1,010

1) Converted bonds has no cash-effect. The same amount is included in repayment of debt.

**BALANCE SHEET AT 31.12**

<i>NOK million</i>	<i>Notes</i>	<b>1997</b>	<b>1996</b>	<b>1995</b>
<b>Assets</b>				
Cash and bank deposits	9	302	351	184
Short-term investments	10	551	737	826
Accounts receivable	11	1,840	1,842	1,886
Other short-term receivables		315	164	394
Stocks	12	1,507	1,498	1,328
<b>Current assets</b>		<b>4,515</b>	<b>4,592</b>	<b>4,618</b>
Shares in affiliated companies	13	394	383	307
Shares in other companies and partnerships	14,15	79	107	103
Other long-term receivables	17	226	302	281
Securities and long-term financial assets		699	792	691
Operational fixed assets	16	12,079	11,239	9,555
<b>Fixed assets</b>		<b>12,778</b>	<b>12,031</b>	<b>10,246</b>
<b>Total assets</b>		<b>17,293</b>	<b>16,623</b>	<b>14,864</b>
<b>Liabilities and shareholders' equity</b>				
Short-term liabilities	18	2,481	2,466	2,795
Interest bearing short-term liabilities	19	882	1,288	542
<b>Current liabilities</b>		<b>3,363</b>	<b>3,754</b>	<b>3,337</b>
Pension obligations	4	98	101	73
Subordinated convertible bonds	20	0	707	1,206
Senior interest bearing long-term debt	21	4,116	3,920	3,267
Other long term debt		243	39	0
Deferred taxes	7	350	411	435
<b>Long-term liabilities</b>		<b>4,807</b>	<b>5,178</b>	<b>4,981</b>
<b>Minority interests</b>		<b>59</b>	<b>56</b>	<b>1</b>
Share capital		764	653	652
Other consolidated equity	23	8,300	6,982	5,893
<b>Shareholders' equity</b>	23	<b>9,064</b>	<b>7,635</b>	<b>6,545</b>
<b>Total liabilities and shareholders' equity</b>		<b>17,293</b>	<b>16,623</b>	<b>14,864</b>
Mortgages	24	67	692	964
Contract obligations	26	602	386	362

## Accounting principles

### The consolidated accounts

The consolidated accounts include all companies in which Norske Skog owns more than 50 % and/or has controlling influence. Affiliated companies are shown in the accounts according to the equity method.

Inter-company sales, receivables, payables and profits included in inventories are eliminated in the consolidated accounts.

Shares in subsidiary companies are eliminated in accordance with the purchase method. The price paid in excess of the calculated equity is, on the basis of an excess value analyse according to the unit principle, allocated to the relevant items in the balance sheet and amortised accordingly. If the date of payment differs from the date of purchase and no interest has been agreed, the purchase amount is corrected to allow for the accrued interest. The interest adjustment is recorded as a financial expense.

In translating to NOK the liquid assets, receivables etc. of foreign subsidiaries which are considered an integrated part of the parent company, the year-end exchange rate is used. In the same way, current liabilities are translated at the year-end exchange rate. Long-term liabilities are translated at the higher of the exchange rate on the transaction date or on the balance sheet date, while non-monetary items are translated at the exchange rate on the transaction date. Profit and loss account items are translated at average exchange rate for the year, except for cost of materials and ordinary depreciation, which are translated at the exchange rate on the transaction date. The translation difference is shown in the profit and loss account as a financial item. Items on the balance sheets of subsidiaries not considered as an integrated part are translated to NOK at year-end exchange rates. Profit and loss account items are translated at the average exchange rate for the year. The translation difference is shown under consolidated equity.

Minority interests in subsidiaries that are not wholly-owned are shown as separate items in the profit and loss account and balance sheet.

Affiliated are those companies in which the Group owns between 20 and 50 % and where its ownership gives influence. The Group's share of profit of affiliated companies is shown on a separate line in the profit and loss account. In the balance sheet, share of equity is shown as fixed assets, adjusted for excess/lesser values and the Group's share of post-acquisition profit less taxes.

### Revenue recognition

Sales are recognised as revenue from the time of delivery. Newsprint is mostly sold free delivered to customer abroad and free from mill in the domestic market, while other deliveries are sold on a cif (cost, insurance and freight) basis.

Operating revenue include gross operating revenue reduced with commissions, rebates and other direct reductions in the sales price.

### Cash rebates

Cash rebates in respect of sales are deducted from sales revenue and in respect of purchases deducted from cost of materials.

### Classification

Assets which are to be retained or used on a long-term basis and receivables due for repayment more than a year after the end of the accounting year are shown as fixed assets. Other assets are classified as current assets. There will be corresponding classification for liabilities.

### Assets and liabilities in foreign currencies

Bank deposits, short-term receivables and short-term debt denominated in foreign currencies are translated into Norwegian kroner using year-end exchange rates.

Long-term receivables and long-term debt denominated in foreign currencies are translated into Norwegian kroner at the lower, respective higher, of the exchange rates on the transaction date or on the balance sheet date. Each currency is consciously managed as a whole so that unrealised losses are eliminated against unrealised gains within each currency. Net unrealised losses within each currency are booked as financial expenses. Net unrealised gains are booked as financial revenue (reversed) within the limits of previous booked unrealised losses.

### Shares, bonds and commercial papers

Shares, bonds and commercial papers included under current assets are valued as a portfolio. The portfolio is consciously managed as a whole, and is recorded at the lower of cost and market value at year-end. Net unrealised losses of each portfolio are booked as financial expenses, while net unrealised gains are booked as financial revenue within the limits of previous unrealised losses.

Shares shown under fixed assets not being shown as affiliated companies are investments of strategic character where the Group has no significant influence. These shares are valued at cost or market value if value reduction is of a permanent character.

### Stocks

Raw materials and other purchased goods are valued at purchase cost on a first-in-first-out (FIFO) basis. The value of own produced finished goods includes cost of raw materials, energy, direct wages and a share of indirect costs including maintenance and ordinary depreciation. Future net realisable value is used where this is lower than cost.

### Operational fixed assets and depreciation

Expenditure that increases capacity or significantly improves the quality of the facilities, including environmental investments, are capitalised. Expenses related to preparing IT-systems for the turn of the millennium are capitalised if this increases future economic benefits. Building loan expenses of larger investments are capitalised.

Ordinary depreciation is calculated from the time fixed assets are used in normal operations and is based on the estimated useful economic lives of the assets in accordance with the following guidelines:

Machinery	10 - 20 years
Fixtures	10 years
Vehicles	5 - 10 years
Factory buildings	25 - 33 years
Other buildings	10 - 25 years
Computer equipment	3 - 5 years
Goodwill and other exclusive rights	5 - 20 years

Spare parts are capitalised in the same group as the machinery to which they belong, and depreciation rates follow those of the machinery. No depreciation has been made for plant under construction.

Gains and losses on sales of operational fixed assets are calculated as the difference between sale price and net book value and included as other income.

#### Leasing

A concrete evaluation of each leasing agreement determines whether it is considered to be a financial or an operational leasing agreement. Fixed assets leased under agreements regarded as financial leasing agreements are capitalised in the balance sheet and depreciated in the same way as ordinary fixed assets. The amortisation part of the leasing obligation is shown as a long-term loan. The liability is reduced by the amount of rental paid, after deducting the calculated interest cost.

#### Pension costs and pension obligations

The net periodic pension cost is included in wages, salaries and personnel expenses, and consists of the total of the benefits earned during the year, the interest costs of the prior period benefit, the expected return on pension plan assets, the booked effect of changes in estimates and pension plans, the booked effect of any difference between the actual and expected return, plus periodic employers' contribution.

The plan assets at fair value is evaluated against projected benefit obligations. Initially, each individual pension arrangement is evaluated separately, but the value of overfunding in one arrangement, and underfunding in others, is combined and shown net on the balance sheet, where plan assets can be transferred between one arrangement and another. Net plan assets are shown as long-term receivables, and net pension obligations as long-term liabilities.

Changes in projected benefit obligations resulting from changes in estimates and pension plans, as well as disparities between actual and expected return, are charged according to the accrual method over the remaining earning time, or expected lifetime, only when the accumulated effect exceeds ten per cent of the larger of plan assets or pension obligations.

#### Bonds held in treasury

The senior long-term debt in the balance sheet is reduced by bonds held in treasury.

Value above or below par on bond issued and owned by the company is accrued over the remaining life of the loan.

#### Deferred taxes/deferred tax advantage

At the balance day deferred taxes are booked according to temporary differences between fiscal and tax values, together with taxable deficit. Temporary differences related to assets and liabilities are eliminated within the same period and shown in the accounts as net values.

Deferred tax advantage due to pension obligations and deficits which are not eliminated has been classified as tax advantage and shown separately in the balance sheet.

#### Derivative financial instruments

The accounting treatment of financial instruments follows the intention behind entering into a contract. Upon agreement these contracts are either termed as hedging or as trading. In those cases where the contracts entered into serve the purpose of hedging exposure, the revenues or costs are accrued and classified as for the underlying balance sheet items.

Those contracts not directly linked to a specific commercial or financial transaction are considered to be trading.

Forward rate agreements, currency options and spot deals are consciously managed as one single portfolio. Contracts, which for accounting purposes are not classified as hedging contracts, are valued at market rate.

Each instrument employed for hedging interest rate exposure is consciously managed as a single group and is valued at the lowest value of cost price and market value. Net unrealised losses on the individual portfolios are booked as financial items, whereas net unrealised gains offset previously incurred losses.

Received or paid premiums related to options maturing after closing date are accrued over the options' lifetime.

#### Comparability

Sande Paper Mill AS, with operating revenue of NOK 183 million and total assets of NOK 156 million included in business area paper in 1996, was sold with effect as of 03.01.1997. Hedalm Trelast was acquired with effect as of 01.07.1997, and is included in business area building materials with operating revenue of NOK 118 million and total assets of 214 million for 1997. Norske Skog Steti was consolidated into the group accounts with effect as of 01.11.1997, and is included in business area paper with operating revenue of NOK 55 million and total assets of NOK 342 million for 1997.

# Notes to the Consolidated Accounts

All figures shown as NOK million unless otherwise stated.

## 1. Business areas

1997	Paper	Fibre	Building materials	Staff/elim.	Consolidated
<b>Operating revenue:</b>					
Norway	964	498	1,659	-26	3,095
Rest of Europe	6,072	863	889	11	7,835
Rest of World	2,248	15	119	0	2,382
Total operating revenue	9,284	1,376	2,667	-15	13,312
Operating expenses	7,293	1,227	2,520	49	11,089
Ordinary depreciation	857	100	163	20	1,140
Operating profit	1,134	49	-16	-84	1,083
Current assets	2,668	342	778	727	4,515
Fixed assets	9,648	895	1,341	894	12,778
Non-interest bearing debt	1,311	88	328	754	2,481
Investments	1,334	111	317	52	1,814
Employees	3,436	468	1,818	264	5,986
Export share (%)	90	64	38		77

1996	Paper	Fibre	Building materials	Staff/elim.	Consolidated
<b>Operating revenue:</b>					
Norway	907	403	1,727	-79	2,958
Rest of Europe	6,751	814	789	50	8,404
Rest of World	1,835	5	63	0	1,903
Total operating revenue	9,493	1,222	2,579	-29	13,265
Operating expenses	6,563	1,218	2,421	-73	10,129
Ordinary depreciation	852	121	131	28	1,132
Restructuring expenses	0	10	0	78	88
Operating profit	2,078	-127	27	-62	1,916
Current assets	2,273	358	684	1,277	4,592
Fixed assets	8,918	891	1,629	593	12,031
Non-interest bearing debt	1,026	83	253	1,104	2,466
Investments	511	81	443	18	1,053
Employees	3,386	521	1,862	196	5,965
Export share (%)	90	67	33		78

1995	Paper	Fibre	Building materials	Staff/elim.	Consolidated
<b>Operating revenue:</b>					
Norway	842	703	1,468	-20	2,993
Rest of Europe	5,679	1,461	832	-2	7,970
Rest of World	1,545	7	33	0	1,585
Total operating revenue	8,066	2,171	2,333	-22	12,548
Operating expenses	5,777	1,373	2,123	-57	9,216
Ordinary depreciation	581	116	114	21	832
Operating profit	1,708	682	96	14	2,500
Current assets	2,555	461	674	928	4,618
Fixed assets	7,530	937	829	950	10,246
Non-interest bearing debt	945	128	260	1,462	2,795
Investments	601	96	217	12	926
Employees	2,799	532	1,681	181	5,193
Export share (%)	90	68	37		76

## 2. Consumption of raw materials

	1997	1996	1995
Raw materials and purchased goods	6,073	5,645	5,400
Change in stock of finished goods	48	-81	-148
Total	6,121	5,564	5,252

## 3. Wages, salaries and personnel expenses

	1997	1996	1995
Wages/salaries incl. holiday allowances	1,575	1,546	1,298
National insurance and pensions	386	313	270
Total	1,961	1,859	1,568

## 4. Pension costs and pension obligations

Norske Skogindustrier ASA, with subsidiaries in Norway, has collective benefit retirement plans for its employees with a life insurance company. The retirement plans for the Group are uniform. The main conditions are 30 years' service, a pension amounting to 65 % of pensionable earnings on January 1 of the year the employee reaches 67 years, plus disablement, spouse and childrens' pension. All plan benefits are coordinated with expected social security benefits. The pension level is reduced to 60 % from the pensioner's 75th birthday. As of December 31, 1997 the pension

arrangements covered 6.722 members, of whom 4.547 were working and 2.175 were pensioners. In case of disablement the obligations extend to the disabled both as an active employee and as a pensioner. In these cases the person will be included in both aforementioned categories.

In addition to the benefit obligations covered through insurance arrangements, the Group has uninsured benefit obligations. These include obligations concerning former owners of subsidiaries, and pensions of top management and Board members, totalling 64 persons. The uninsured benefit obligations also include estimated future obligations connected with the AFP- arrangement (involving a possible future reduction of the pension age), and obligations concerning foreign subsidiaries. Obligations relating to top management pensions are partly insured through a supplementary retirement plan with life insurance company.

In evaluating plan assets their estimated value at year end is used. This estimated value is corrected every year in accordance with the figures provided by the life insurance company regarding the market value of the assets.

In measuring incurred obligations the projected obligation at year end is used. This projected obligation is corrected every year in accordance with the figures provided by the actuary concerning incurred pension obligations.

Calculation of future benefit obligations is based on the following assumptions:

	1997	1996	1995
Discount rate	5.5 %	5.5 %	5.5 %
Expected return on plan assets	6.5 %	6.5 %	6.5 %
Salary adjustment	3.0 %	3.0 %	3.0 %
Social security increase/inflation	2.0 %	2.0 %	2.0 %
Pension increase	1.6 %	1.6 %	1.6 %

Net periodic pension cost	1997	1996	1995
Benefits earned during the year	51	40	37
Interest cost on prior period benefit	49	44	37
Expected return on plan assets	-56	-53	-45
Accrued employer tax	2	-1	1
Expensed portion of changed AFP-plan	3	0	0
Expensed portion of differences in estimates	3	2	0
Net periodic pension cost	52	32	30

#### Status of the pension plans reconciled to the consolidated balance sheet:

	Plan assets exceed PBO			PBO exceed plan assets		
	31.12.97	31.12.96	31.12.95	31.12.97	31.12.96	31.12.95
Projected Benefit Obligations (PBO)	-694	-780	-657	-327	-143	-79
Plan assets at fair value	746	887	841	181	31	14
Plan assets in excess of/lessthan (-) PBO	52	107	184	-146	-112	-65
Differences in estimates and plans not taken into income/expense*)	82	72	15	51	14	-3
Net plan assets / pension obligations	134	179	199	-95	-98	-68
Accrued employer tax	7	9	10	-3	-3	-5
Plan assets/pension obligations (-) in the balance sheet	141	188	209	-98	-101	-73

\*) Changed AFP-plan included with NOK 57 million in 1997.

The plan assets are managed by the life insurance companies and invested in accordance with the general guidelines governing investments by life insurance companies in Norway.

The actual return on plan assets in 1996 was NOK 60 million. For 1997 return on plan assets of NOK 54 million is estimated, which is included in the estimated plan assets as at 31 December 1997. The difference of NOK 2 million between the booked return and the estimated return is treated as an estimate difference.

The effect of changes in estimates and deviations between projected and actual returns is booked during the average remaining earning period, only when the accumulated effect exceeds 10 % of plan assets or pension obligations, whichever is the larger. This entails booking according to the straight line method over 15 years.

## 5. Other operating expenses

Losses on bad debts are included as follows.

	1997	1996	1995
Amounts written off during the year	10	14	15
Received amounts previously written off	-2	-2	-1
Changes in bad debt reserves	12	8	-7
<b>Total</b>	<b>20</b>	<b>20</b>	<b>7</b>

## 6. Net financial expenses

	1997	1996	1995
Dividends received	2	2	1
Interest revenue	89	86	100
Profit on securities	2	11	52
Realised net profit on foreign currency debt and related foreign exchange contracts	0	45	0
Net profit realised on foreign exchange contracts related to cash flows	0	0	94
Other financial revenue	121	91	43
<b>Total financial revenue</b>	<b>214</b>	<b>235</b>	<b>290</b>

Interest expenses	285	371	408
Loss on securities	0	0	10
Realised and unrealised net loss on foreign currency debt and related foreign exchange contracts	132	0	4
Realised net loss on foreign exchange contracts related to cash flow	230	104	0
Other financial expenses	22	22	93
<b>Total financial expenses</b>	<b>669</b>	<b>497</b>	<b>515</b>
<b>Net financial expenses</b>	<b>-455</b>	<b>-262</b>	<b>-225</b>

## 7. Taxes

New rules for taxation of power plants has been introduced with effect from January 1, 1997. The change entailed an upward adjustment of fiscal value on assets used in power production. The upward adjustment has untaught a reduction of deferred taxes with NOK 65 million in 1997.

Tax expenses	1997	1996	1995
Taxes payable	-124	-345	-513
Change in deferred tax	-3	-70	-124
Effect from changed tax rule	65	0	0
<b>Total tax expenses</b>	<b>-62</b>	<b>-415</b>	<b>-637</b>

## Deferred tax/deferred tax advantage

A specification is made of temporary differences and losses to be brought forward, as well as calculation of deferred tax/deferred tax advantage at year end:

Deferred tax	1997	1996	1995
Total short-term items	-23	37	6
Total long-term items	2,557	2,790	2,537
Taxable deficit to be brought forward *)	-1,053	-1,063	-937
Total temporary differences and losses to be brought forward	1,481	1,764	1,606

<b>Deferred tax</b>	<b>350</b>	<b>411</b>	<b>435</b>
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\*) Taxable deficit to be brought forward is related to our companies in France and Austria. The deficits have no time limit.

Deferred tax advantage	1997	1996	1995
Unsecured pension obligations	55	94	61
Deficits not eliminated	0	0	0
<b>Total basis of tax advantage</b>	<b>55</b>	<b>94</b>	<b>61</b>

Deferred tax advantage (see note 17)	15	27	17
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## 8. Net cash flow from operations

The connection between profit before minority interests and cash flow from operations is shown below.

	1997	1996	1995
Profit before minority interests and taxes	650	1 728	2 335
Ordinary depreciation	1,140	1,132	832
Share of profit in affiliated companies	-22	-74	-60
Taxes paid	-310	-522	-7
Changes in receivables*)	-118	620	-367
Changes in stocks*)	52	7	-371
Changes in current liabilities*)	223	-275	193
<b>Net cash flow from operating activities</b>	<b>1,615</b>	<b>2,616</b>	<b>2,555</b>

\*) Changes in balance sheet items are not directly comparable to changes in the consolidated balance sheet page 11, due to acquisitions and sales of companies during the year.

## 9. Cash and bank deposits

Restricted deposits covering employer taxes and sundry guarantees amount to NOK 14 million in 1997, compared to NOK 25 million in 1996.



## 10. Short-term investments

	1997	1996	1995
Treasury bonds	90	66	10
Bank/Insurance	105	201	320
Other Financial institutions	258	221	237
Industry/Commerce/Shipping	0	29	55
Foreign bonds	0	0	22
Total bonds	453	517	644
Commercial papers	98	20	158
Short-term investments	0	200	24
Total	551	737	826

For 1997, securities defined as current assets are valued as a portfolio. At year-end, unrealised loss in the portfolio amounted to NOK 5 million. Corresponding figures for year end 1996 were unrealised gains of NOK 12 million.

Norske Skogindustrier ASA bonds held in treasury have been deducted from the bond portfolio.

## 11. Accounts receivable

	1997	1996	1995
Accounts receivable	1,931	1,922	1,940
Provisions for bad debts	-91	-80	-54
Total	1,840	1,842	1,886

## 12. Stocks

	1997	1996	1995
Raw materials	640	629	636
Work in progress	60	66	49
Finished goods	807	803	643
Total	1,507	1,498	1,328

## 13. Affiliated companies

In the consolidated accounts, shares in affiliated companies are included according to the equity method. Norske Skog owns 48,1% of the voting shares in Union. Norske Skog's total ownership in Union of 57,6% has been used when applying the equity method. Share of profit is reported after correction of dividend from affiliated companies and the Group's share of the dividends payable by Norske Skog to Union.

Company	Ownership	Book value 31.12.96	Bought shares	Share of profit for the year	Dividend/ other equity corrections	Book value 31.12.97
Union	57.6%	359	0	27	-11	375
Norsk Gjenvinning	31.4%	24	0	-5	0	19
Total		383	0	22	-11	394

## 14. Shares

Shares included as financial assets

	<i>Share capital</i>	<i>Number of shares</i>	<i>Total nominal value</i>	<i>Book value</i>
<b>Shares owned by the parent company</b>				
Støren Trelast AS	6.6	12,400	1.1	1.1
Bio-Varme AS	15.0	30	3.0	3.0
Adresseavisen AS	31.3	37,015	0.6	4.7
Norsk Avfallshandtering AS	131.4	300	3.0	3.0
Union *)	10.0	289,057	2.9	15.0
Norsk Gjenvinning *)	19.3	1,212,820	6.0	33.5
Stangeskovene	20.3	726	3.6	13.4
Camfore AB	SEK 3.2	179,700	0.4	13.0
Other shares, each with book value less than NOK 1 million				3.8
<b>Total</b>				<b>90.5</b>
<b>Shares owned by subsidiaries</b>				
Union *)	10.0	287,094	2.8	12.8
Other shares				9.1
<b>Total</b>				<b>112.4</b>
*) Included as affiliated companies				-61.3
Partnerships (see note 15)				27.8
<b>Total amount shares and partnerships</b>				<b>78.9</b>

### Shares in subsidiaries

<i>Shares in Norwegian subsidiaries owned by the parent company</i>	<i>Share capital (NOK 1,000)</i>	<i>Number of shares</i>	<i>Total nominal value (NOK 1,000)</i>	<i>Ownership %</i>	<i>Book value (NOK 1,000)</i>
Nornews AS	50	1,000	50	100.0	50
Norske Treindustrier AS	50	50	50	100.0	50
Lysaker Invest AS	100	1,000	100	100.0	100
Forestia AS	50	50	50	100.0	50
Norske Skog Sales AS	50	455	46	91.0	46
Norske Skog Bygg AS	10,000	100,000	100	100.0	10,000
Norsk Virke AS	4,000	364	3,640	91.0	3,640
Folla CTMP AS	10,000	100,000	10,000	100.0	0
Norske Skog Flooring Holding AS	100	1,000	100	100.0	100
Service - og Utmarksenteret AS	605	500	500	82.6	500
AWA AS	1,000	600	600	60.0	600
<b>Total</b>					<b>15,136</b>

<i>Shares in foreign subsidiaries owned by the company</i>		<i>Share capital (NOK 1,000)</i>	<i>Number of shares</i>	<i>Total nominal value (NOK 1,000)</i>	<i>Owner-ship %</i>	<i>Book value (NOK 1,000)</i>
Norske Skog Golbey SA	FRF	2,187,370	2,187,370	2,187,370	100.0	2,270,988
Norske Skog Bruck GmbH	ATS	25,000	25	25,000	100.0	165,917
Norske Skog Steti a.s.	CZK	680,000	8,600	100	100.0	138,176
Norske Skog Østerreich GmbH	ATS	2,000	1	2,000	100.0	1,254
Markproject Ltd.	GBP	300	50,000	300	100.0	3,105
Norske Skog Deutschland GmbH	DEM	1,000	1,000	1,000	100.0	4,222
Norske Skog (UK) Ltd.	GBP	100	10,000	100	100.0	2
Norske Skog Holland B.V.	NLG	100	200	100	100.0	400
Norske Skog Belgium S.A.	BEC	19,375	19,375	19,375	100.0	3,234
Nornews Produtos Florestais. LDA	PTE	400	400	400	100.0	17
Norske Skog Espana S.A.	ESP	55,000	550	55,000	100.0	3,606
Norske Skog (Irland) Ltd.	IEP	2	20	2	100.0	22
Norske Skog (Schweiz) AG	CHF	25	25	25	100.0	193
Norske Skog Danmark ApS	DKK	30	30	30	100.0	25
Norske Skog Italia s.r.l.	ITL	20,000	19	19,000	95.0	84
Norske Skog France S.A.R.L.	FRF	50	500	50	100.0	6,374
Norske Skog Japan Co. Ltd.	JPY	2,000	20	2,000	100.0	94
Norske Skog (USA) Inc.	USD	2	200	2	100.0	8
Norske Skog AB	SEK	50	500	50	100.0	58
Norske Skog (Cypros) Ltd.	CYP	1	1,000	1	100.0	2
Norske Skog Asia Pacific Pte Ltd.	SGD	20	20,000	20	100.0	69
AB Lee Bruk	SEK	150	1,500	150	100.0	11,089
Norske Skog Hong Kong Ltd.	HKD	10	10,000	10	100.0	8
<b>Total</b>						<b>2,608,947</b>
<b>Total shares owned by the company</b>						<b>2,624,083</b>

<i>Shares in Norwegian subsidiaries owned by consolidated companies</i>		<i>Share capital (NOK 1,000)</i>	<i>Number of shares</i>	<i>Total nominal value (NOK 1,000)</i>	<i>Owner ship %</i>
Norske Skog Trelast AS	NOK	6,500	65,000	6,500	100.0
Norske Skog Plater AS	NOK	26,000	26	26,000	100.0
Telemarksbruket AS	NOK	2,240	14,784	1,478	66.0
Norske Skog Flooring AS	NOK	32,000	32,000	32,000	100.0
Norske Skog Flooring (USA) AS	NOK	50	500	50	100.0
Fibo-Trespo AS	NOK	4,000	4,000	4,000	100.0
<i>Shares in foreign subsidiaries owned by consolidated companies</i>					
Polak & van Berg B.V.	NLG	120	240	120	100.0
Amstelpoort B.V.	NLG	10	20	10	100.0
Respatex International Ltd.	GBP	10	10,000	10	100.0
Norske Skog Italia s.r.l.	ITL	20,000	1	1,000	5.0
Norske Skog Flooring AB	SEK	100	1,000	100	100.0
Norske Skog Holzprodukte GmbH	DEM	100	1	100	100.0
Norske Skog Flooring (UK) Ltd	GBP	15	15,000	15	100.0
Norske Skog Flooring (USA) Inc.	USD	1	1,000	1	100.0
Norske Skog Flooring (USA) Real Property	USD	1	1,000	1	100.0
Wallmann Gulv AS	DKK	500	5,000	500	50
Fjellman Press i Mariestad AB	SEK	2,500	1,000	2,500	89.0
Norske Skog Publicationspapier GmbH	ATS	380,000	1	380,000	100.0
Paper Back Buro-Alt-papier GmbH	ATS	500	1	500	100.0
Germain Saulxures	FRF	4,977	8,917	3,566	71.7

## 15. Shares in partnerships

<i>NOK 1,000</i>		<i>Partnership capital paid</i>	<i>Partnership capital not paid</i>	<i>Share of profit</i>	<i>Book value</i>
<i>Shares in partnerships owned by the parent company</i>	<i>Owner- ship</i>				
Nornews Express ANS	55 %	936	0	3,694	15,945
Lys-Skog ANS	60 %	10,123	0	1,568	11,854
<b>Total owned by the company</b>		<b>11,059</b>	<b>0</b>	<b>5,262</b>	<b>27,799</b>

### *Shares in partnerships*

Telemarksbruket KS	66,0%	10,900	0		
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Shares in ANS Hed-Opp, Norway Airlines City of Stavanger ANS and ANS Østfoldtømmer were sold in 1997.

## 16. Operational fixed assets

<b>Acquisition cost</b>	<i>Goodwill and other exclusive rights</i>	<i>Ships</i>	<i>Machinery, equipment, etc.</i>	<i>Buildings and plants</i>	<i>Real estate</i>	<i>Plant under construction</i>	<i>Total</i>
Acquisition cost 31.12.1996	193	21	14,917	4,162	351	482	20,126
Addition, new companies	0	0	290	50	3	2	345
Addition 1997 at cost	76	0	516	130	30	1,062	1,814
Sales 1997 at cost	0	0	-253	-117	-22	0	-392
Transferred from plant under construction	0	0	469	54	0	-523	0
Acquisition cost 31.12.1997	269	21	15,939	4,279	362	1,023	21,893

### Revaluation

Revaluation 31.12.1996	0	0	0	31	99	0	130
Addition 1997 at cost	0	0	0	0	4	0	4
Revaluation 31.12.1997	0	0	0	31	103	0	134

### Depreciation

Accumulated ordinary depreciation 31.12.1996	61	18	7,469	1,408	61	0	9,017
Accumulated depreciation new companies	0	0	0	0	0	0	0
Ordinary depreciation 1997	21	2	928	181	8	0	1,140
Depreciation on fixed assets sold in 1997	0	0	-133	-75	-1	0	-209
Accumulated ordinary depreciation 31.12.1997	82	20	8,264	1,514	68	0	9,948

### Book value

Book value 31.12.1996	132	3	7,448	2,785	389	482	11,239
Book value 31.12.1997	187	1	7,675	2,796	397	1,023	12,079

### Operating fixed assets - acquisition and disposals over the last 5 years

1993	Acquisition	18	0	160	41	3	905	1,127
	Disposal	0	0	6	23	7	0	36
1994	Acquisition	4	0	314	53	9	185	565
	Disposal	0	0	20	2	19	0	41
1995	Acquisition	23	0	618	89	8	188	926
	Disposal	0	0	7	0	13	0	20
1996	Acquisition	10	0	467	102	19	455	1,053
	Disposal	0	0	14	0	7	0	21
1997	Acquisition	76	0	516	130	30	1,062	1,814
	Disposal	0	0	10	72	10	0	92
Total 5 years	Acquisition	131	0	2,075	415	69	2,795	5,485
	Disposal	0	0	57	97	56	0	210

**17. Other long-term receivables**

	1997	1996	1995
Loans to employees	11	8	8
Sundry long-term receivables	59	79	47
Pension plan assets	141	188	209
Deferred tax advantage	15	27	17
<b>Total</b>	<b>226</b>	<b>302</b>	<b>281</b>

Loans to associated parties under the Joint Stock Companies' Act § 12-10 represent NOK 8.7 million.

**18. Short-term liabilities**

	1997	1996	1995
Public dues and holiday allowances	244	226	226
Accounts payable	1,144	1,028	1,027
Sundry interest-free short debt	362	259	249
Provisions for dividend	267	228	196
Accrued expenses	326	287	476
Taxes payable	138	438	621
<b>Total</b>	<b>2,481</b>	<b>2,466</b>	<b>2,795</b>

**19. Interest-bearing short-term liabilities**

	1997	1996	1995
Short-term bank debt	742	202	215
Current portion of long-term debt	140	1,086	327
<b>Total</b>	<b>882</b>	<b>1,288</b>	<b>542</b>

**20. Subordinated convertible bonds**

	1997	1996	1995
Remaining debt as at December 31	0	1,206	1,206
Current portion of long-term debt	0	-499	0
<b>Book value of long-term debt</b>	<b>0</b>	<b>707</b>	<b>1,206</b>

During 1997, NOK 1,106 million of the subordinated convertible bond loans were converted. NOK 100 million was paid to the bond owners..

**21. Senior interest bearing long-term debt**

	1997	1996	1995
Senior long term debt in NOK	1,486	1,483	783
Senior long term debt in foreign currencies	2,770	3,024	2,811
<b>Total</b>	<b>4,256</b>	<b>4,507</b>	<b>3,594</b>
Current portion of senior long term debt	-140	-587	-327
<b>Total</b>	<b>4,116</b>	<b>3,920</b>	<b>3,267</b>

**Bonds**

The book value of bonds held in treasury is NOK 46 million at year-end. These bonds are deducted from the senior long term debt in NOK.

On September 20, 1991 the company issued a 10.5 per cent domestic fungible bullet bond loan with an upper limit of NOK 1,500 million, maturing in 2001. Total drawn on this facility as at December 31, 1997 was NOK 944 million. In connection with this bond loan, the company has entered into cross-currency swap agreements of NOK 700 million, thus changing the exposure into floating rate foreign currency obligations. This part of the bond loan has been presented in the accounts as a foreign currency debt with floating interest.

On March 16, 1994 the company issued a 6.5 % domestic fungible bullet bond loan with an upper limit of NOK 1,000 million, maturing in 2004. The total outstanding on this facility as at December 31, 1997 was NOK 53 million.

On November 13, 1996 the company issued a 7.6 % domestic fungible bullet bond loan with an upper limit of NOK 1,000 million, maturing in 2006. The total outstanding on this facility as at December 31, 1997, was NOK 753 million.

**Senior long-term debt by currency**

Senior long term debt by currencies, current portion included:

	Booked		Weighted	
	Amount in foreign	exchange	NOK	average
	currency (million)	rates	million	interest
	31.12.97	31.12.97	31.12.97	31.12.97
ATS	1,357	0.5815	789	3.01
CZK	463	0.2127	98	16.00
DEM	192	4.0920	787	4.32
FRF	143	1.2230	174	3.57
GBP	9	12.1240	106	8.28
NLG	4	3.6308	16	3.50
USD	104	7.3157	762	5.80
Set-off			37	
<b>Total debt in foreign currencies</b>			<b>2,770</b>	
<b>Total senior long term debt in NOK</b>			<b>1,486</b>	<b>5.86</b>
<b>Total senior long term debt</b>			<b>4,256</b>	
<b>Current portion of long term debt</b>			<b>-140</b>	
<b>Total interest bearing long-term debt</b>			<b>4,116</b>	

Unrealised losses at December 31, 1997 exchange rates amount to NOK 172 million. Unrealised losses as at December 31 1996 amounted to NOK 55 million. The change of NOK 117 million is included in the financial expenses in 1997.

## Repayment of debt

The company's long-term debt as at December 31, 1997 matures as follows

	<i>Debt</i>		
	<i>banks</i>	<i>Bonds</i>	<i>Total</i>
1999	90	0	90
2000	945	0	945
2001	187	944	1,131
2002	461	0	461
2003	211	0	211
2004	60	0	60
After 2004	465	753	1,218
<b>Total</b>	<b>2,419</b>	<b>1,697</b>	<b>4,116</b>

In October 1997 the company signed for a loan of USD 187 million with Eksportfinans, that matures in 2007. The loan may be drawn in several currencies with both floating and fixed interest rate. A syndicate of norwegian and international banks have guaranteed for the loan. The loan will be drawn in January 1998.

The company thereby increased its drawing rights as at December 31 1997 to a total of NOK 5.106 million. The drawing rights of USD 470 million matures in 2004. The remaining committed drawing rights of NOK 300 million matures in 2002.

Loans of FRF 250 million in Den Nordiske Investeringsbank (NIB), which originally were set to mature in 1997, have had the maturity date extended until 2005, with the first instalment due in 2003.

The Group's long term fixed-interest debt has a market value at year end which exceeds the book value by NOK 54 million. When entering into certain unsecured long term loan agreements, negative trust receipts have been issued. Furthermore, some loan agreements require financial ratios regarding solidity and liquidity to be met. These requirements have been satisfied.

## 22. Foreign exchange- and interest off-balance instruments

### Foreign exchange exposure

Bank deposits, receivables, long-term receivables and cash flow from operations in foreign currencies are managed partly through debt in foreign currencies and partly through the use of different derivative financial instruments. Mainly, Norske Skog uses foreign exchange contracts in managing the foreign exchange exposure.

### Interest rate exposure

In order to obtain an effective management of the interest structure in the company, off-balance interest rate contracts are used in addition to a well-proportioned balance of interest bearing assets and liabilities.

## Foreign exchange contracts

<i>Currency</i>	<i>Purchase contracts equivalent to NOK million</i>	<i>Sales contracts equivalent to NOK million</i>
ATS	1,244	
BEC		149
CHF		121
DEM		753
DKK		155
ESP		190
FIM	96	
FRF	362	
GBP		861
ITL		368
JPY		92
NLG		283
NOK	1,881	
PTE		40
SEK	79	
USD		585
XEU		57
<b>Total</b>	<b>3,662</b>	<b>3,653</b>

Foreign currency contracts have been converted to NOK at December 31 1997 spot rates.

All foreign exchange contracts related to operations mature during 1998. The contracts related to the investment in the new paper machine in Golbey matures according to the direct cash flow of the project.

### Currency options

The premiums of not yet matured bonds were NOK 2,6 million at year end. Premiums are accrued according to the date of maturity of the bond.

### Forward rate agreements (FRA)

<i>Currency</i>	<i>Net purchase/ sales(-) in million</i>	<i>Period</i>
FRF	140	3 months
DEM	-40	3 months
NOK	-50	6 months
NOK	-50	3 months

When selling forward rate agreements the company will benefit from a decrease in the interest rates.

As at December 31, 1997 there is an unrealised gain in the FRA portfolio amounting to NOK 0,6 million.

### Long term interest rate futures

<i>Commercial paper no.</i>	<i>Net purchase/sales(-)</i>
German Bund	31

When buying long term interest rate futures the company will benefit from a decrease in the interest rates.

### Interest rate swaps

<i>Currency</i>	<i>Million</i>	<i>Receives</i>	<i>Pays</i>	<i>Maturity</i>
NOK	350	Fixed	Floating	1998
NOK	50	Fixed	Floating	2001
DEM	25	Floating	Fixed	1998
FRF	50	Floating	Fixed	1999

When interest rates go down the company will benefit from receiving fixed interest rates and paying floating interest rates.

As at December 31 1997 there is an unrealised gain in the portfolio amounting to NOK 17 million, which is not included in the accounts. At year end 1996 the unrealised gain amounted to NOK 23 million.

### 23. Shareholders' equity

<i>Other consolidated equity</i>	<i>1997</i>	<i>1996</i>	<i>1995</i>
Legal reserve	2,946	1,869	1,754
Temporary restricted reserve	0	0	79
Distributable reserve	4,479	4,420	3,680
Other consolidated equity	875	693	380
<b>Total consolidated equity</b>	<b>8,300</b>	<b>6,982</b>	<b>5,893</b>

#### *Shareholders' equity*

Shareholders' equity 1.1.	7,635	6,545	4,727
Profit for the year	590	1,317	1,699
Share issues	0	4	89
Converted bonds	1,106	0	16
Provisions for dividend	-267	-228	-196
Corrected equity capital in			
Norske Skog Golbey	0	0	179
Corrected equity capital in affiliated co.	0	-3	0
Translation difference	0	0	31
<b>Shareholders' equity 31.12.</b>	<b>9,064</b>	<b>7,635</b>	<b>6,545</b>

### 24. Mortgages

The following loans are secured by real estate mortgages 31.12.

	<i>1997</i>	<i>1996</i>	<i>1995</i>
Outstanding balance, bond	0	5	10
Outstanding balance, other mortgages debt	67	687	954
<b>Total</b>	<b>67</b>	<b>692</b>	<b>964</b>

Book value of assets securing this debt as at 31.12.

	<i>1997</i>	<i>1996</i>	<i>1995</i>
Ships	0	3	4
Machinery	64	1,856	5,706
Buildings	29	629	2,046
Forest, land and other real estate	0	3	158
Plant under construction	0	1	106
Operating fixed assets	93	2,492	8,020
Stocks/receivables	88	12	63
<b>Total</b>	<b>181</b>	<b>2,504</b>	<b>8,083</b>

### 25. Environment

*Capitalised environmental investments*

	<i>1997</i>	<i>1996</i>	<i>1995</i>
Norske Skog Skogn	243	16	0
Norske Skog Bruck	3	6	-
Norske Skog Golbey	10	0	0
Norske Skog Follum	40	1	43
Norske Skog Saugbrugs	16	108	64
Sande Paper Mill	-	8	6
Norske Skog Tofte	9	1	1
Norske Skog Folla	3	3	27
Norske Skog Hurum	0	4	2
Area Buliding Materials	20	25	9
<b>Total</b>	<b>344</b>	<b>172</b>	<b>152</b>

These investments are included in addition at cost in note 16.



**Norske Skog Skogn**

A new biological waste water treatment plant and a new biofuel boiler were put into operation at the end of the year. The treatment plant was necessary to meet new emission limits effective from 1998. The biofuel boiler was needed for handling the moisture sludge coming from the new treatment plant.

**Norske Skog Follum**

Since the startup of the new biofuel boiler in 1995 Follum has had problems incinerating sludge due to high moisture levels. In 1997, therefore a new thermal sludge dryer was installed to reduce the moisture in the sludge before incineration. As a consequence there is no further need to dispose of biological waste at the mill. In 1997, the mill also installed a new backwater tower that will reduce and stabilize the amount of waste water. This leads to a more stable operation of the treatment plant and consequently reduced emissions.

**Norske Skog Saugbrugs**

During 1997 the mill completed the construction of a new biofuel boiler. Saugbrugs now burns all organic waste produced at the mill, and as a consequence there is no further need to dispose of organic waste at the mill. This has also greatly reduced the consumption of fossil fuels.

**Norske Skog Golbey**

The mill installed new presses for dewatering of sludge from the deinking process and from the treatment plant. The investment was made to improve the incineration quality of the sludge.

**Norske Skog Tofte**

The mill has carried out activities aimed at energy conservation and reducing emissions of odour-containing gases from the mill's calcium oven.

**Other mills**

New plants for purifying of flue gases were installed at Norske Skog Folla and at the board mill in Braskereidfoss. At other mills, only minor environmental investments were made.

**26. Contractual obligations**

The company has entered into contractual obligations for the purchase of operational fixed assets amounting to NOK 602 million in addition to the expenses included in the accounts as at December 31 1997. Additionally, decisions have been made to invest a total of NOK 3,301 million.

**27. Leasing obligations**

The Group has annual expenses related to long-term rental and leasing obligations of NOK 67 million.

# Accounts 1997 Norske Skogindustrier ASA

## PROFIT AND LOSS ACCOUNT

<i>NOK million</i>	<i>Notes</i>	<b>1997</b>	<b>1996</b>	<b>1995</b>
<b>Operating revenue</b>	2	<b>7,262</b>	<b>7,685</b>	<b>9,919</b>
Cost of materials		3,048	2,946	4,227
Wages, salaries and personnel expenses	5	958	911	1,052
Other operating expenses	3	1,843	1,682	1,888
Ordinary depreciation	7	563	563	578
Operating expenses		6,412	6,102	7,745
<b>Operating profit</b>		<b>850</b>	<b>1,583</b>	<b>2,174</b>
Financial revenue		220	199	401
Financial expenses		-499	-358	-557
<b>Financial items, net</b>		<b>-279</b>	<b>-159</b>	<b>-156</b>
<b>Profit before taxes</b>		<b>571</b>	<b>1,424</b>	<b>2,018</b>
Taxes	6	-39	-301	-511
<b>Profit for the year</b>		<b>532</b>	<b>1,123</b>	<b>1,507</b>
<b>Application of profit for the year:</b>				
Group contribution		-171	-122	0
Allocated to legal reserve		-68	-112	-151
Transferred from temporary restricted reserve		0	79	238
Transferred from/to(-) distributable reserve		-26	-740	-1,398
Dividend to shareholders		-267	-228	-196
Total		-532	-1,123	-1,507

## STATEMENT OF CASH FLOW

### Cash flow from operating activities

Cash generated from operations		7,120	8,042	9,883
Cash used in operations		-5,631	-6,013	-7,393
Financial revenue received		220	202	401
Financial expenses paid		-499	-384	-557
Taxes paid		-290	-483	4
Net cash flow from operating activities	4	920	1,364	2,338

### Cash flow from investment activities

Investments in operational fixed assets		-717	-470	-761
Sales of operational fixed assets		74	13	16
New intercompany receivables		-760	-711	-60
Net financial investments		-76	-43	-1,814
Net cash flow from investment activities		-1,479	-1,211	-2,619

### Cash flow from financial activities

New long-term debt		239	941	1,092
Repayment of long-term debt		-1,252	-677	-1,453
New short-term liabilities		3,407	3,228	1,126
Repayment of short-term liabilities		-2,902	-3,443	-1,151
Dividend paid		-228	-196	-48
Converted bonds		1,106	0	16
Share issues		0	4	89
Net cash flow from financial activities		370	-143	-329
<b>Total change in liquid assets</b>		<b>-189</b>	<b>10</b>	<b>-610</b>
Liquid assets as at January 1		797	787	1,397
Liquid assets as at December 31		608	797	787

**BALANCE SHEET AT 31.12.**

<i>NOK million</i>	<i>Notes</i>	<b>1997</b>	<b>1996</b>	<b>1995</b>
<b>Assets</b>				
Cash and bank deposits		64	80	52
Bonds		454	517	622
Commercial papers		90	0	75
Other short-term investments		0	200	38
Liquid assets		608	797	787
Accounts receivable		868	1,013	1,423
Provision for bad debts		-45	-51	-47
Other receivables		235	99	283
Intercompany receivables		1,100	989	747
Receivables		2,158	2,050	2,406
Raw materials and work in progress		288	307	367
Finished goods		413	437	383
Stocks		701	744	750
<b>Current assets</b>		<b>3,467</b>	<b>3,591</b>	<b>3,943</b>
Shares in subsidiaries		2,624	2,384	2,376
Shares in other companies		91	91	61
Partnerships		28	42	41
Pension plan assets	5	111	139	165
Other long-term assets		49	44	40
Deferred tax advantage	6	8	10	13
Intercompany receivables		1,501	946	238
Securities and long-term financial assets		4,412	3,656	2,934
Operational fixed assets	7	5,951	5,816	5,920
<b>Fixed assets</b>		<b>10,363</b>	<b>9,472</b>	<b>8,854</b>
<b>Total assets</b>		<b>13,830</b>	<b>13,063</b>	<b>12,797</b>
<b>Liabilities and shareholders' equity</b>				
Bank debt		0	0	215
Current portion of long-term debt		46	569	57
Taxes payable		118	371	576
Provisions for dividend		267	228	196
Public dues and holiday allowances		129	128	126
Accounts payable		312	358	528
Other short-term liabilities		1,066	259	461
<b>Current liabilities</b>		<b>1,938</b>	<b>1,913</b>	<b>2,159</b>
Pension obligations	5	29	35	46
Senior long-term debt		3,093	2,826	2,551
Mortgage loans		3	3	28
Subordinated convertible bonds		0	707	1,206
Deferred tax	6	574	637	642
<b>Long-term liabilities</b>		<b>3,699</b>	<b>4,208</b>	<b>4,473</b>
Share capital		764	653	652
Legal reserve		2,946	1,869	1,754
Temporary restricted reserve		0	0	79
Revaluation reserve		4	0	0
Distributable reserve		4,479	4,420	3,680
<b>Shareholders' equity</b>	9	<b>8,193</b>	<b>6,942</b>	<b>6,165</b>
<b>Total liabilities and shareholders' equity</b>		<b>13,830</b>	<b>13,063</b>	<b>12,797</b>
Mortgages		3	27	28
Guarantees	8	1,330	1,238	408

# Notes to Norske Skogindustrier ASA

## 1. Accounting principles

The company's accounting principles are the same as those of the consolidated accounts, which are described on page 12 and 13. The company's notes are similar to the consolidated notes. Only those notes which are different, are shown below.

## 2. Operating revenue

The figures include ordinary revenue from sale of goods to companies within the Group amounting to NOK 838 million. Additionally, administration fee and income from rent to the subsidiaries amounted to NOK 74 million. All inter-company deliveries, intercompany profits and intercompany debts are eliminated in the consolidated accounts.

## 3. Other operating expenses

Losses on bad debts amounting to NOK -2 million are included in the figures.

## 4. Net cash flow from operations

The connection between profit before taxes and cash flow from operations is shown below.

	1997	1996	1995
Profit before taxes	571	1,424	2,018
Ordinary depreciations	563	563	578
Shares a.o. written off	0	0	0
Taxes paid	-290	-483	4
Changes in receivables	108	357	-36
Changes in stocks	43	6	-139
Changes in current liabilities	-75	-503	-87
Net cash flow from operating activities	920	1,364	2,338

## 5. Pension costs and pension liabilities

	1997	1996	1995
Net periodic pension costs			
Benefit earned during the year	33	28	28
Interest costs on prior period benefit	34	30	28
Expected return on plan assets	-41	-38	-36
Periodic employer tax	1	-2	1
Expensed portion of changes of AFP	2	0	0
Expensed portion of differences in estimates	1	0	0
Net periodic pension cost	30	18	21

## 6. Taxes

New rules for taxation of power plants has been introduced with effect from January 1, 1997. The change entailed an upward adjustment of fiscal value on assets used in power production. The upward adjustment has untaught a reduction of deferred taxes with 65 mkr in 1997.

### Taxation basis

A specification of the difference between profit before taxes and basis for taxation this year is shown below.

	1997	1996	1995
Profit before taxes	571	1,424	2,018
Permanent differences	-9	-19	-204
Group contribution	-171	-121	0
Change of temp. differences	-6	-5	-74
Basis for taxation this year	385	1,279	1,740

### Tax expenses

Taxes payable	-102	-300	-468
Change in deferred tax	-2	-1	-43
Effect from changes tax rule	65	0	0
Total tax expenses	-39	-301	-511

### Deferred tax / deferred tax advantage

A specification is made of temporary differences and calculation of deferred tax/deferred tax advantage at the end of the year (taxation rate 28 per cent).

	1997	1996	1995
Reserve in accounts receivable	-44	-49	-36
Reserve in stocks	88	85	67
Other short-term items	-34	-27	-14
Total short-term items	10	9	17
Accelerated depreciation	1,857	2,076	1,972
Allocated capital gains	67	61	69
Pension plan assets	111	139	165
Other long-term items	5	-9	-17
Total long-term items	2,040	2,267	2,189
Total temporary differences	2,050	2,276	2,206
Deferred tax	574	637	642

### Deferred tax advantage

Uncovered pension obligations	-30	-35	-45
Deferred tax advantage	8	10	13

## Status of pension plans reconciled to the balance sheet

	Pension assets exceed PBO			PBO exceed plan assets		
	31.12.97	31.12.96	31.12.95	31.12.97	31.12.96	31.12.95
Projected Benefit Obligations (PBO)	-622	-532	-512	-56	-53	-52
Plan assets at fair value	662	631	676	22	17	14
Plan assets in excess of/less than (-) PBO	40	99	164	-34	-36	-38
Diff. in estimates and plans not taken to income/expense*)	65	32	-7	8	3	-4
Net plan assets/pension obligations	105	131	157	-26	-33	-42
Accrued employer tax	6	8	8	-3	-2	-4
Pension assets/pension obligations (-) in the balance sheet	111	139	165	-29	-35	-46

See note 4 to the consolidated accounts regarding assumptions and further information.

\*) Changed AFP plan included with NOK 30 million in 1997.

## 7. Operational fixed assets

	<i>Goodwill and other exclusive rights</i>	<i>Ships</i>	<i>Machinery equipment, etc.</i>	<i>Buildings and plants</i>	<i>Real estate</i>	<i>Plant under construction</i>	<i>Total</i>
<b>Acquisition cost</b>							
Acquisition cost 31.12.1996	6	21	8,509	2,273	187	220	11,216
Acquisition cost 31.12.1996 at merger	0	0	13	5	7	0	25
Addition 1997 at cost	1	0	170	99	28	419	717
Sales 1997 at cost	0	0	-39	-43	-1	-3	-86
Reclassification	0	0	197	52	0	-249	0
Acquisition cost 31.12.1997	7	21	8,850	2,386	221	387	11,872
<b>Revaluation</b>							
Revaluation 31.12.1996	0	0	0	0	83	0	83
Revaluation 31.12.1996 at merger	0	0	0	0	4	0	4
Revaluation 31.12.1997	0	0	0	0	87	0	87
<b>Depreciation</b>							
Accumulated ordinary depreciation 31.12.1996	2	18	4,622	806	35	0	5,483
Accumulated ordinary depreciation 31.12.1996 at merger	0	0	7	2	0	0	9
Ordinary depreciation 1997	1	2	469	86	5	0	563
Depreciation on fixed assets sold 1997	0	0	-38	-9	0	0	-47
Accumulated ordinary depreciation 31.12.1997	3	20	5,060	885	40	0	6,008
<b>Book value</b>							
Book value 31.12.1996	4	3	3,887	1,467	235	220	5,816
Book value 31.12.1997	4	1	3,790	1,501	268	387	5,951

### Operating fixed assets - acquisition and disposals over the last 5 years

1993	Acquisition	18	0	110	10	2	25	165
	Disposal	0	0	4	23	6	0	33
1994	Acquisition	3	0	106	6	2	132	249
	Disposal	0	0	16	1	14	0	31
1995	Acquisition	10	0	527	55	7	162	761
	Disposal	4	0	199	51	22	28	304
1996	Acquisition	0	0	230	21	8	211	470
	Disposal	0	0	6	0	7	0	13
1997	Acquisition	1	0	170	99	28	419	717
	Disposal	0	0	5	62	7	0	74
Total 5 years	Acquisition	32	0	1,143	191	47	949	2,362
	Disposal	4	0	230	137	56	28	455

## 8. Guarantees

The company has guaranteed debt for subsidiaries for a total of NOK 1,330 million.

## 9. Shareholders' equity

	<i>Share capital</i>	<i>Legal reserve</i>	<i>Distributable reserve</i>	<i>Revaluation reserve</i>	<i>Total</i>
Shareholders' equity 31.12.1996	653	1,869	4,420	0	6,942
Share issues	111	995	0	0	1,106
Group contribution	0	0	-171	0	-171
Equity corrections	0	14	33	4	51
Profit for the year	0	68	464	0	532
Provisions for dividend	0	0	-267	0	-267
Shareholders' equity 31.12.1997	764	2,946	4,479	4	8,193

Equity corrections are related to the merge with the subsidiary A/S Van Severen & Co. Ltd.

## Auditor's Statement

### To the Annual General Meeting of Norske Skogindustrier ASA

We have audited the annual accounts of Norske Skogindustrier ASA for 1997, showing a profit of NOK 532 million for the parent Company and a profit of NOK 590 million for the Group. The annual accounts, which consist of the Board of Directors' report, statement of income, balance sheet, cash flow analysis, notes and the corresponding consolidated accounts, are the responsibility of the Board of Directors and the President and Chief Executive Officer.

Our responsibility is to examine the Company's annual accounts, its accounting records and the conduct of its affairs.

We have conducted our audit in accordance with applicable laws, regulations and generally accepted auditing standards. We have performed the auditing procedures we considered necessary to determine that the annual accounts do not con-

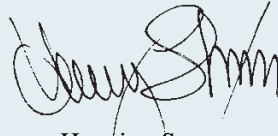
tain significant errors or omissions. We have checked selected parts of the accounting material supporting the financial statements and evaluated the accounting principles applied, the estimates made by the management, and the content and presentation of the annual accounts. To the extent required by generally accepted auditing standards we have also evaluated the Company's asset management and internal controls.

The Board of Directors' proposal for application of the year's profits and equity transfers complies with the requirements of the Joint Stock Companies Act.

In our opinion, the annual accounts have been prepared in conformity with the Joint Stock Companies Act and give a fair presentation of the Company's and the Group's financial position as of December 31, 1997 and the result of its operations for the fiscal year in accordance with generally accepted accounting principles

Oslo, February 11, 1998

ARTHUR ANDERSEN & CO.



Henning Strøm  
State Authorised Public Auditor (Norway)



*Newspapers and other printed medias, have an advantage over TV as an advertising medium in that one can devote time to them whenever, and for as long as, it suits the individual – like this lady who is studying the day's issue of Le Figaro in a Paris cafe. About 2/3 of advertising budgets in Western Europe went to newspapers, magazines and direct advertising in 1996.*

## The Corporate Assembly's Statement

### The corporate assembly's statement to the general meeting

The Board's draft accounts for 1997 have been presented to, and discussed by, the Corporate Assembly.

The Corporate Assembly recommends that the General

Meeting confirms the Board's proposed profit and loss statement and balance sheet of Norske Skogindustrier ASA, together with the consolidated profit and loss statement, and balance sheet.

It also recommends the Board's proposal for distributing the profit to be approved.

Lysaker, March 4, 1998



Ivar B. Korsbakken  
Corporate Assembly Chairman



# Continued growth for wood-containing printing paper

*Wood-containing printing paper accounts for more than 50%, or about 60 million tonnes, of the nearly 115 million tonnes of paper used for communication and information purposes throughout the world.*

By wood-containing printing paper - hereafter called printing paper - is meant newsprint, magazine paper and a growing proportion of medium grades, including improved newsprint, which are used for a number of special purposes. Printing paper is made mainly from mechanically processed wood fibre and/or recycled fibre.

North America and Western Europe account for three quarters of output capacity and two thirds of the consumption of this product, among other things because use of printing paper is closely connected with economic activity and use of advertisements. Advertisers provide 50-70% of the income basis for newspapers and magazines. These regions also have supplies of the two most important input factors, long-fibre wood and energy. In Norway, printing paper accounts for nearly three quarters of paper production, in Finland for more than half and in Sweden for about one third.

### Newsprint moves southwards

The use of recycled fibre as raw material has pushed a rising proportion of newsprint production southwards - into the major consuming areas. After the expansion of Norske Skog Golbey by the addition of a new paper machine, Norske Skog will have about 40% of its printing paper production outside Norway. In the first half of the 1990's, the Nordic area fell behind the UK/-Continent as a newsprint producer, and the same thing is happening in Canada/-USA. In Europe this has taken place simultaneously with the consolidation, internationalisation and structural renewal of the industry. Nordic companies now have a significant proportion of the capacity for printing paper in the UK and on the Continent, while Canadian companies have only a limited share of the printing paper industry in the US.

A large part of the Nordic expansion in Europe has come from new paper machines. In 1990 large machines (more than 8 metres wide) accounted for 47% of European newsprint capacity - in 1999 the corresponding figure will be 62%. Norske Skog Golbey's two newsprint machines - which will account for about 6% of European capacity - will date from 1992 and 1999. The consolidation wit-

hin printing paper has come relatively far in Europe, where the five largest producers have three quarters of total capacity. The North American printing paper industry is far more fragmented. The five largest suppliers of newsprint thus account for only just over 30% of capacity in the region, while the comparable figure for western Europe is 76%. Norske Skog today has newsprint capacity which corresponds to about 18% of the West European market, or 5% of the world market.

### Paper for magazines and catalogues

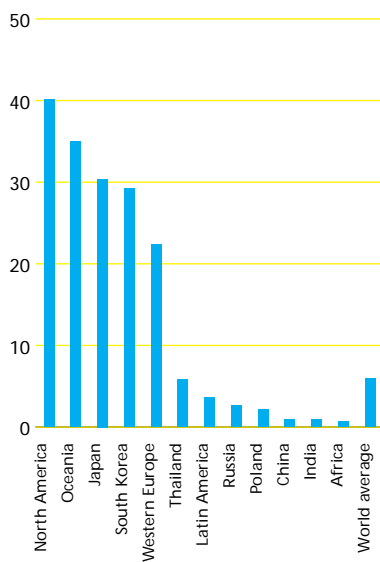
Magazine paper (also called SC and LWC) has a global market of five million tonnes and eleven million tonnes, respectively. Uncoated magazine paper (SC) has filler mixed with its paper pulp, and the finished paper sheet is processed mechanically by passing through a roller press a so called super calender. This process smooths the roughness caused by individual paper fibres on the surface of the sheet, and give the paper good printing qualities. The most important area of use is magazines and catalogues printed in large numbers. Uncoated magazine paper fetches a price around 15-20% higher than that of newsprint.

Coated magazine paper (LWC) is coated with a layer of filler, to achieve an even smoother and more glossy surface. This further improves its print characteristics, and this paper is particularly suited to special magazines and free sheets requiring high print quality. Coated magazine paper fetches a 15-20% higher price than uncoated. Norske Skog's capacity for magazine paper accounts for about 10% of the market in western Europe - for uncoated magazine paper, for more than 20%.

### Magazine paper shows strongest growth

The growth in the use of printing paper varies from region to region and from

Newsprint consumption, kilograms per capita (1996)





product to product. Coated magazine paper has shown the highest growth during the past few years. This is due, among other things, to a switch from mass marketing to more targeted advertising directed at special groups, via specialised magazines, direct mail and catalogues. Growth for newsprint and SC has been more moderate, and is related to general economic conditions. During the period 1980-95, demand for LWC in Western Europe rose by 6%, on average, while the corresponding rise for newsprint and SC was barely 3%. In the future, too, magazine paper is expected to show stronger growth than newsprint.

In Europe, demand for newsprint is expected to grow by about two per cent – or 180,000 tonnes/year – during the next few years. Growth in the US is expected to be around zero, because this is beginning to be a "mature" market, with newsprint consumption per inhabitant of more than 40 kilos/year. The corresponding figure for Europe is 23 kilos. In Asia, Latin America and Central/Eastern Europe demand is expected to increase by 3-4.5% annually – but from a very low level, as low as around 1 kilo per inhabitant per year in some Asian countries.

**Many areas of use**

Magazine paper - particularly coated grades - meets a growing need for

paper for advertising supplements, special issues and niche magazines, and significant amounts of this product are exported from Europe to overseas markets. Asia, excluding China and Japan, does not produce magazine paper at present, and even though consumption is still low, it is expected to rise steeply in the future. LWC is a good alternative to woodfree paper, because its lower total weight means lower postage and distribution costs.

The printed media are now being challenged by audiovisual media such as TV, the Internet and radio. An analysis of trends since 1984 shows real growth in newspapers' advertising revenues - and they are continuing to grow. However, since TV and radio have grown more rapidly, the printed media's share of total advertising turnover is falling. Advertising budgets in Western Europe in 1996 totalled USD 100 billion – and of that 66% went to newspapers, magazines and direct advertising. The corresponding figure for the US was USD 133 billion, and the share of the printed media was 62%.

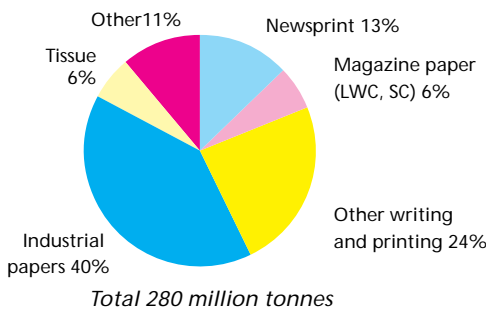
**Rapid newsprint growth in Asia**

During the period 1985-95 newsprint consumption in Asia (excluding Japan) rose from 2.1 million tonnes to 4.6 million tonnes – an annual growth of 8.1%. To meet this rising demand South Korea, in particular, has strongly

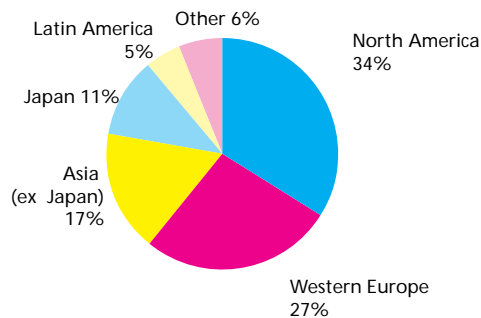
expanded its newsprint capacity. This expansion has to a great extent been based on waste paper from western countries, thus setting obvious limits to long-term growth. Production growth in this part of the world is coming primarily within woodfree paper, and Asia's capacity for these grades exceeds its own consumption, while it imports about a quarter of its newsprint consumption. Woodfree paper is being produced from chemical pulp, using short-fibre wood as raw material. Asian wood resources is for the greater part short-fibred, and the potential for plantation production of this kind of wood is great.

Nordic printing paper producers such as Norske Skog, with a large proportion of newsprint in their portfolios, face several challenges. To maintain their positions in the market they must strengthen their presence in regions where production and consumption are already at a high level. Suppliers in the long-fibre areas must exploit to the maximum the quality characteristics of the timber, in products where virgin fibre cannot be replaced by recycled fibre, or challenged by short fibre. At the same time it is necessary to take account of those parts of the world which – in the longer term – appear to have the greatest potential for economic growth and consequently also for increased use of printing paper.

**World paper consumption, different grades**



**Newsprint consumption, regions (1996)**



# Main financial figures

(NOK million)

Profit and loss accounts	Definitions	1997	1996	1995	1994	1993	1992	1991	1990	1989
Operating revenue		13,312	13,265	12,548	9,170	7,338	7,557	8,640	9,879	9,248
Gross operating profit	1	2,223	3,136	3,332	1,348	851	728	1,183	1,676	1,678
Operating profit		1,083	1,916	2,500	732	299	-47	500	1,128	1,001
Profit before financial expenses	2	1,319	2,225	2,850	843	589	49	877	1,502	1,490
Profit before taxes		652	1,732	2,336	333	4	-659	478	957	917
Profit for the year		590	1,317	1,699	206	-47	-516	246	773	802

## Balance sheet (NOK million)

Current assets		4,515	4,592	4,618	4,333	4,261	3,816	5,690	4,835	5,093
Fixed assets		12,778	12,031	10,246	7,377	7,694	7,917	6,042	5,380	4,662
Total assets		17,293	16,623	14,864	11,710	11,955	11,733	11,732	10,215	9,755
Current liabilities		3,363	3,754	3,337	2,043	1,958	2,535	2,077	2,418	3,358
Long-term liabilities		4,807	5,178	4,981	4,936	6,133	5,413	5,368	3,139	2,453
Minority interests		59	56	1	4	3	16	20	20	31
Untaxed reserves		-	-	-	-	-	-	-	3,379	2,713
Shareholders' equity		9,064	7,635	6,545	4,727	3,861	3,769	4,267	1,259	1,200
Total liabilities and shareholders' equity		17,293	16,623	14,864	11,710	11,955	11,733	11,732	10,215	9,755

## Profitability:

Gross operating margin %	3	16.7	23.6	26.6	14.7	11.6	9.6	13.7	17.0	18.1
Net operating margin %	4	8.1	14.4	19.9	8.0	4.1	-0.6	5.8	11.4	10.8
Net profit margin %	5	4.4	9.9	13.5	2.2	-0.6	-6.8	2.9	7.8	8.7
Return on total assets %	6	7.8	14.1	21.4	7.1	5.0	0.4	8.0	15.0	17.0
Return on equity %*)	7	7.1	18.6	30.1	4.8	-1.2	-12.8	6.5	25.3	33.4
Equity ratio %	8	52.4	45.9	44.0	40.4	32.3	32.1	36.4	32.2	29.0
Net interest-bearing debt/Equity		0.46	0.63	0.61	0.67	1.13	1.07	0.49	0.65	0.63
Return on capital employed %	9	8.4	15.9	25.4	8.3	3.4	-0.6	7.2	17.9	19.8
Net earnings per share after tax (NOK)	10	16.40	40.38	52.39	6.91	-1.79	-21.28	10.18	32.05	35.99
Net earnings per share fully diluted (NOK) <sup>1)</sup>	10	16.40	35.89	45.99	6.91	1.68	-13.03	11.30	30.25	34.59
Cash flow per share after tax (NOK)	11	44.89	80.20	78.79	29.07	18.74	10.56	58.12	41.50	41.19
Cash-flow per share fully diluted (NOK) <sup>1)</sup>	11	44.89	69.47	68.22	25.91	18.11	11.56	49.73	38.85	39.55

\*) For 1990 and 1989 equity includes shareholders' equity and 60% of untaxed reserves.

## Liquidity:

Liquid assets (NOK million)	12	853	1,088	1,010	1,499	1,716	1,433	3,081	1,879	2,354
Cash flow (NOK million)	13	1,615	2,616	2,555	866	492	256	1,405	1,001	918
Current ratio	14	1.34	1.22	1.38	2.12	2.18	1.51	2.74	2.00	1.52

1) \*) When calculating financial ratios per share fully diluted net earnings and cash flow are rectified by interest expenses on subordinated convertible bonds.

## Definitions main financial figures:

1. Gross operating profit=	Operating profit + Ordinary depreciation + Restructuring expenses
2. Profit before financial expenses=	Operating profit + Financial income + Share of profit in aff. companies
3. Gross operating margin=	Gross operating profit : Operating revenue
4. Net operating margin=	Operating profit : Operating revenue
5. Net profit margin=	Profit for the year : Operating revenue
6. Return on total assets=	Profit before financial expenses : Total assets (average)
7. Return on equity=	Profit for the year : Equity (average)
8. Equity ratio=	Equity : Total assets
9. Return on capital employed=	Operating profit : Capital employed (average) (see 15)
10. Net earnings per share after tax=	Profit for the year : Average number of shares *)
11. Cash flow per share after tax=	Cash flow : Average number of shares *)
12. Liquid assets=	Cash and bank deposits + Short-term investments
13. Cash flow=	Net cash flow from operating activities (from Statement of Cash Flow)
14. Current ratio=	Current assets : Current liabilities
15. Capital employed=	Total assets with deductions for non-interest-bearing liabilities and interest-bearing assets.

## Major events in Norske Skog's development 1989-97

### 1989:

Norske Skogindustrier A.S merged with A/S Follum Fabrikker and Tofte Industrier A/S.

The merged company acquired Saugbrugsforeningen with effect, for accounting purposes, from July 1.

### 1990:

Norske Skog acquired 49 per cent of the FRF 900 million share capital of Papeteries de Golbey S.A., and the company ordered the main machinery for its new newsprint mill in March. Total investment budget NOK 3.4 billion.

In December the Group decided to build a new paper machine, to make SC magazine paper, at Norske Skog Saugbrugs in Halden - total investment budget NOK 3 billion.

Floating of NOK 500 million convertible bond loan.

Operations at Otto Langmoen A/S, a sawn timber business, were wound up during the first half-year.

### 1991:

Floating of NOK 707 million convertible bond loan.

*During the year, the Group sold these units:*

- Guru Papp A/S (packaging)
- Kartopap A/S (packaging)
- Dalwell AB (packaging)
- F. Beyers wholesaling and printing business
- F. Beyers Bok- og Papirhandel (stationery and books)

*Activity at the following companies was wound up:*

- Fibo-Trespo AS' division at Notodden (laminates)
- The pulp mill at Norske Skog Saugbrugs (dissolving pulp)

### 1992:

The new newsprint machine (PM 1) at Papeteries de Golbey S.A.: - with a

capacity of 255,000 tonnes - was brought on line in January.

Restructuring costs, currency losses, and our share of Golbey's results in the start-up year were debited to the accounts, in the amount of NOK 619 million.

*These businesses were sold:*

- Empire Fine Papers Ltd., England (fine paper)
- Koppang Innredninger AS (interior fittings)

### 1993:

Norske Skog Saugbrugs new paper machine (PM 6), with capacity of 290,000 tonnes SC magazine paper, started production in February.

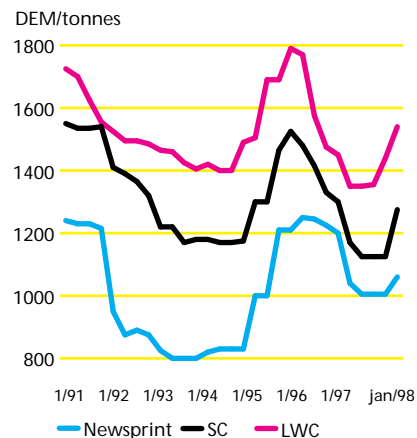
*These businesses were transferred to new owners:*

- Sarpsborg Finpapir
- Olaf Norlis Bokhandel A/S (book retailing - 50% ownership stake)
- Ad. Jacobsen (paper trading)

### 1994:

New share issue brought the company NOK 767 million, net, of new equity capital.

### Price development publication paper in Germany



Source: PPI Pricewatch

### 1995:

The particle board mill Agnes Fabrikker A.S. was taken over in March.

Norske Skog acquired the remaining 51% of the shares in Papeteries de Golbey S.A., so that the newsprint mill became a wholly-owned subsidiary and was consolidated in the accounts with effect from 01.04.1995.

### 1996:

Effective from 01.01.1996, Norske Skog took over the Bruck printing paper mill in Austria, with capacity of 220,000 tonnes LWC magazine paper and 115,000 tonnes newsprint.

Norske Skog decided in November to transfer Sande Paper Mill A/S (fluting) to new owners, with effect from 03.01.1997.

### 1997:

During the first quarter, the particle board mill at Braskereidfoss started up a new NOK 325 million production line.

The Group decided in April that Norske Skog Golbey should be expanded by the addition of a second newsprint machine - with a capacity of 330,000 tonnes - involving a total investment of NOK 2.8 billion.

Our subsidiary company Forestia AS took over Hedalm Trelast, with three production units, in July.

In November, Norske Skog took over the 100,000 tonnes capacity ROTO (Norske Skog Steti) newsprint mill in the Czech Republic.

*These units were transferred to new owners:*

- Lundby Bruk Rena and Brumunddal (building materials trading)
- Namsen Bygg (building materials trading)
- Folla Tech (workshop business)

## Sensitivity

One per cent change of the price on main products/input factors entails the following change on the operating profit:

<i>NOK million</i>	<i>1 % changes</i>
<b>Salesprices</b>	
Newsprint	45
SC magazine paper	23
LWC magazine paper	10
Pulp	11
Sawn timber	14

<i>NOK million</i>	<i>1 % changes</i>
<b>Input factors</b>	
Timber	28
Waste Paper	3
Energy	10

## Interest Rate Risks

In the management of the Group's currency and interest rate exposure, the goal is to minimise risk, in accordance to given guidelines.

Comprehensive internal supervisory routines have been established to ensure that the financial management follows these guidelines.

### Currency risk

Fluctuations in currency rates expose Norske Skog to both direct and indirect economic risk.

The direct risk (basic risk) reflects the fact that approx. 80% of the Group's operating revenues are in foreign currencies, while only about 25-30% of its costs are in such currencies. The largest exposures are against GBP, USD and DEM.

The basic risk per currency is calculated as 12 months future net cash flow per currency (rolling). Allowance is made for the fact that market pulp is invoiced in local European currencies, while prices are agreed in USD. On a 12-month horizon, 75% of the currency risk on pulp is calculated as a USD risk. The basic risk is estimated by the business units, and consolidated to a net exposure per currency. At all times, 50-100% of that exposure should be hedged. Hedging takes place either by drawing on a loan in foreign currency, or through the use of hedging instruments such as forward contracts and currency options.

The effect of hedging deals is shown in the Group accounts under financial items. Such currency losses or gains will to a greater or lesser extent have counterpart items in the form of increased or reduced future net operating revenue. The size of the counterpart item will depend mainly on what proportion of the exposure has been hedged.

Norske Skog is exposed to indirect risk because our competitive position is affected by fluctuations in the domestic currencies of our competitors. This applies mainly to SEK, FIM and CAD. This type of risk is not hedged.

### Interest rate risk

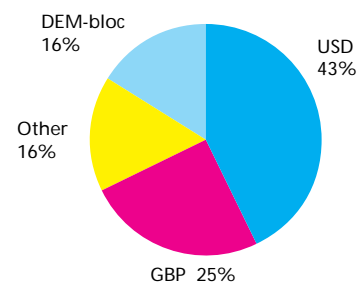
Norske Skog is normally a net borrower, and is therefore exposed to risk connected to changes in interest rate levels. During an upswing, interest rates will normally be higher than during a downturn, and in the same way Norske Skog's results are normally higher in an economic upswing than in a downturn. Thus, Norske Skog can handle higher interest costs during an upswing, while it is important to ensure low interest costs during a recession. It is therefore regarded as a reduction of risk to have floating interest rates, to the greatest possible extent, on net borrowing. In order to exploit interest rate fluctuations, we also have a proportion of borrowing at fixed interest rates.

Today's loan portfolio consists of floating and fixed interest rate loans. The economic risk incorporated in the portfolio is measured in terms of interest rate sensitivity. The risk is hedged either by interest-bearing assets or by off balance sheet hedging instruments.

As a consequence of this strategy, Norske Skog has held long-term bonds to hedge the interest rate risk on long-term loans. The losses and gains on the bond portfolio have their counterpart item in an increase/decrease in the value of the company's fixed interest rate debt, but such effects are not shown in the accounts, in accordance with present accounting rules.

### Net currency exposure

The Group's annual net currency exposure is at present approx. NOK 6 billion when Golbey PM 2 is included, divided by:



## Production capacities

Paper		Capacities
<i>Newsprint:</i>		
Norske Skog Skogn	Levanger	550,000 tonnes
Norske Skog Follum	Ringerike	355,000 tonnes
Norske Skog Golbey	Golbey, France	255,000 tonnes
Norske Skog Bruck	Steiermark, Austria	115,000 tonnes
Norske Skog Steti	Czech Republic	100,000 tonnes
A/S Union (affiliated company)	Skien	240,000 tonnes
<b>Total newsprint</b>		<b>1,615,000 tonnes</b>
<i>SC magazine paper:</i>		
Norske Skog Saugbrugs	Halden	540,000 tonnes
<i>LWC magazine paper:</i>		
Norske Skog Bruck	Steiermark, Austria	220,000 tonnes
<b>Total magazine paper</b>		<b>760,000 tonnes</b>
<b>Total publication paper (newsprint and magazine paper)</b>		<b>2,375,000 tonnes</b>
<i>Special grades:</i>		
Norske Skog Hurum	Hurum	35,000 tonnes
<b>Total capacity paper</b>		<b>2,410,000 tonnes</b>
<b>Fibre</b>		
Norske Skog Tofte (sulphate pulp)	Hurum	365,000 tonnes
Norske Skog Folla (chemithermomechanical pulp)	Verran	90,000 tonnes
<b>Total capacity pulp</b>		<b>455,000 tonnes</b>
<b>Resources</b>		
Total land area		180,000 hectares
Of which productive forest area		81,000 hectares
Mean installed hydropower capacity		415 GWh

## Statistics

Production		1997	1996	1995	1994	1993	1992	1991	1990	1989
<b>Area Paper</b>										
Newsprint *)	1000 tonnes	1,218	1,107	1,051	816	821	748	767	787	778
SC magazine paper	1000 tonnes	502	458	523	430	336	199	242	241	220
LWC magazine paper	1000 tonnes	214	178	-	-	-	-	-	-	-
Kraft Paper	1000 tonnes	29	29	31	32	28	29	32	31	31
<b>Area Fibre</b>										
Sulphate pulp	1000 tonnes	340	326	356	341	295	322	305	300	322
CTMP	1000 tonnes	64	60	89	83	70	52	62	71	78
<b>Building Materials</b>										
Sawn timber	1000 m <sup>3</sup>	654	557	497	491	476	476	467	488	499
Particle board	1000 m <sup>3</sup>	368	347	334	244	228	213	206	225	210
Parquet flooring and laminated flooring	1000 m <sup>2</sup>	3,529	3,724	3,695	2,960	2,337	1,996	1,498	1,579	1,792
<b>Personnel as at December 31</b>										
Area Paper		3,436	3,386	2,799	2,505	2,518	2,748	3,291	3,742	3,740
Area Fibre		468	521	532	518	509	527	719	748	731
Building Materials		1,818	1,862	1,681	1,597	1,568	1,602	1,755	1,846	1,969
Administration		264	196	181	138	144	139	139	129	96
<b>Total</b>		<b>5,986</b>	<b>5,965</b>	<b>5,193</b>	<b>4,758</b>	<b>4,739</b>	<b>5,016</b>	<b>5,904</b>	<b>6,465</b>	<b>6,536</b>

\*) Excl. A/S Union.

# Basis for value estimates

## General remarks

The assets of an industrial group such as Norske Skog consist largely of factories and the appertaining working capital in the form of stocks and receivables. The value of these assets is, in principle, equal to the discounted value of the future cash flows they will generate. The Group has, however, certain other assets which must be taken into account when valuing total assets, including the Group's liquid assets, which on 31.12.1997 amounted to NOK 853 million.

Below are listed the most important assets not dependent on operations.

## Forests

Norske Skog owns 81,000 hectares of productive forest, 17,000 hectares of which is in Sweden. Annual fellings during the past few years have averaged about 80,000 m<sup>3</sup>.

The book value of the Group's forest properties is NOK 103 million. Of this, write-ups account for NOK 27 million.

## Hydro power rights

Norske Skog owns power plants which, in a year with average precipitation,

generate 415 GWh of hydro power. Only a small part of this hydro power is subject to "hjemfall" (that is, due to revert to state ownership within a specified period).

The book value of the Group's power plants and hydro power rights is NOK 80 million, of which write-ups account for NOK 50 million.

## Shares in A/S Union (Union Co.)

Norske Skog owns 576,151 shares in Union, corresponding to 57.6% of total share capital. The Union group produces about 240,000 tonnes of newsprint and other grades of printing paper. In addition, Union owns power plants with an annual output of 280 GWh and buildings in downtown Drammen.

The cost price to Norske Skog of its Union shares is NOK 27.8 million. Union is consolidated in Norske Skog's accounts according to the equity capital method. This gives it a book value of NOK 375 million, as of 31.12.1997.

## Ships

Norske Skog has a 55% ownership stake in each of the ships "Nornews

Express" and "Nornews Leader".

The two vessels carry newsprint for Norske Skog under long-term contracts. The 60% ownership in "Lys-Skog" was sold in the beginning of 1998.

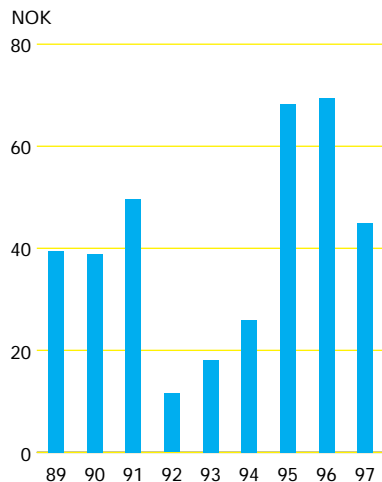
"Nornews Express" is of 4,568 m.t. deadweight and built in 1987. "Nornews Leader" is of 5,670 m.t. deadweight and built in 1991.

The book value of Norske Skog's 55% stakes in "Nornews Express" and "Nornews Leader" is NOK 17 million.

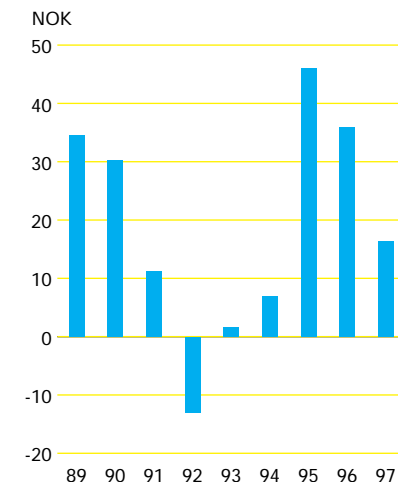


Norway ranks highest in Europe – and thus also in the world – in newspaper readership. The number of newspapers sold per thousand inhabitants exceeds 600, while the corresponding figure for other European countries is 470 or less.

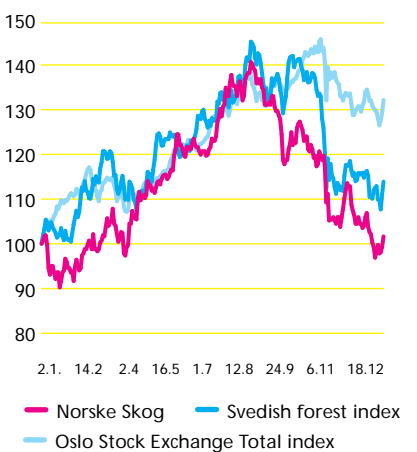
Earnings per share – fully diluted



Cash flow per share – fully diluted



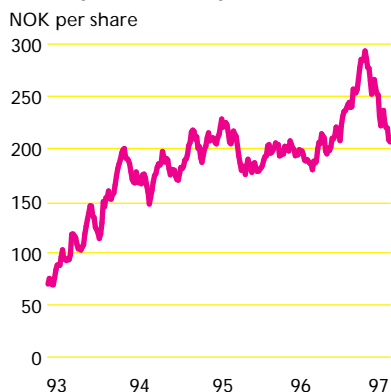
Share price 1997 (1/1 = 100)



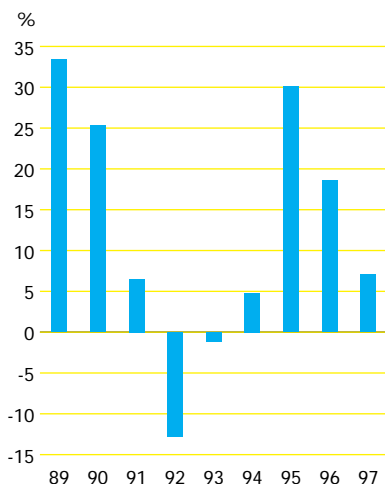


## Shareholder policy, share capital and shareholder structure

### Share price development 1993-1997



### Return on equity 1989-1997



### Shareholder policy

The forest industry is a sector which is marked by wide fluctuations in earnings and a need for large amounts of capital to invest, continuously, in machinery and equipment. To be able to cope with economic fluctuations and major investment outlays, a sound balance sheet is required, with a high equity to assets ratio and long-term financing.

Risk capital is essential for Norske Skog's further development. The company's shares must, therefore represent a competitive invest option.

Norske Skog seeks to achieve this through dividend payment and by creating the conditions for a long-term share price increase.

It is Norske Skog's goal to pay a dividend which gives shareholders a reasonable proportion of profits during an economic cycle, without undermining the company's ability to finance its future development from its own earnings. Efforts will be made to even out dividend payments during the cycle.

### Value for shareholders

Over the longer term, there is usually a correlation between the trend of a share's price and the return on capital invested. Compared with the sector average, Norske Skog has had a good yield, but its share price trend has been relatively weak. There is reason to believe that the return in the sector generally is too low, and the Group has launched a programme called «Norske Skog 2000» which aims to boost profitability. The goal is to achieve targets for return on total assets and on equity profitability of 13% and 15%, respectively, as an average during a cycle.

### Dividend for 1997

Norske Skog wishes to pay a competitive dividend, and its goal is that shareholders should receive 15-25% of profits, during an economic cycle. The company also wishes to even out the dividend over the cycle, and is therefore maintaining an unchanged dividend of NOK 7 per share, despite the lower profit in 1997. This dividend represents a pay-out ratio of 43% for 1997. As a weighted average over the past five years, the pay-out ratio is 20%. Based on share prices as of 31.12.1997, it provides a yield of 3.3% on A-shares and 3.5% on B-shares.

### Shares for employees

Norske Skog would like as many as possible of its employees to be shareholders, and every year it sells shares to the Group's employees in Norway. Norwegian taxation rules allow the company to grant employees a 20% discount on the market price (limited to a maximum discount of NOK 1,000 per employee) on such share sales. About 20% of our employees have taken advantage of this offer during the past two years. The annual share sales increase awareness, throughout the organisation, of the role played by owners in Norske Skog, as well as giving employees insight into the share market.

These annual share sales are handled by a foundation which buys shares in the market and re-sells them to employees. Under the terms of the foundation's articles, the share sales are to give an equal economic benefit to every employee receiving the offer, and this benefit is to be limited to the tax-free discount. In 1997 a total of 17,540 shares were sold to employees under this arrangement.

### Shares and share capital

As of 31.12.1997 the company's share capital was NOK 764,222,340 divided between 28,795,560 A-shares and 9,415,557 B-shares. Share capital increased by NOK 111.4 million during 1997, owing to conversions. The number of shares rose by 5,570,062, comprising 2,238,834 A-shares and 3,331,228 B-shares.

B-shares do not have voting rights. Otherwise, all shares have equal rights in the company, and there is no limit on the number of shares which may be held by foreigners.

Ownership structure is more or less stable, and there were only minor changes during 1997. At the turn of the year, the Norwegian Forest Owners' Federation owned, as a whole, 36.4% of A-shares and 29.2% of total share



capital. The largest single shareholder was the US investment fund Templeton, which - at the turn of the year - owned 11.9% of A-shares and 9% of total share capital. Foreign investors held 26% of A-shares and 21.6% of total share capital. Corresponding figures at the start of 1997 were 23.6% of A-shares and 22% of total share capital.

The Board has no authorisation, at present, to increase share capital.

### Share price trends in 1997

The Oslo Stock Exchange and most international stock exchanges experienced turbulent market movements during 1997. Share prices were rising until August; after that came price declines which were more marked for forest industry, and other cyclical shares, than for the market as a whole. The decline was largely a result of economic turmoil in Asia, with the risk of reduced import requirements in the region, coupled with Asian producers' greater competitiveness owing to steep devaluations. Toward the end of the year, lower pulp prices also had some negative impact on Norske Skog share prices. Most companies in the forest industry, world-wide, saw a share price decline during the autumn.

At the end of the year, Norske Skog shares were quoted at NOK 214 for A-shares and NOK 200 for B-shares. This was about the same as at the end of the previous year. The highest price was in August, at NOK 296 for A-shares and NOK 281.50 for B-shares. Those were historic, all-time high prices. The Oslo Stock Exchange overall index rose by over 31% during 1997, making the trend of Norske Skog shares markedly weaker than that of the overall index, during the year.

Norske Skog's market capitalization was at NOK 8.1 billion as of 31.12.1997. This is NOK 1.2 billion more than a year earlier, and reflects the increased number of shares, owing to conversions.

### Trading in Norske Skog shares

The company's shares are listed on the Oslo Stock Exchange. In addition, its B-shares are listed on SEAQ (Stock Exchange Automatic Quotation System) in London.

During the year a total of 30.5 million Norske Skog Shares were traded on the Oslo Stock Exchange. In relation to the average number of shares - 36.0 million - that represents a turnover ratio of 0.84. That is a relatively high figure, considering the significant presence of long-term, institutional shareholders in Norske Skog. In addition to the shares traded on the Oslo Stock Exchange, 7.4 million A-shares and 2.1 million B-shares were traded on SEAQ.

### Investor Relations

Norske Skog gives high priority to keeping in touch with the Norwegian and international financial market. The goal is to increase knowledge about the company and understanding of the industry. This will build up the confidence needed to make long-term investors interested in Norske Skog.

Providing the financial market with relevant and timely information is an important part of investor relations. Norske Skog plans to issue the following reports during 1998:

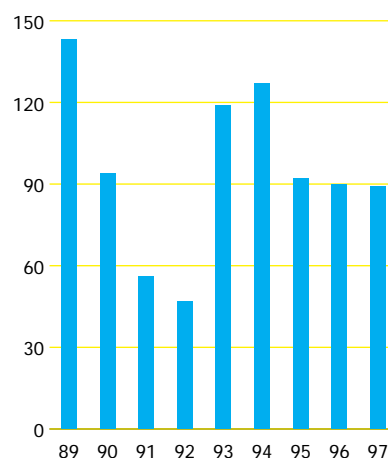
Preliminary report 1997 - February  
Annual report and accounts 1997 - April  
1st quarter 1998 - May 6  
2nd quarter 1998 - August 20  
3rd quarter 1998 - October 29

In addition to the information provided by these reports, Norske Skog holds regular presentations for the Norwegian and international financial market. In 1997 such presentations were held in Norway, England, Sweden, Austria and the US. Information activity is increasing both in Norway and abroad.

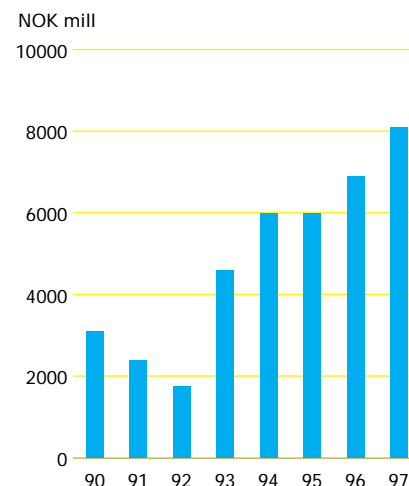
A large number of Norwegian and foreign broking houses follow Norske Skog and publish analyses of the company.

Jarle Langfjæran is responsible for Norske Skog's investor relations.

### Market cap. as % of book value



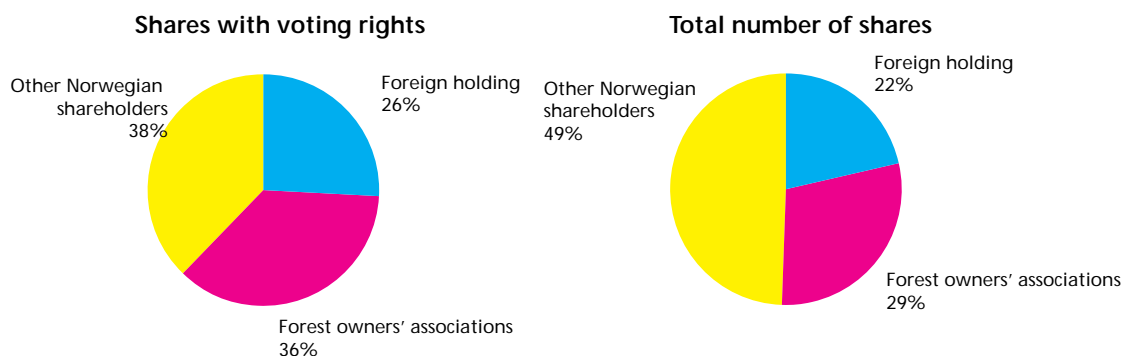
### Market cap as of 31.12.



## Principal shareholders as of December 31, 1997 (&gt;1% ownership)

No.	Name	A-shares		B-shares		Total	
		Number	%	Number	%	Number	%
1	Chase Manhattan Bank NA, GBR	3,907,321	13.57	22,361	0.24	3,929,682	10.28
2	Drammendistr. Skogeierforening, Hønefoss	2,322,832	8.07	140,398	1.49	2,463,230	6.45
3	Folketrygdfondet, Oslo	934,222	3.24	812,000	8.62	1,746,222	4.57
4	Kommunal Landspensjonskasse, Oslo	418,371	1.45	1,025,390	10.89	1,443,761	3.78
5	Storebrand Liv- og Skadefors., Oslo	311,733	1.08	983,277	10.44	1,295,010	3.39
6	Mjøsen Skogeierforening, Lillehammer	1,133,773	3.94	139,225	1.48	1,272,998	3.33
7	State Street Bank & Trust Co. USA	1,015,159	3.53	168,929	1.79	1,184,088	3.10
8	Telemark Tømmersalgslag, Skien	1,123,769	3.90	9,004	0.10	1,132,773	2.96
9	Gjensidige Forsikring, Oslo	431,436	1.50	693,492	7.37	1,124,928	2.94
10	Glommen Skog/Fond, Elverum	1,087,527	3.78	24,659	0.26	1,112,186	2.91
11	Nedre Glommen Skogeierforening, Ås	862,544	3.00	82,849	0.88	945,393	2.47
12	A/S UNION, Skien	838,546	2.91	182	0.00	838,728	2.19
13	Vestfold-Lågen Skogeierfor., Hvittingfoss	778,949	2.71	49,975	0.53	828,924	2.17
14	Omega, Oslo	13,450	0.05	655,050	6.96	668,500	1.75
15	Aksjefondet Avanse, Oslo	610,007	2.12	0	0.00	610,007	1.60
16	Sør-Trøndelag Skogeierforening, Trondheim	518,260	1.80	19,000	0.20	537,260	1.41
17	Namdal Skogeierforening, Namsos	507,609	1.76	23,854	0.25	531,463	1.39
18	Morgan Guaranty Trust Co., Belgia	486,429	1.69	20,312	0.22	506,741	1.33
19	Nidarå Tømmersalgslag, Arendal	485,067	1.68	9,002	0.10	494,069	1.29
20	Vital Forsikring, Oslo	360,123	1.25	113,000	1.20	473,123	1.24
21	Agder Skogeigarlag, Kristiansand S.	403,593	1.40	66,467	0.71	470,060	1.23
22	Norsk Hydro Pensjonskasse, Oslo	440,500	1.53	25,000	0.27	465,500	1.22
23	Morgan Stanley Trust, USA	345,386	1.20	75,396	0.80	420,782	1.10
24	Odin Norge AF, Oslo	25,000	0.09	393,251	4.18	418,251	1.09
25	Orkla ASA, Oslo	104,710	0.36	305,686	3.25	410,396	1.07
Total principal shareholders		19,466,316	67.60	5,857,759	62.21	25,324,075	66.27
Total number of shares		28,795,560	100.00	9,415,557	100.00	38,211,117	100.00

## Shareholder structure as of 31.12.1997



## Key figures related to shares

		1997	1996	1995	1994	1993	1992	1991	1990	1989
Nominal value per share (NOK)		20	20	20	20	20	20	20	20	20
Average number of shares excluding shares held in treasury (1,000)		<b>35,979</b>	32,617	32,430	29,794	26,259	24,251	24,174	24,121	22,286
Average number of shares after full conversion excluding shares held in treasury (1,000)		<b>35,979</b>	38,695	38,508	36,241	32,791	31,399	29,922	26,509	23,388
Dividend per share (NOK)		<b>7.00</b>	7.00	6.00	1.50	1.00	0.00	2.00	3.00	3.00
Price earnings ratio <sup>1)</sup>		<b>13.05</b>	5.28	3.54	27.77	-	-	9.63	3.96	4.61
Payout ratio (%)		<b>43.00</b>	17.30	11.50	21.70	-	-	19.60	9.40	8.30
Number of shares 31.12 (1,000)	A-share	<b>28,796</b>	26,557	26,531	26,199	23,684	21,826	21,826	21,825	21,825
	B-share	<b>9,416</b>	6,084	6,084	5,561	2,631	2,425	2,425	2,425	2,425
	Total	<b>38,211</b>	32,641	32,615	31,760	26,315	24,251	24,251	24,250	24,250
Share prices high (A-restricted) low		<b>296.00</b> <b>190.00</b>	214.00 174.50	233.00 170.00	203.50 140.00	175.50 65.00	127.50 45.00	173.00 73.00	185.00 103.00	186.00 109.00
Trading volume (Oslo Børs)	1.000 stk.	<b>30,500</b>	25,600	28,000	26,192	25,619	30,190	19,571	10,010	16,560
Share prices 31.12.	A-restricted				192.00	174.00	71.00	96.00	125.00	-
	A free	<b>214.00</b>	213.00	185.50	190.00	176.00	76.00	97.50	135.50	166.00
	B-share	<b>200.00</b>	194.50	175.50	184.00	175.00	68.00	95.00	119.00	-
Number of shareholders 31.12.	A-restricted					16,907	16,824	17,067	17,561	-
	A free	<b>17,466</b>	17,456	17,285	17,222	16,106	15,936	16,224	16,811	17,524
	B-share	<b>13,796</b>	14,271	14,605	14,950	15,384	15,196	17,502	16,192	-
	Total	<b>18,075</b>	18,070	17,710	17,503	17,552	17,379	17,501	17,854	17,524
Number of foreign shareholders 31.12.	A-restricted				0	0	0	0	0	0
	A free	<b>186</b>	154	179	164	139	108	100	91	116
	B-share	<b>97</b>	92	127	130	80	98	91	105	-
	Total	<b>208</b>	177	231	222	162	142	112	137	116
Foreign ownership 31.12.	A-restricted					0,0 %	0,0 %	0,0 %	0,0 %	0,0%
	A free	<b>26.0 %</b>	23.6 %	14.2 %	15.9 %	42.7 %	17.0 %	11.7 %	25.1 %	13.7%
	B-share	<b>8.3 %</b>	15.2 %	41.4 %	60.8 %	58.4 %	63.2 %	54.4 %	7.6 %	-
	Total	<b>21.6 %</b>	22.0 %	19.3 %	24.7 %	18.6 %	11.7 %	8.9 %	8.3 %	13.7%
Market value (NOK mill)		<b>8,100.0</b>	6,900.0	6,000.0	5,983.0	4,597.0	1,750.9	2,376.6	3,089.5	4,037.0

1) Price earnings ratio = Share price 31.12: Net earnings per share after tax.  
The share classes A restricted and A free were combined at year-end 1994.



## Continuous focus on profitability

*The forest industry is a cyclical industry, in which economic results fluctuate considerably. Companies' results from year to year must be judged in this context. Over a period of time, Norske Skog has shown good profitability, compared with many of our competitors in the international forest industry. This demonstrates that the company is competitive within its sector. But we cannot be satisfied with the level of results. Historically, it is a fact that profitability is not good enough, neither in Norske Skog nor in the industry as a whole. The international forest industry has had - and still has - a poorer return on capital than many other industries. This is not satisfactory in a global economy where there is keen competition for both markets and capital.*

*To increase our owners' values is a main goal for Norske Skog. It is the Company's declared ambition to offer owners a competitive return on their investments. That is necessary to ensure capital for further development. Norske Skog's most important result goal is, therefore, to achieve a return on total assets of at least 13%, taken as an average throughout an economic cycle. In February 1998 Norske Skog started a three-year profitability programme called "Norske Skog 2000". The aim of the programme is to close the gap between the Group's profitabi-*

*lity goal and its actual earnings.*

*The programme is intended to ensure a continuous improvement in all parts of Norske Skog's activities. For many years we have focused strongly on rationalisation and productivity enhancement in the operation of our mills. These efforts will continue, and intensify. At the same time, we must become more skilful in exploiting synergies and exchanging experience among the Group's units and functions. There is still significant potential here. Logistics is another area in which we can still achieve gains.*

*We are also reviewing our administrative processes, with a view to improvement and streamlining. This includes, among other things, an energetic emphasis on the IT side, where several large projects were started during 1997. Administrative changes mean, however, much more than finding new IT solutions. It is just as much a matter of organisation and finding new ways of working. In short, working smarter. The drive for greater profitability cannot be a short-term, one-off effort. It must be an ongoing process which creates and maintains a culture committed to continuous improvement throughout the entire organisation. Consequently, everyone in Norske Skog can contribute to improving profitability and increasing the Company's value.*



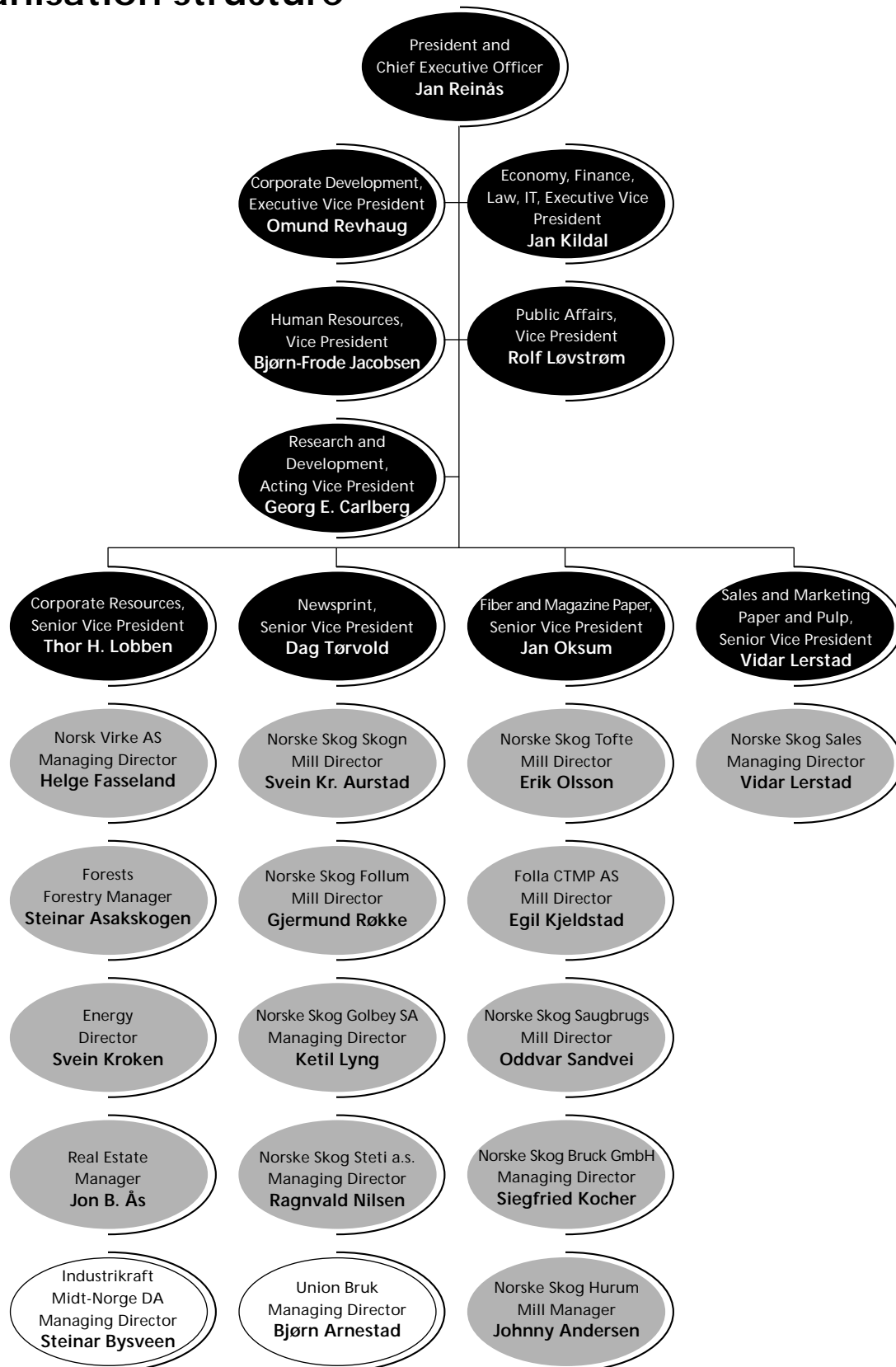
*France leads the world when it comes to magazine readership - not quite so high where newspaper readership is concerned. Literally thousands of magazines are published there - not least specialised magazines. In consequence, this type of publication has a relatively large share of the advertising market in France.*

Jan Reinås

# Organisation structure

Corporate center

Business units



Norske Skog's building materials business is organised in two subsidiaries - Forestia AS and Norske Skog Flooring AS. Chairmen of the Board of directors are, respectively, President and CEO Jan Reinås and Executive Vice president Jan Kildal.

## Group administration in 1997

Norske Skog's management has concentrated on implementing the Group's strategy and development plan.

### Group development

In view of Norske Skog's ambitions to continue growing - primarily internationally - the Group's organisation and skills are being adapted to this end. The business development department was strengthened in 1997, and given responsibility for the operation of production activities outside Europe.

Norske Skog's strong financial position, with an equity to assets ratio of 52%, provides latitude for further developing the Group. In October, Norske Skog signed an agreement with Eksportfinans and a group of underwriting banks regarding a USD 187 million loan facility. The loan has a life of ten years and will be used for major investment projects, primarily PM 2 at Norske Skog Golbey.

### New and better working methods

In 1997 Norske Skog initiated a two-year programme to improve the commercial and administrative routines within the Group. This involves a reorganisation of its administrative processes and IT-based systems. The programme will, in total, lead to new and better working methods in administration, business operation and financing, and is expected to result in significant streamlining, as well as ensuring that all systems are adapted to handle the year 2000 and the introduction of the Euro.

The most comprehensive single project within the programme is GLOSS (Global Logistics and Sales Systems), which has an overall investment budget of NOK 100 million. This project aims to streamline all routines connected with Norske Skog's global paper sales and distribution. The system will be adopted by Norske Skog Bruck and a number of our sales companies in autumn 1998. In addition, a new budget management programme is being developed.

### More employees outside Norway

The recruitment and development of employees has high priority. At the end of 1997 the Group had 140 apprentices under contract. Norske Skog cooperates with colleges and universities regarding doctoral studies, project- and degree theses and vacation jobs for students.

Norske Skog is in continuous contact with several European management studies institutes, and in 1997 several of its key management people participated in programmes at such institutes. The international mobility of the Group's employees has increased - affecting managers, project group people and operatives. A special administrative section has been created to stimulate and administrate rotation within the Group, with particular focus on international rotation.

Norske Skog decided in 1997 to focus more strongly on Health, the Working Environment, and Safety (HWS). A network organisation has

been established for managers and people with HWS responsibilities within the Group.

### Increased R & D activity

Norske Skog Research (previously Norske Skog Teknikk) - the Group's central unit for research and development - cooperates closely with areas, business units, the sales organisation and external institutes. Its programme for 1998 comprises 20 different projects. Resources have also been set aside which will be able to undertake contract work for the mills, as and when these need to have special R & D work done. In addition, a new productivity improvement area has been established, at Norske Skog Skogn. During 1998 a new R & D group will be created, at Norske Skog Bruck in Austria, concerned with coating and surface treatment of printing paper.

The different kinds of technologies needed to close the water systems in a newsprint/magazine paper mill have been tested. Concepts aimed at closing the water systems of sulphate pulp bleaching plants, in the future, are being worked out in parallel.

### New Corporate Centre

At the turn of the year 1998/99 Norske Skog will move its Corporate Centre to new premises at Oxenøen, on the Fornebu peninsula in the district of Bærum, near Oslo. These will provide up to date office accommodation, under one roof, for all of the Group's functions.





## AREA PAPER

# Record production in an uneven market

*Even with some curtailments on output at the start of the year, Norske Skog's production of printing paper passed the 2 million tonne mark in 1997 for the first time ever - reaching 1,427,000 tonnes of newsprint and 716,000 tonnes of magazine paper. A further increase is foreseen in 1998.*



*Consumption of newsprint is closely correlated with economic developments in a country or region. During the period 1985-95 consumption of newsprint in Asia (ex Japan) more than doubled - from 2.1 million tonnes to 4.6 million tonnes. That corresponds to annual growth of 8.1%.*

## Market conditions

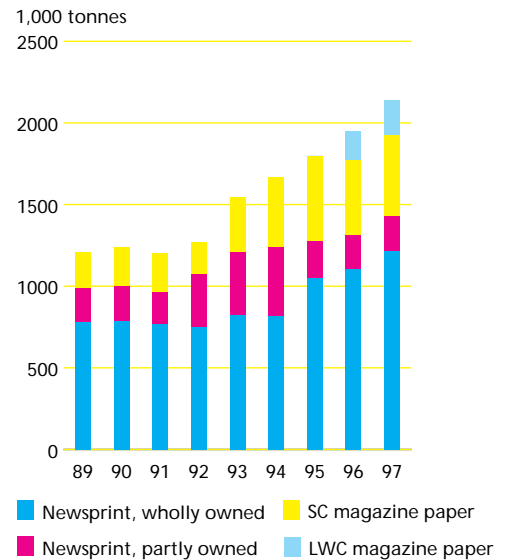
At the start of 1997, conditions on the printing paper market were affected by the difficult supply situation in the second half of 1996, leading to a significant price decline. The magazine paper market improved quite early in 1997, however. Overall, Norske Skog's deliveries of wood-containing printing paper to Western Europe were higher than ever.

Global demand for newsprint developed favourably in 1997, and total deliveries of newsprint to Western Europe rose by 5%. High demand in the US, combined with a strong USD, meant that deliveries from Canada to Western Europe declined in 1997. Because contracts for newsprint in Western Europe are concluded on an annual basis, no price increases were achieved during the year. Increased consumption in overseas markets, too, made quarterly price increases possible in these markets. Taken as a whole, however, newsprint prices were 15-20% lower than in 1996. Norske Skog increased its total newsprint sales, in volume terms, by about 10% compared with the previous year.

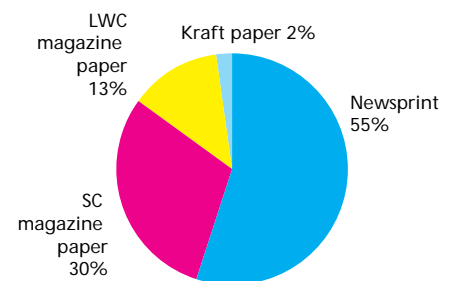
A final agreement regarding the purchase of the Roto newsprint mill in the Czech Republic - Norske Skog Steti - was signed on 26.11.1997. With a capacity of about 100,000 tonnes/year, this mill, together with Norske Skog Bruck, gives Norske Skog a good foothold in Eastern and Central Europe. Consumption of printing paper in this area shows relatively strong growth.

Deliveries of magazine paper also grew strongly in 1997. The growth amounted to no less than 25% and 10% for LWC and SC respectively. Capacity utilisation in the European magazine paper industry was therefore signi-

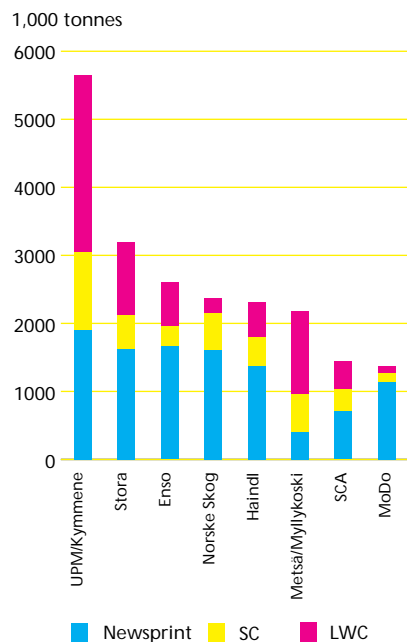
## Production publication paper



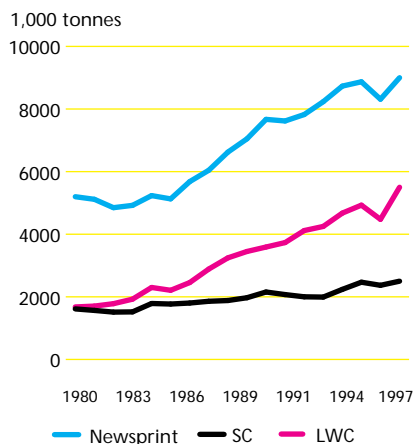
## Operating revenue



### European producers of printing paper



### Demand for publication paper in Western Europe



ificantly higher in 1997 than in 1996. The high demand for LWC made it possible to implement price increases in both the third and fourth quarters. After the summer holiday, demand for SC also rose. In Europe, the price of SC was stable, while a small price increase was achieved in the US.

Growth in printing paper capacity is at present low. No new newsprint machine came on stream in either Western Europe or the US in 1997, and none will do so in 1998 either. In 1998 one new magazine paper machine will come on stream in Europe, and one in North America. But the increase in capacity will be partly offset by the shutdown of existing LWC production in France.

For special paper, the market situation in 1997 varied - depending on grades - from satisfactory to poor.

### Production

The market situation at the beginning of 1997 made it necessary to curtail production. Market balance improved, after some time, and led to high capacity utilisation at the Group's mills even before the summer. The Group's mills produced a total of 2,172,000 tonnes of paper, comprising 1,427,000 tonnes of newsprint (including the affiliated company A/S Union), 716,000 tonnes of magazine paper and 29,000 tonnes of kraft paper. This is an increase of 9% from 1996, and the highest production volume Norske Skog has ever achieved.

The rise reflects increased operating time and higher productivity. Norske Skog Golbey and Norske Skog Bruck continued to improve productivity and - like Norske Skog Skogn and Norske Skog Follum - they set new output records. The Group is also beginning to reap the benefit, in the market, of its investment in special grades at Norske Skog Follum.

### Plant and investment

Investment activity in 1997 was dominated by the construction of a new newsprint machine at Golbey. The project is going ahead according to plan, and the machine will start up during the first quarter of 1999. This project will boost Norske Skog's capacity for newsprint production to more than 1.9 million tonnes, or 5% of world capacity.

At Norske Skog Skogn, work was completed during the year on the construction of a new biological effluent treatment plant and a biofuel boiler, at a total investment cost of nearly NOK 300 million. The facilities have been started up and are performing well. Norske Skogn now has Norway's largest biofuel plant, with an output of 80 MW and an achievable capacity, in practice, of 550 GWh of thermal energy per year.

At Norske Skog Saugbrugs it has been decided to rebuild PM 5, at a total cost of NOK 400 million. That will bring production from this paper machine, too, up to SC A-grade. The

<i>Area Paper</i>		1997	1996	1995
Operating revenue	NOK million	9,284	9,493	8,066
Operating expenses	NOK million	7,293	6,563	5,777
Depreciation	NOK million	857	852	581
Operating profit	NOK million	1,134	2,078	1,708
Operating margin	%	12.2	21.9	21.2
<hr/>				
Total assets	NOK million	12,316	11,191	10,085
Current assets	NOK million	2,668	2,273	2,555
Fixed assets	NOK million	9,648	8,918	7,530
Return on total assets	%	9.8	19.9	23.1
Export share	%	90	90	90
Number of employees		3,436	3,260	2,799

project is currently being carried out and is scheduled for completion around end April/early May 1998.

At Norske Skog Follum work has started on a new wood handling plant at a total investment cost of about NOK 300 million. It is due for completion during 1998.

Other investments at the paper mills concern a number of smaller projects.

**Personnel, organisation and the work environment**

At the end of 1997 there were 3,436 people on the Area Paper payroll. The net increase of 98 from 1996 includes Norske Skog Steti, with 238 employees.

There were no lay-offs during 1997 at any of our mills.

At the mills, absence due to illness and injuries at work were considerably down on previous levels. The Group has sharpened its focus on this area, and the mills' ambition is to achieve further improvements in 1998.

The integration of Norske Skog Steti into the Group's organisation is well under way, and as early as September Norske Skog had leading personnel in place in the company's organisation.

Norske Skog Follum is carrying out an organisational development project in close cooperation with the employees and their organisations. The aim is to adapt organisation and skills at the mill to meet new requirements.

**Environment**

With the new biological effluent treatment plant at Norske Skog Skogn on stream, all the Group's printing paper mills have biological treatment of process water.

All the mills met permitted emission limits during 1997.

Following completion of a number of projects, no new official requirements are envisaged which will entail major environmental investments at Norske Skog's paper mills.

**Future prospects**

For newsprint, markets in both Europe and North America are expected to develop favourably in 1998. The largest relative growth is foreseen in Central and Eastern Europe. No new newsprint capacity will come on line in Western Europe in 1998, but the market balance may be negatively affected by the situation in South East Asia. Turmoil on the financial markets in South East Asia, and local capacity increases, will probably reduce the region's need for newsprint imports.

Norske Skog expects the positive trend for magazine paper to continue during 1998. Good market balance and high capacity utilisation made it possible to implement increases in magazine paper prices from 01.01.1998.

For magazine paper, too, the situation in Asia is an uncertainty factor, since it could reduce the region's import needs. If there should be a rise in exports from Asia of certain grades of wood-free paper, that could, in addition, have a negative impact on the market balance for magazine paper in Europe and North America.

The situation for special paper is expected to be somewhat better than in 1997.

**Mills**

*Newsprint*

- Norske Skog Skogn
- Norske Skog Follum
- Norske Skog Golbey, France
- Norske Skog Bruck, Austria
- Norske Skog Steti, Czech Republic
- A/S Union (affiliated company)

*Magazine paper*

- Norske Skog Saugbrugs
- Norske Skog Bruck, Austria

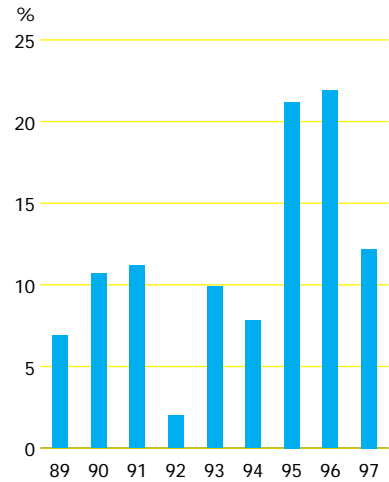
*Special paper*

- Norske Skog Hurum

**Products**

*Newsprint:* Used for newspapers and to some extent for catalogues and free sheets.

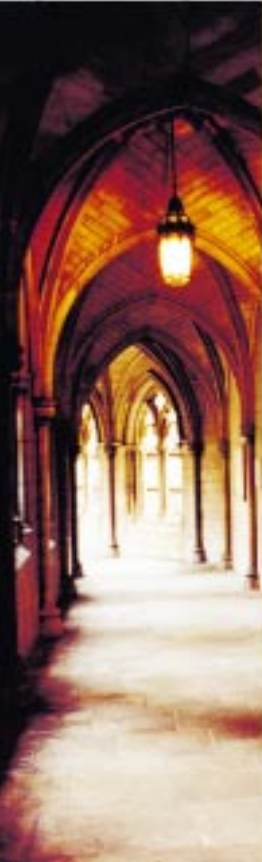
**Operating margin**



*SC magazine paper:* Used mainly for magazines, but also for catalogues and free sheets.

*LWC magazine paper:* Used for magazines, catalogues, free sheets and brochures requiring high quality print characteristics.

*Special paper:* Used for a wide range of packaging and office purposes.



## AREA FIBRE

# Large stocks resulted in low prices

*Over-capacity and large stocks meant that pulp prices were at a very low level throughout 1997. After some improvement during the autumn, the market weakened again toward the end of the year.*



*The number of specialised magazines has risen steeply during recent years. Niche publications like this give advertisers good coverage of special target groups they wish to reach, such as couples who are about to marry. The latter will find both editorial and commercial information in wedding magazines, ahead of the great day. Publications of this kind demand high print quality, and are often printed on coated magazine paper (LWC) - from, among others, Norske Skog Bruck in Austria.*

### Market conditions

The market for bleached long-fibre sulphate pulp continued difficult in 1997. Pulp stocks in the NORSCAN area (the Nordic countries and North America) were at a high level throughout the whole year - about 1.8 million tonnes - while about 1.2 million tonnes is regarded as providing a balanced market. At the end of 1997 NORSCAN stocks stood at 1.75 million tonnes.

The list price for bleached long fibre sulphate pulp was USD 560/tonne at the beginning of 1997, and reached a low of USD 520/tonne at the end of the first quarter, before it again rose gradually to USD 600/tonne in October. At the end of 1997 the price was USD 580/tonne. The price of short fibre eucalyptus pulp showed a parallel trend, and at the end of 1997 it was ECU 490/tonne, compared with ECU 420/tonne at the start of the year.

The imbalance in the market was not due to demand - which rises ever year - but to excessive capacity growth. During 1997 capacity rose by about 1 million tonnes to about 37 million tonnes. An increase of the same order is expected in 1998.

The market situation for CTMP pulp has been even poorer than for sulphate pulp - due to significant over-capacity.

### Production

Norske Skog Tofte produced 340,000 tonnes of bleached sulphate pulp in 1997 - 13,700 tonnes more than in 1996. Of total output, 147,700 tonnes was eucalyptus pulp. The mill was shut down for a total of four weeks in 1997 - mostly in the second half of the year - for necessary maintenance and rebuilding of the recovery boiler.

Norske Skog Folla produced 63,500 tonnes of CTMP pulp in 1997 - 3,100 tonnes more than in 1996.

Owing to the market situation, the mill was obliged to curtail production significantly in 1997, as in the previous year.

### Plant and investments

Norske Skog decided in 1997 to carry out the "Tofte 400" project during the period 1997-2001. It has a total investment budget of NOK 600 million, and its aim is to increase the mill's competitiveness and profitability, achieve quality improvements and develop pulp products adapted to customers' needs. It is also intended to improve the environment locally by reducing emissions of odour, noise and dust. The upgrade means that Norske Skog Tofte's capacity will rise from 360,000 tonnes/year to 420,000 tonnes/year during the period.

The first stage of "Tofte 400" was completed in 1997. It covered rebuilding of the recovery boiler to increase capacity and improve operational availability. Stage two will be carried out in 1998 and aims to improve the quality of the finished product and to reduce emissions to air.

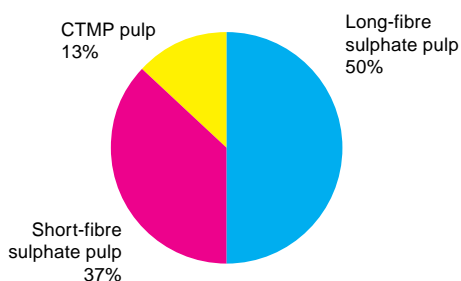
At Norske Skog Folla a new wrapping line was installed, and several smaller investments were made.

### Personnel and the working environment

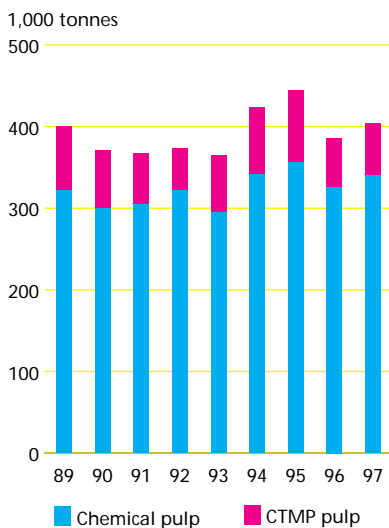
Norske Skog Tofte is continuing its drive to increase competence and streamline its organisation. A teamwork training course for all personnel was completed in 1997. The number of people on the mill's payroll fell during 1997 by 13 to 384.

At Norske Skog Folla the shift system was changed to a continuous five-shift system. At this mill, too, there has been a drive to upgrade competence and develop the organisation. The workforce declined by 6 to 79.

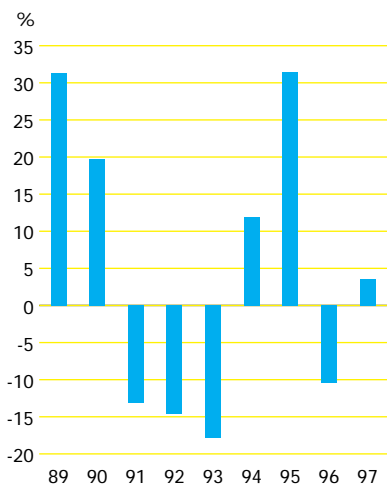
### Operating revenue



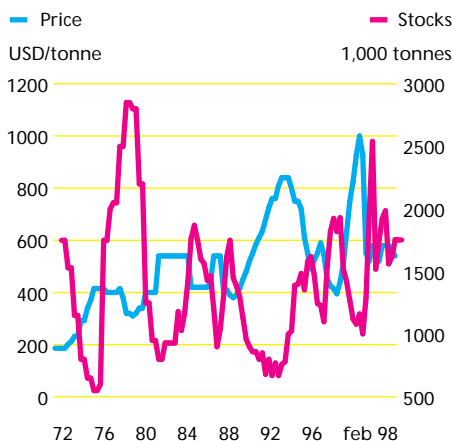
### Production of pulp



### Operating margin



### List price bleached longfibred pulp/NORSCAN stocks



NORSCAN = Producers stocks in the Nordic countries and North America.

In 1997 the number of injuries involving absence from work rose at both Norske Skog Tofte and Norske Skog Folla. Injury figures are too high, and priority is being given to improving the situation, as well as to further increasing productivity and profitability.

Long-term absence due to illness was high at Norske Skog Tofte in 1997, and in 1998 the focus will be on rehabilitation measures and systematic remedial training.

### Environment

Norske Skog Tofte operated well within permitted emission limits in 1997. As part of the "Tofte 400" programme, there will be a further reduction in emissions to air affecting the local environment.

Norske Skog Folla stayed within all its emission limits in 1997, apart from one dust emission incident.

Both mills are working to achieve EMAS (environmental standard) approval by the end of 1998.

### Future prospects

During the next few years, capacity growth for chemical pulp will be somewhat higher than the expected rise in demand. The new capacity will come mainly in South East Asia and South America, and will be for short fibre pulp.

The situation in Asia causes great uncertainty as to how pulp markets will develop in 1998. Production curtailments will be needed this year, to keep the inventory situation under control. Prices declined during the first quarter

of 1998, but a more favourable trend is expected in the second half of the year.

The market for CTMP will be affected by overcapacity in 1998, once again, and production curtailments will be necessary.

### Mills

Norske Skog Tofte, bleached sulphate pulp, long fibre and eucalyptus.  
Norske Skog Folla, CTMP.

### Products

*Bleached sulphate pulp:* Used to give magazine paper necessary strength, as well as a raw material for fine paper, soft paper and special paper.

*CTMP:* Used as raw material for tissue, writing and printing paper and for absorbent products.



Newspaper readership in Europe is very stable. No dramatic changes have taken place in any country during the past 10-15 years, although the market shares of particular papers within the different countries may fluctuate somewhat. Norske Skog supplies newsprint to eight of the ten largest-circulation newspapers in Europe. The Times, founded in 1785 as The Daily Universal Register, is one of the veterans of Europe's press.

Area Fibre		1997	1996	1995
Operating revenue	NOK million	1,376	1,222	2,171
Operating expenses	NOK million	1,227	1,228	1,373
Depreciation	NOK million	100	121	116
Operating profit	NOK million	49	-127	682
Operating margin	%	3.6	-10.4	31.4
Total assets	NOK million	1,237	1,249	1,398
Current assets	NOK million	342	358	461
Fixed assets	NOK million	895	891	937
Return on total assets	%	4.5	-9.5	50.5
Export share	%	64	67	68
Number of employees		468	521	532



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Human shield fear as Iraqis



## BUILDING MATERIALS

# Major changes in 1997

***Norske Skog's Building Materials area was reorganised as two new subsidiary companies in 1997. A new, large production line for particle board was started up. In addition the activity was expanded by three new production units.***

### **Forestia AS**

With effect from 01.07.1997, the Group's sawn timber and board business was organised under a single management as a separate subsidiary company, Forestia AS. The company became formally operative from January 1998.

### **Sawn timber**

#### *Market conditions*

The international sawn timber markets were satisfactory during the first half of the year, and it was possible to increase prices. Germany is the most important export market, while other important markets outside Norway are Denmark, England and the Netherlands. Exports accounted for 37% of turnover in 1997.

During the autumn, record-high output in Sweden and Finland - combined with a significant weakening of the Japanese market - led to imbalance between supply and demand. That led to a steep decline in prices of spruce products, which make up the largest sawn timber product group.

Underlying demand for sawn timber has, however, been generally good in both Norway and Europe. On the Norwegian market, chains of building material outlets have further strengthened their position and are the most important customer group.

#### *Production*

Production was satisfactory and out-

put volume (including Hedalm's mills) totalled 721,000m<sup>3</sup>. Total Norwegian production reached about 2.4 million m<sup>3</sup> of sawn timber, the same level as in 1996. In 1997, too, imports of timber from Russia and the Baltic states were necessary to meet raw material requirements. In 1997, Forestia Van Severen became the first Norwegian sawmill to achieve EMAS/ISO certification.

#### *Investments*

Following a period in which investments were at a high level, the total for the sawmills in 1997 was NOK 49 million.

#### *Personnel and organisation*

There were 910 employees at the end of 1997. The net increase of 67 people from 1996 reflects the acquisition of three new units. Absence due to illness increased somewhat, while the injury rate declined slightly. A limited number of temporary lay-offs were implemented in 1997.

As part of a drive to improve capacity utilisation, structural changes are planned for 1998. The building materials outlets Namsenbygg, Lundby Brumunddal and Lundby Rena were sold in 1997, and it is expected that the building materials business Saugbrugs Trelast will be sold during the first half of 1998.

#### *Future prospects*

Owing to overcapacity and high raw material prices, profitability in the sawn timber business will remain under pressure in 1998. There is a need for structural changes, productivity improvements and cost-cutting measures, combined with the development of new products which can stand a higher level of costs.

### **Board**

#### *Market conditions*

There was good demand for particle board on all the most important markets in 1997. It was also possible to achieve small price increases, but these were not enough to compensate for higher production costs.

Consumption of particle board in Norway rose by 7% in 1997 to 274,000 m<sup>3</sup>. Norske Skog's share of this market is 56%. Export sales were somewhat higher than in 1996, totalling 180,000 m<sup>3</sup>.

#### *Production*

It has taken somewhat longer than expected to run in the new particle board line at Braskereidfoss. Productivity and quality are developing favourably.

New output records were set during 1997 by the particle board mills Forestia Agnes and Forestia Kvam, and by Forestia Grubhei, which makes I-beams. Total production of particle board reached 368,000 m<sup>3</sup>, against 347,000 m<sup>3</sup> in 1996.

Forestia Kvam achieved ISO 14001 approval in 1997 - probably the first particle board mill in Europe to do so.

#### *Investments*

Investments totalled NOK 77 million, 85% of which was related to the new particle board line at Braskereidfoss.

#### *Personnel and organisation*

At the end of the year the workforce in this business numbered 432. There were no temporary lay-offs during 1997. In 1997, as in the previous year, the rate of absence due to illness declined slightly, and is now just over 5%. Injury rates are, however, too high.



### Future prospects

Good activity is envisaged in all the main markets for particle board during the first half of 1998. The greatest challenge in 1998 will be to get the new production line run in as rapidly as possible, so that it can achieve the intended levels of productivity and quality.

### Norske Skog Flooring AS

With effect from 01.06.1997, Langmoen Parkett AS in Brumunddal, and Fibo-Trespo AS in Lyngdal, were merged to form Norske Skog Flooring AS.

1997 was a poor year, as regards results. This was due mainly to significant pressure on prices of laminated products, as well as the start-up of production and the introduction of the new Alloc products on several European markets, in addition to their test launch in the US.

### Market conditions

In 1997 sales volumes rose by 12%, for laminated flooring, and 8%, for parquet. Owing to a steep rise in international production, prices for laminated flooring fell considerably in both Europe and the US. Prices for parquet in local currencies were stable. For

laminated flooring, Norway is the largest single market, while the US is the largest export market.

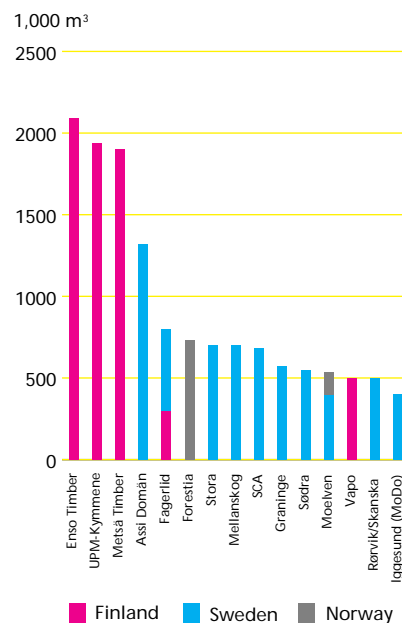
The new product category, Alloc laminated flooring - a type of flooring that does not need glue - was launched in Europe in the first half-year, and achieved a satisfactory volume growth during the year. The product was launched in the US in January 1998. Laminated flooring is showing good growth in Europe, and in the US a continued very high rate of growth is expected.

Demand for parquet flooring rose in 1997. Langmoen Parkett strengthened its position on the domestic market, achieving a 13% increase in turnover. Sales to German-language parts of Europe now account for 43% of parquet turnover.

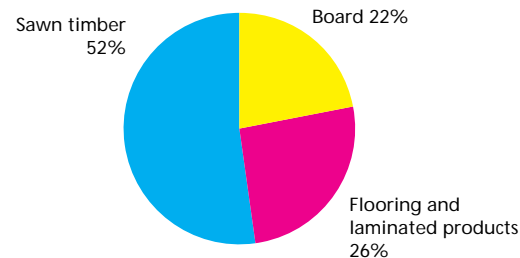
### Production, plant and investment

Improved efficiency and reduced down time boosted parquet output by 14%, compared with 1996. Alloc production line no. 2 was started up in the spring of 1997, and output of Alloc flooring increased from 300,000 m<sup>2</sup> in 1996 to 700,000 m<sup>2</sup> in 1997. Quality and productivity developed very well during the second half-year.

### Largest producers of sawn timber in nordic countries



### Operating revenue



Building materials		1997	1996	1995
Operating revenue	NOK million	2,667	2,579	2,333
Operating expenses	NOK million	2,520	2,421	2,123
Depreciation	NOK million	163	131	114
Operating profit	NOK million	-16	27	96
Operating margin	%	-0.6	1.0	4.1
Total assets	NOK million	2,119	2,313	1,503
Current assets	NOK million	778	684	674
Fixed assets	NOK million	1,341	1,629	829
Return on total assets	%	0.6	2.8	7.9
Export share	%	38	33	37
Number of employees		1,818	1,862	1,681

At the parquet plant only minor investments were made. At the Lyngdal plant two new production lines were put into operation, one for Alloc and one for laminated flooring.

#### *Personnel and organisation*

As a consequence of the streamlining and rebuilding of parts of the production facilities at the Brumunddal parquet plant, the workforce there fell by 36 to 225 in 1997. The workforce at the Lyngdal plant fell by 20 to 229. During the year the central organisational units of Norske Skog Flooring AS - including the market and sales areas - were set up and staffed.

## **Plants**

### **Forestia AS**

#### *Sawmills:*

Forestia Våler  
Forestia Østerdalen  
Forestia Langmoen  
Forestia Løten  
Forestia Elverum  
Forestia Romedal  
Forestia Sokna  
Forestia Telemark  
Forestia Numedal  
Forestia Van Severen

#### *Particle board mills:*

Forestia Braskereidfoss  
Forestia Agnes  
Forestia Kvam

#### *Trade and further processing:*

Forestia Gol  
Forestia Vikersund  
Forestia Hen  
Forestia Hen Treimpregnering  
Forestia TreNova  
Forestia Grubhei  
Forestia Saugbrug Trelast

### *Future prospects*

Demand for flooring products is rising, both in Norway and on export markets. Parquet prices are expected to rise somewhat, while overcapacity and keen competition will cause further price pressure on laminated flooring. Norske Skog Flooring AS will take its share of growing consumption by focusing on a broader product range and by strengthening distribution in all market segments.

### *Products*

Sawn timber for building and construction use, panelling and special grades, beams, components for the furniture industry, particle board for the building, furniture and interior products industries.

### **Norske Skog Flooring AS**

Norske Skog Flooring AS, Lyngdal  
Norske Skog Flooring AS,  
Brumunddal

### *Products*

Parquet flooring, laminated flooring, laminates, laminated products.

### **Fibo-Trespo AS**

Fibo-Trespo AS, Lyngdal

### *Products*

Bathroom panelling, counter tops, elements, dividing walls.

### **Fibo-Trespo AS**

With effect from 01.09.1997 the company was hived off from Norske Skog Flooring AS. Results were good in 1997, reflecting high sales of bathroom panelling. At the end of the year the company installed a new profiling line for panelling. The workforce numbered 60 at the year's end. Prospects for 1998 are favourable.

*The Japanese are fond of reading, and account for nearly ten per cent of world printing paper consumption. Some of the world's largest newspapers are published in Japan*





## AREA RESOURCES

# Focus on energy

*This area includes the Group's forest land estates, its hydro power stations, procurement of electric power, management of the Group's real estate in Norway, and Norsk Virke AS, which is responsible for purchases of round timber, sawmill chips and waste paper.*

### Timber and waste paper

Norsk Virke AS is responsible for supplies of pulpwood and chips to the Group's pulp and paper mills in Norway, and Union. Norske Skog Saugbrugs was supplied by Østfold-tømmer ANS until September 1997, when Norsk Virke took over responsibility. The company has also been responsible for supplying sawmill timber to the sawmills Van Severen, Sokna, Numedal, Telemark and to Hen, as well as raw material for the particle board mills. As a consequence of the establishment of Forestia AS, Norsk Virke no longer procures sawmill timber for the sawmills and raw materials for the particle board mills, with the exception of the Van Severen sawmill at Namsos.

The agreement with Sande Paper Mill on procurement of timber and waste paper terminated at the end of 1997.

Cooperation with M. Peterson & Søn AS regarding the procurement of brown waste paper through AWA AS has also ended. Norsk Virke will play a key role in procuring waste paper for the deinking plant at Norske Skog Skogn.

Munkedal Skog AB, a timber trading company in Sweden, has been acquired with effect from the turn of the year 1997/98 to strengthen Norske Skog Saugbrugs' position in the Swedish timber market.

Norsk Virke is taking on responsibility for operating Norske Skog's procurement network, and for inward transport by road and rail in Norway.

Purchases of pulpwood and chips for our Norwegian units totalled about 6.7 million m<sup>3</sup> in 1997, of which Norsk Virke accounted for about 5.8 million m<sup>3</sup>. Imports amounted to 1.8 million m<sup>3</sup>. About 35% of the pulpwood was imported, and about a quarter of that was eucalyptus for Tofte. Most of the coniferous timber imported comes from Sweden.

The collection of waste paper in Norway has risen very steeply during the past few years. Norske Skog's agreement with the Environment Ministry has made it possible to find buyers on export markets for the large volumes involved. The planned deinking plant at Norske Skog Skogn will help ensure sales of Norwegian waste paper.

Norske Skog is concerned to ensure and to document that wood for the Group's mills comes from sustainable forestry. The Group supports the broadly-based forest project "Living Forests". This project, which is in its concluding phase, aims at national standards for sustainable forestry and certification methods which are adapted to the ownership structure of forestry in Norway.

### Forests

Total area of Norske Skog's forest land is 180,000 hectares, of which 81,000 hectares is productive forest. Harvesting and cultivation of the forests went according to plan. A total of 81,660 cubic metres was harvested in 1997

Registration of forest resources in the county of Nord-Trøndelag was concluded in the summer of 1997. Together with recent records covering the other areas, this data will be the basis for operation of the forests in the coming years.

Environmental surveys carried out in recent years were followed up by a "Naturvårdsavtal" ("Environmental Protection Agreement") covering 42 hectares of the Group's forests in Sweden. The intention is that the area covered by these agreements shall be managed to conserve or foster environmental qualities. The agreements are being concluded for periods of 50 years, with the Swedish Skogsvårdstyrelsen (Forest Protection Authority) as the other party to the agreement.

The Skogvårdstyrelsen has the authority to decide on all the measures to be carried out.

### Energy

Norske Skog's operations are energy-intensive, and consumption of electric energy at its plants in Norway in 1997 totalled 4,504 GWh. Power generated by the Group's own hydro plants accounted for 364 GWh, back-pressure power amounted to 200 GWh and deliveries by Statkraft were about 2,400 GWh. The rest was bought under contracts of varying duration with other suppliers in the market.

Production and consumption of thermal energy totalled 5,888 GWh, including 4,842 GWh in Norway. In the Group's Norwegian units, bioenergy accounted for 60% and recovered electric power for 23% of total heat requirements.

Norske Skog wishes to support an increased use of bioenergy, in order to reduce consumption of oil and electricity for heating purposes. The Group has therefore taken a stake in Bio-Varme AS, a recently formed bio-energy company.

The Group needs predictable, long-term power supply arrangements that will ensure the competitiveness of its Norwegian printing paper mills. A plan of action comprising four elements was decided on in 1997. These four elements are industrial power contracts, imports, bioenergy and a larger degree of self-sufficiency.

Norske Skog believes that Norwegian gas resources should be used to strengthen the Norwegian power supply balance and to increase the share of the Group's electricity consumption from own sources.

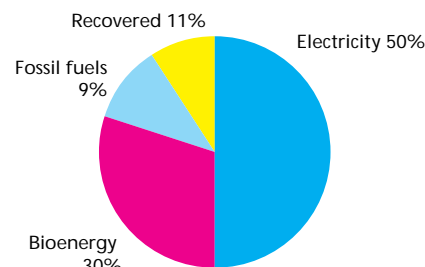
In partnership with Elkem and Statoil, Norske Skog has therefore established Industrikraft Midt-Norge

DA to build and operate a gas-fired cogeneration plant located at Norske Skog's Skogn paper mill. The cogeneration plant will produce about 5,600 GWh per year, meeting a third of Elkem's and Norske Skog's electric power requirements. Integrating the cogen plant with the paper mill at Skogn will make it a very efficient and environment-friendly gas-fired generating plant, in an international context - due, among other things, to the mill's need for process heat. Industrikraft Midt-Norge plans to file an application in the summer of 1998 for permission to build the cogen plant.

### Real estate

Building of the new Corporate Centre at Oxenøen Bruk, near Oslo's Fornebu airport, is proceeding according to plan. The move to the new Centre is planned for the turn of the year 1998/99.

### Energy consumption (electricity and thermal energy) by sources 1997 - 11,454 Gwh



### Raw material purchases

	Round timber and chips (m <sup>3</sup> )	Waste paper (tonnes)
Norsk Virke, from Norway	4.0 million	
Norsk Virke, imports	1.7 million	
Other Norwegian suppliers	1.0 million	
Other imports	0.1 million	
Mills outside Norway	0.5 million	312,000
	7.3 million	312,000

## RESEARCH AND DEVELOPMENT

# Focus on mechanical pulp

*Norske Skog's R & D unit, Norske Skog Research (formerly Norske Skog Teknikk), performs research and development work for the Group in close cooperation with the mills' own development departments. Norske Skog Research was established in 1989 and consists today of four departments: Fibre/Cellulose, Mechanical pulp, Paper and Environment, as well as a group, established in 1997, which works on measures to improve productivity. Norske Skog Research today has 35 employees.*

In 1997 the unit was much concerned with improving the process for making mechanical pulp and the quality of this pulp, in view of the fact that mechanical pulp is the main raw material for the Group's paper production. One result of this work is that improved technology is being adopted at both Follum and Saugbrugs. Follum will be the first mill in the world to install refiner technology which employs higher pressure and greater rotation speed. This produces pulp with improved fibre characteristics, while at the same time reducing energy consumption. Where mechanical pulp is concerned, the demand for more even quality is constantly growing, and because of the varying quality of the raw material, selective treatment of the fibrous material is needed to achieve a homogenous end product. At Saugbrugs this has been taken into account, by removing large particles which are given separate refining treatment. This gives the paper a better surface and consequently improved printing characteristics.

Market pulp from Tofte competes in the market with sulphate pulp from many other producers. It has therefore been considered important to enable the mill to tailor pulp for the different paper grades in which it is to be used. Most of the projects in the Fibre/Cellulose department have been dedicated to this problem. Tofte's raw material comes from different parts of the country, and therefore has varying natural qualities, including different fibre length. This has been exploited by sorting the pulp wood, so that pulp grades can be made with the desired fibre length and thus the desired strength potential.

Regarding Norske Skog's main product, wood based printing paper, the demands of the market are becoming tougher. Printing presses are constantly undergoing technological improvements, and at the same time printing methods are changing, reflecting - among other things - environmental and productivity requirements. For example, continuous efforts are being made to find substitutes for the solvent-based inks used in rotogravure. At the same time it is apparent that a switch to water-based printing ink will make quite different demands on the paper's dimensional stability, on both a micro and a macro scale. Colour pictures are being increasingly used in newspapers, magazines and free sheets. This also requires higher quality paper, both as regards printability and runnability. New modifications of the offset process, such as - for example - anhydrous offset and single fluid offset, may prove to require other paper characteristics. Norske Skog Research works closely with Technical Customer Service at the mills concerning problems relating to the runnability and printability of their paper.

A great deal of work was done during 1997 on the improvement of existing paper grades and the development of potential new grades. These efforts have largely concerned production at Follum, Saugbrugs and Golbey.

In the Environment department work is proceeding on projects concerned with reducing water consumption at our mills, and at finding the most environment-friendly ways of treating sludge and ash generated by production processes.

## Corporate Assembly

### Nominated by the shareholders

Ivar B. Korsbakken, Oslo, chairman (27)  
 Karl Stalleland, Grimstad, vice chairman  
 Bjørn Arnestad, Stabekk  
 Bjørn Asp, Steinkjer  
 Bjørn Blakstad, Sørumsund (148)  
 Kjell Brandtsegg, Steinkjer (3,282)  
 Trygve Bruvik, Bergen  
 Einar Gjems, Rena (100)  
 Tellef Harstveit, Åmli  
 Pål Haugstad, Ringeby (66)  
 Kurt Jessen Johansson, Mosjøen (194)  
 Idar Kreutzer, Oslo  
 Ola R. Kristiansen, Halden (413)  
 Tore Lindholt, Skjetten  
 Johan Olaf Melø, Kvelde  
 Torstein A. Opdahl, Namnå (99)  
 Dieter Oswald, Bø i Telemark (560)  
 Tom Ruud, Oslo  
 Per Stamnes, Hønefoss (110)  
 Kjell Stendahl, Spillum (60)

### Deputy members

1. Tom Hansson, Oslo  
 2. Lars Wilhelm Grøholt, Hov (51)  
 3. Knut Reinset, Ålvundfjord (86)  
 4. Arne Bakken, Trysil (4)  
 5. Jens Nicolai Jenssen, Hommelvik (238)  
 6. Per Kjelstad, Sande i Sunnfjord

### Nominated by the employees

Iver Engebretsen, Follum  
 Steinar Voldseth, Skogn  
 Tor Salater, Skogn (55)  
 Vidar Israelsson, Hurum  
 Sverre Abrahamsen, Lyngdal  
 Ruth Bekkeli, Våler (19)  
 Finn Fløttum, Brumunddal  
 Connie I. Abelsen, Saugbrugs (50)  
 Martin M. Petersen, Saugbrugs  
 Tormod Blomset, Folla (44)

### Deputy members

Åse Roen, Follum (19)  
 Kjetil Bakkan, Skogn (25)

Hans Thore Kirknes, Skogn (132)  
 Kjell Torp, Tofte (44)  
 Odd Kåre Dahlen, Numedal  
 Arnt Saelor, Lyngdal (19)  
 Stein Ove Brun, Østerdalsbruket (19)  
 Torbjørn Fredriksen, Saugbrugs  
 Per Kristian Dahl, Saugbrugs  
 Odd Vidar Vandbakk, Folla (25)

### Observers from the employees

Rolf Bråthen, Follum (69)  
 Roger Harstad Olsen, Hurum  
 Ove Magne Anseth, Braskereidfoss  
 Henrik Gundersen, Agnes (88)  
 Torbjørn Dybsand, Brumunddal

### Deputy observers

Bjørn Løken, Follum (44)  
 Rolf Ingvar Lurud, Tofte (55)  
 Magne Eriksmoen, Våler  
 Svein Gunnar Snippen, Sokna  
 Frank W. Torgersen, Brumunddal



From left: Arne Rødø, John Frøseth, Halvard Sæther, Lage Westerbø (Chairman of the Board), Jan Reinås, Jon R. Gundersen (Vice Chairman of the Board), Eivind Reiten, Kjell Hansen, Roy Eilertsen and Gisle Hegstad.

## Board of Directors

Lage Westerbø, Aurdal, chairman (439)  
 Jon R. Gundersen, Oslo, vice chairman (283)  
 Roy Eilertsen, Saugbrugs  
 John Frøseth, Støren (188)  
 Kjell Hansen, Follum  
 Gisle Hegstad, Tofte (19)  
 Jan Reinås, Bærum (544)  
 Eivind Reiten, Oslo  
 Halvard Sæther, Lillehammer

### Deputy members by the employees

Kåre Leira, Skogn (117)  
 Roy Borgersen, Tofte (149)  
 Fred Lundberg, Saugbrugs (19)

### Observer

Arne Rødø, Van Severen

### Deputy observer

Ole Ellingsrud, Braskereidfoss (50)  
 (Number of shares owned in parenthesis)

## Auditors

Arthur Andersen & Co., Oslo

## Executive Staff as of February 1, 1998



*President and Chief  
Executive Officer  
Jan Reinås (544)*



*Executive Vice President  
Omund Revhaug,  
Corporate Development (44)*



*Executive Vice President  
Jan Kildal, Economy, Finance,  
Law, IT (694)*



*Vice President  
Bjørn-Frode Jacobsen,  
Human Resources (44)*



*Acting Vice President  
Georg E. Carlberg, Research and  
Development (44)*



*Vice President  
Rolf Løvstrøm,  
Public Affairs (44)*



*Senior Vice President  
Dag Tørvold,  
Newsprint (19)*



*Senior Vice President  
Jan Oksum,  
Fibre and Magazine paper (201)*



*Senior Vice President  
Vidar Lerstad, Sales and  
Marketing - Pulp and Paper (94)*



*Senior Vice President  
Thor H. Lobben, Corporate  
Resources (338)*

*(Number of shares owned in parenthesis)*



## Socio-Economic Accounts

### Value added in Norway 1997

In 1997, the domestic operating revenues for Norske Skog reached NOK 10,109 million. Export revenues made up the majority of this figure, amounting to NOK 7,380 million and domestic sales provided NOK 2,729 million in operating revenues.

Value added is a product of the Group's income, less the value of purchased goods and services, and less depreciation. The resulting figure is the value which is distributed between the company's owners, lenders and employees.

### Total domestic value creation for 1997 as a result of the Group's activities (NOK million)

Net operating income	10,109
- Purchase of goods and services (domestic and imported)	-6,960
- Depreciation	-735
= Creation of value by the business units	2,414

The creation of value in the Group benefits the employees, the public sector, the owners and the enterprise itself. For 1997 the total values created in Norway are distributed as follows.

### Distribution of the Group's value creation in 1997 (NOK million)

Employees	1,376
Lenders *	377
State/local government	215
Owners **	267
The company	179
	2,414

\*) Lenders: Net financial costs

\*\*) Owners: Dividend

Of the total value creation in Norway of NOK 2.4bn, NOK 1.38 bn benefits the employees of the Group in terms of wages and social costs (less employer tax). The remaining amount is distributed between lenders as net financial costs the State local authorities the owners and the company.

### Employment

In total the Group employed 5,986 people as at 31.12.1997. With overseas employees numbering 1,280, the total number of employees in Norway is thus 4,706 as at 31.12.1997.

### Regional distribution of employees in Norway

#### No. of full-time employees

Østfold	809
Oslo/Akershus	240
Telemark	39
Hedmark	988
Oppland	47
Buskerud	1,363
Vestfold	114
Vest-Agder	237
Nord-Trøndelag	859
Nordland	10
Total	4,706

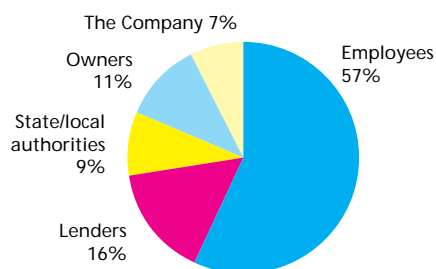
### Indirect employment:

The indirect employment in forestry, the transport sector and the energy sector, as well as other industries which deliver goods and services to Norske Skog, is an estimated figure based on multiplying factors provided by the Norwegian public bureau of statistics.

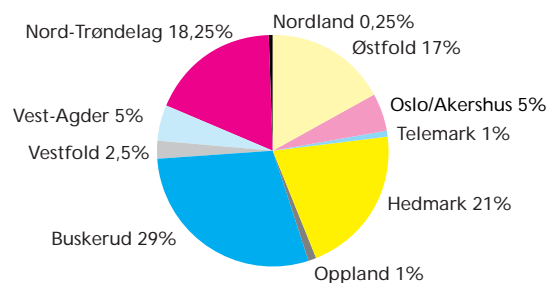
The indirect employment effect of the group's domestic purchasing in 1997 is estimated at about 10,550 man years.

The total employment effect of the group's activities amounts to 15,300 man years based on this premise.

The distribution of domestic value added in Norske Skog during 1997



Regional distribution of employees in Norway



## GLOSSARY

### Raw material

**Timber:** General term for wood as a raw material. Primarily used as a general name for pulpwood and saw logs timber, but also of sawn timber as a raw material for wood-products factories.

**Pulpwood:** Logs suitable for the production of chemical or mechanical pulp.

**Saw logs:** Logs suitable for the production of timber.

**Chips:** Wood chopped into pieces, 20-50 mm long, 4-5 mm thick and 15-20 mm wide, produced from round logs, or as a secondary product from the sawmills.

**Waste paper:** Used newspapers and magazines, waste paper from offices and printshops, used packaging.

### Pulp

**Cellulose:** Organic substance which is the most important component of the cell walls in wood fibre; it accounts for roughly 40%, while lignin makes up 30% and other substances the rest.

**Lignin:** Organic substance gluing the wood fibres together.

**Mechanical pulp:** A mixture of fibres having been separated through mechanical processing in refiners or grinders.

**Refiner:** A machine which makes mechanical pulp by pressing chips between rotating steel discs. The surface pattern of the discs helps separate the individual fibres in the wood.

**Grinder:** A machine which makes pulp from logs; the fibres in the wood are separated when the logs are pressed against a rotating grinding stone.

**Thermo Mechanical Pulp (also called TMP):** Mechanical pulp produced by refining chips that are pre-heated to 100-115 °C. The high temperature softens the wood structure and helps separate the fibres, thus yielding longer and stronger fibres than are produced by grinding.

**CTMP (Chemi-Thermo-Mechanical Pulp):** Pulp produced in refiners where the raw material - chips - is both pre-heated and chemically impregnated.

**Chemical pulp:** A mixture of fibres having been separated through a chemical cooking

process where substances other than cellulose are dissolved and removed.

**Sulphate (kraft) pulp:** Chemical pulp produced by cooking the wood chips with a solution consisting mainly of caustic soda and sodium sulphide in a digester. The term sulphate reflects the fact that sodium sulphate was traditionally used in the chemical recovery process.

**Long fibre pulp:** Chemical pulp produced from softwood timber such as spruce or pine.

**Short fibre pulp:** Chemical pulp produced from hardwood timber such as birch or eucalyptus.

**DIP (deinked pulp):** Recycled newspapers, magazines and other printed material which are chemically treated to remove the ink.

**Bleaching:** Removal or modification of the coloured components in the pulp, primarily lignin, to improve its brightness. Acting chemicals include chlorine dioxide and hydrogen peroxide, giving the pulp higher brightness..

**Market pulp:** Pulp delivered to external end-users. Most pulp is converted to paper in an integrated mill.

### Paper

**Coating:** A process in which the paper sheet is given a thin coating of clay and other pigments, to give the sheet a good printing surface.

**Basis weight (substance):** The weight of the paper sheet per unit area, normally in grammes per square metre. In North America other units of measurement are used (lb per 3,000 square feet).

**Wood containing paper (publication paper):** General term for paper containing mainly mechanical pulp. The most common grades are newsprint, SC magazine paper and LWC magazine paper.

**Newsprint:** Paper for newspapers containing of up to 100% mechanical pulp and/or deinked pulp. Deinked pulp is increasingly used as a raw material for the production of newsprint.

**SC (Super Calendered) magazine paper:** Uncoated printing paper, mainly for magazines and catalogues, consisting of about

50% mechanical pulp, 20% chemical pulp and 30% clay. This paper is given a surface treatment (super calendered) to give it a smoother surface and better printing characteristics.

**LWC (Light Weight Coated) magazine paper:** Coated printing paper with a base sheet of mechanical and chemical pulp given a coating to improve its surface - used for magazines, catalogues and free sheets.

**Fine paper:** General term for writing and printing paper of high quality, made from bleached chemical pulp.

### Sawn timber, board and parquet

**Timber:** Wood product for structural purposes and carpentry, or for further processing to other timber products. Used as a common name for sawn timber and planed timber.

**Sawn timber:** Materials produced straight from the log.

**Planed timber:** Timber planed on all surfaces.

**Drying:** Removal of moisture from the timber until the moisture content satisfies the requirement to what the timber shall be used for.

**Kiln:** Plant for artificial drying of timber with controlled climate conditions (temperature, air humidity and air velocity).

**Particle board:** A board produced by blending chips and glue and subjecting it to high temperature and pressure.

**Parquet:** Laminated boards, most often consisting of three layers. The top layer made from hardwood, the middle layer of cross-wise wooden strips and bottom layer of plywood. The boards are tongued and grooved and are produced in lengths of 1.80 - 2,5 metres.

### Other

**Biological treatment:** A method of cleansing waste water in which micro organisms convert dissolved organic material in the effluent to water, CO<sub>2</sub> and combustible sludge.

**Boiler house:** The section that produces the thermal energy (steam/hot air) required during the production process to give the finished products (pulp, paper, board, sawn timber) the desired dry matter content.





### **Shareholders' General Meeting**

The ordinary General Meeting will be held on Wednesday May 6, 1998 at 12 o'clock at Festiviteten, Kirkegaten 18, Levanger.

### **Financial information 1998**

General Meeting **May 6**  
Shares are quoted exclusive of dividend **May 7**

Dividend paid to shareholders registered at the VPS as of May 6, **May 22**

Publication of results for January-March **May 6**

Publication of results for January-June **August 20**

Publication of results for January-September **October 29**

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# This is Norske Skog

***Our goal is to continue developing Norske Skog as an international forest industry group which provides a competitive return on its owners' investments. Norske Skog's core areas are printing paper and bleached sulphate pulp. Two subsidiary companies produce wood-based building materials. In 1997 Norske Skog derived 77% of its operating revenues from markets outside Norway.***

Printing paper - newsprint and magazine paper - is Norske Skog's largest core area. With a capacity of about 2.4 million tonnes of paper, and a world-wide sales and distributing organisation, Norske Skog is one of the world's leading suppliers within this market segment. Norske Skog is the fourth largest producer of printing paper in Europe, and in newsprint it is among the world's five largest. The world market for printing paper is just over 50 million tonnes, while the total west European market exceeds 16 million tonnes. Printing paper accounted for about 70% of the Group's operating income in 1997.

Norske Skog's output capacity for market pulp is 455,000 tonnes, in a total global market of about 35 million tonnes. Norske Skog is northern Europe's only producer of eucalyptus pulp. Market pulp accounted for about 10% of the Group's operating revenues in 1997.

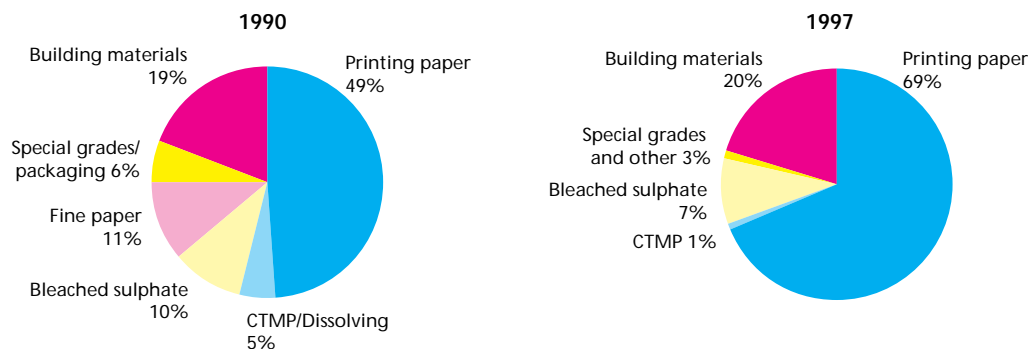
Through its subsidiaries Forestia AS and Norske Skog Flooring AS, Norske Skog is Norway's largest manufacturer of building materials, and one of the largest suppliers of sawn timber and board in the Nordic area. The two subsidiaries accounted in 1997 for about 20% of the Group's operating revenues.

Norske Skog has a strong financial basis, with total booked assets of NOK 17.3 billion and an equity capital ratio of 52%. The company had about 18,000 shareholders as of 31.12.1997, and is listed on the Oslo Stock Exchange and on SEAQ (Stock Exchange Automatic Quotation System) in London. At the turn of the year, 21.6% of shares were owned by non-Norwegians.

Norske Skog was founded in 1962, and has since it started grown rapidly through mergers with other companies (in 1972 and 1989), as well as through acquisitions and major investments in new plant in Norway and abroad.

Through continued growth and internationalisation, Norske Skog will strengthen its position as a cost-efficient supplier of high-quality printing paper. When the upgrade of paper machine number two at Golbey has been completed, in the first quarter of 1999, the Group will have doubled its printing paper capacity during the 1990's. About 40% of production will be sited in key European markets, and the Group will probably be the world's second largest newsprint producer.

Norske Skog's operating revenue, by products



# Main financial figures

1. Profit and loss account	1997	1996	1995	1994	1993	1992	1991	1990	1989
Operating revenue	13,312	13,265	12,548	9,170	7,338	7,557	8,640	9,879	9,248
Operating profit	1,083	1,916	2,500	732	299	-47	500	1,128	1,001
Profit for the year	590	1,317	1,699	206	-47	-516	246	773	802

## 2. Main financial figures

Cash flow from operating activities	1,615	2,616	2,555	866	492	256	1,405	1,001	918
Depreciation	1,140	1,132	832	616	552	575	553	548	487
Investments in operational fixed assets	1,814	1,053	926	565	1,127	2,220	1,190	1,001	1,373
Gearing	0.46	0.63	0.61	0.67	1.13	1.07	0.49	0.65	0.63

## 3. Profitability

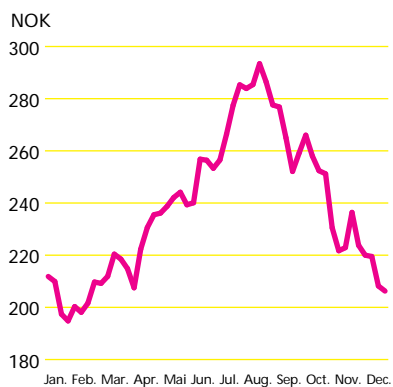
Return on assets % *)	7.8	14.1	21.4	7.1	5.0	0.4	8.0	15.0	17.0
Return on equity % *)	7.1	18.6	30.1	4.8	-1.2	-12.8	6.5	25.3	33.4

## 4. Shares and shareholder structure

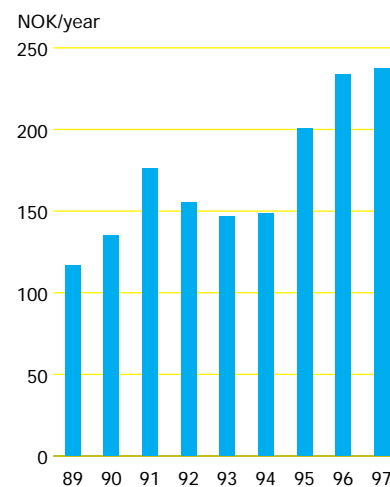
Net earnings per share fully diluted *)	16.40	40.38	52.39	6.91	-1.79	-21.28	10.18	32.05	35.99
Net earnings per share fully diluted *)	16.40	35.89	45.99	6.91	1.68	-13.03	11.30	30.25	34.59
Equity per share	237.20	233.91	200.67	148.84	146.72	155.42	175.95	135.52	116.61

\*) See definitions page 35.

Share price development 1997



Equity per share



# Norske Skogindustrier ASA

## Head Office

7620 SKOGN  
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Fax: +47 74 08 71 00

## Corporate Center

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## Area Paper

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Area Paper  
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1324 LYSAKER  
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Fax: +47 67 59 90 51

## Area Fibre and Magazine paper

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Area Fibre and Magazine paper  
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Tel.: +47 67 59 90 00  
Fax: +47 67 59 91 97

## Area Resources

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