

MACMILLAN BLOEDEL LIMITED

INFORMATION CIRCULAR AND

ANNUAL STATUTORY REPORT 1991

HOWARD ROSS LIBRARY
OF MANAGEMENT
MAR 12 1992
McGILL UNIVERSITY

THE ANNUAL STATUTORY
REPORT COMPRISES:

Annual Information Form

Management's Discussion and Analysis

Results of Operations

Financial Condition

Consolidated Financial Statements

INFORMATION CIRCULAR AND ANNUAL STATUTORY REPORT FOR 1991 OF MacMILLAN BLOEDEL LIMITED

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AVAILABLE DOCUMENTS

The Company's Annual Report to the United States Securities and Exchange Commission (Form 10-K), the Annual Report of Koninklijke Nederlandse Papierfabrieken N.V. (KNP), and a copy of this document in French are available to shareholders on request from the Corporate Secretary of the Company at the Company's head office at 925 West Georgia Street, Vancouver, British Columbia, V6C 3L2, (604) 661-8302.

This document contains most of the information required by the United States Securities and Exchange Commission. Form 10-K information not included in this report is:

- 1. Cover page.
- 2. Cross reference index page to Form 10-K Items.
- 3. Signature page.
- 4. Item 14 Exhibits, financial statement schedules and reports on Form 8-K.

NOTICE OF ANNUAL GENERAL MEETING OF COMMON SHAREHOLDERS

To the Common Shareholders of MacMillan Bloedel Limited:

NOTICE IS HEREBY GIVEN that the Annual General Meeting of the common shareholders of MacMillan Bloedel Limited will be held at The Four Seasons Hotel, 791 West Georgia Street, Vancouver, British Columbia on Thursday, April 9, 1992 at 10:00 a.m. local time, for the following purposes:

- 1. To receive and consider the report of the directors and the financial statements of the Company for the year ended December 31, 1991;
- 2. To elect directors for the ensuing year;
- 3. To appoint auditors for the ensuing year and to authorize the directors to fix their remuneration; and
- 4. To transact any other business that may properly be brought before the meeting.

Shareholders who are unable to attend the Annual General Meeting in person are invited to complete the enclosed form of proxy and mail it as soon as possible in the envelope provided.

DATED at Vancouver, British Columbia the 4th day of March, 1992.

BY ORDER OF THE BOARD

G.E. MYNETT, FCIS Corporate Secretary

INFORMATION CIRCULAR

In connection with the meeting to be held on April 9, 1992 Dated March 4, 1992

The Board of Directors of MacMillan Bloedel Limited (the "Company") has determined that the Annual General Meeting of the common shareholders will take place on Thursday, April 9, 1992 at the time and place and for the purposes set out in the Notice of Meeting.

The management of the Company is soliciting proxies for use at that meeting, and has designated as the person whom shareholders may appoint as their proxyholder the persons listed on the enclosed form of proxy. If a shareholder wants to appoint a person not listed on the form of proxy to represent him or her at the meeting, the shareholder may do so either by substituting the name of that person, who need not be a shareholder, on the form of proxy or by completing another form of proxy. If the shareholder is a corporation, it must execute the proxy by an officer or properly appointed attorney. For the proxy to be valid the shareholder (or the shareholder's attorney, who must be authorized in writing) must sign and date it, and must deposit it at the offices of Montreal Trust Company of Canada, Vancouver, 4th Floor, 510 Burrard Street, Vancouver, British Columbia, V6C 3B9, not less than 48 hours before the time of the meeting. A shareholder may revoke a proxy at any time before the meeting. If the shareholder attends the meeting and votes in a poll, he or she will be automatically revoking the proxy. An undated but executed proxy will be dated the date of receipt by Montreal Trust Company of Canada.

If the instructions are certain, on any poll the persons named in the enclosed form of proxy will vote the shares held under proxy in accordance with the instructions of the shareholder who appointed him. If there are no instructions, on any poll he will vote those shares in favour of each of the nominees for election as directors, and for each other matter shown on the form of proxy.

The form of proxy enclosed, when properly signed, confers discretionary authority to the appointed persons to vote as they see fit on any amendment or variation to any of the matters identified in the notice of meeting and on any other matter that may properly be brought before the meeting. Neither the directors nor the management of the Company is aware of any variation, amendment or other matter to be presented for a vote at the meeting.

The Company is paying for this solicitation, which is being made by mail. The Company has retained Shareholder Communications Corporation to assist it in the solicitation of proxies in the United States of America, and anticipates paying approximately US\$4,000 for this service.

RECORD DATE AND ADVANCE NOTICE

The Board of Directors fixed the record date for determining the names of common shareholders entitled to this Notice of Meeting and Information Circular as the close of business on February 20, 1992. Each person who is listed in the register of members of the Company as a holder of one or more common shares on April 9, 1992 is entitled to attend the Annual General Meeting in person or by proxy and to cast one vote for each share on a poll.

VOTING SHARES AND PRINCIPAL HOLDERS THEREOF

On February 1, 1992, 111,313,548 common shares of the Company entitled to be voted at the meeting were outstanding. This figure excludes 552 shares represented by warrants. Each share carries the right to one vote.

To the knowledge of the directors and officers of the Company, at the date hereof no person or company owns or directly or indirectly exercises control over shares carrying more than 10% of the voting rights attaching to all common shares of the Company entitled to be voted at the meeting except as set out below.

Title of class	Name and address of beneficial holder	Amount beneficially owned Feb. 1, 1992	Percentage of class	
Common Shares	Noranda Forest Inc. P.O. Box 7 Suite 4414 Toronto Dominion Bank Tower Toronto-Dominion Bank Centre Toronto, Ontario, M5K 1A1	54,519,408	49.0%	

The directors and officers as a group beneficially own 639,632 common shares. This number, which includes qualifying shares of directors, represents less than 1% of all common shares.

DIRECTORS' MEETINGS

The Board of Directors of the Company consists of fifteen members, presently made up of two executive officers and thirteen directors who are not executive officers. The Board of Directors held seven meetings during 1991. From among its members, the Board appoints a number of committees with specific duties, including an Executive Committee, an Audit Committee and an Environmental Committee.

The advance notice of the Annual General Meeting to be held on Thursday, April 9, 1992, which was published in Vancouver on February 13, 1992, included an invitation for written nominations signed by members holding in the aggregate not less than 10% of the Company's common shares. The Company had received no such nominations for inclusion in this Information Circular by March 4, 1992.

ELECTION OF DIRECTORS

Unless otherwise directed, the persons named in the enclosed form of proxy intend to vote for the election of a Board of Directors composed of the fourteen nominees in the list below. If any nominee does not stand for election or is unable to serve, they may vote the proxies for a smaller board at their discretion. Unless his office is earlier vacated in accordance with applicable law or the Articles of the Company, each director who is elected will hold office until the end of the next Annual General Meeting.

INFORMATION CONCERNING NOMINEES

Name and residence	Principal occupation of nominee during the past five years	Age at Feb. 1, 1992	Director since	Shares held*
J.T. Arnold Vancouver, Canada	President, Ocean Construction Supplies Ltd. (concrete construction and supplies).	55	_	_
D.C. Davenport Vancouver, Canada	Partner of Davis & Company (barristers and solicitors). (Notes 1 and 2)	59	1981	540
P.W. Douglas New York, U.S.A.	Corporate Director since October, 1991; prior to which he was Chairman and Chief Executive Officer of The Pittston Company (natural resources and specialized transport services).	65	_	-
Senator J.T. Eyton, O.C Caledon, Canada	Chairman, Brascan Limited (natural resources, financial services and consumer products) since May, 1991; prior to which he was President and Chief Executive Officer, Brascan Limited. Member of The Senate of Canada since 1990.	57	1985	9,120
R.B. Findlay	President and Chief Executive Officer since December, 1990; prior to which he was Senior Vice-President, Marketing since 1989; prior to which he was Senior Vice-President, Alberni Region. (Note 1)	58	1990	41,517
D.W. Kerr	President and Chief Executive Officer, Noranda Inc. (mining and metallurgy, manufacturing, forest products, oil and gas exploration) since 1990; prior to which he was President, Noranda Inc. (Note 2)	48	1988	5,000
C.C. Knudsen	Corporate Director since 1990; prior to which he was Vice-Chairman of the Board. (Notes 1 and 2)	68	1976	15,435

Name and residence	Principal occupation of nominee during the past five years	Age at Feb. 1, 1992	Director since	Shares held*
K.L. MacDonald Toronto, Canada	President and Chief Executive Officer of Noranda Forest Inc. (forest products) since July, 1991; prior to which he was President and Chief Operating Officer of Noranda Forest Inc. since February, 1991; prior to which he was Executive Vice-President, Paper Group, Abitibi-Price Inc. (forest products).	57		
A. Powis, O.C	Chairman, Noranda Inc. (mining and metallurgy, manufacturing, forest products, oil and gas exploration) since 1990; prior to which he was Chairman and Chief Executive Officer of Noranda Inc.	61	1981	5,315
J. St.C. Ross	Executive Vice-President and Chief Operating Officer since December, 1990; prior to which he was Senior Vice-President, Operations since 1989; prior to which he was Senior Vice-President, Nanaimo Region. (Note 1)	60	1990	40,504
R.V. Smith	Chairman of the Board since December, 1990; prior to which he was President and Chief Executive Officer of the Company.	65	1980	111,682
Dr. D.W. StrangwayVancouver, Canada	President of The University of British Columbia since 1985. (Note 2)	57	1986	1,332
J.S. Walton Vancouver, Canada	President, Endeavour Capital Corporation (corporate & financial advisory services) since 1989; prior to which he was Corporate Director since 1988; prior to which he was President and Chief Executive Officer, Placer Dome Inc. (international mining).	61	1988	2,000
A.H. Zimmerman	Vice-Chairman of the Board since December, 1990; prior to which he was Chairman of the Board of the Company; Chairman, Noranda Forest Inc. (forest products) and prior to July, 1991 was Chief Executive Officer, Noranda Forest Inc. (Note 1)	64	1981	39,074

^{*}This column shows the number of common shares (including 500 qualifying shares), as reported to the Company, beneficially owned directly or indirectly or over which control is exercised by each of the nominees. The percentage of shares other than qualifying shares held by each nominee is in no case greater than 0.2%.

Note: 1) member of the Executive Committee

²⁾ member of the Audit Committee

The directors listed below hold directorships in other companies with a class of securities registered pursuant to Section 12 of the United States Securities Exchange Act of 1934 or which are subject to the requirements of Section 15(d) of such Act or which are registered as investment companies under the United States Investment Company Act of 1940:

P.W. Douglas Phelps Dodge Corporation (international mining and manufacturing)

Philip Morris Companies Inc. (tobacco and food)

The Pittston Company (natural resources and specialized transport services)

U.S. Trust Corporation NYC (financial)

Senator J.T. Eyton, O.C. American Barrick Resources Inc. (gold production)

M.A. Hanna Co. (plastics and mining)

Norcen Energy Resources Limited (oil and gas)

D.W. Kerr Hemlo Gold Mines Inc. (gold production)

Norcen Energy Resources Limited (oil and gas)

North Canadian Oils Ltd. (oil and gas)

C.C. Knudsen Cascade Corporation (components for heavy industrial equipment)

Penwest Ltd. (brewers' malt and corn derivatives)
Portland General Corporation (utilities holding)

Safeco Corporation (insurance)

Security Pacific Bancorporation Northwest (bank holding)

Security Pacific Bank Washington N.A. (banking)
Security Pacific Corporation (bank holding)
Security Pacific National Bank (banking)

West Fraser Timber Co. Limited (forest products)

A. Powis, O.C. Gulf Canada Resources (oil and gas)

Norcen Energy Resources Limited (oil and gas) North Canadian Oils Limited (oil and gas)

Dr. D.W. Strangway Echo Bay Mines Ltd. (gold and silver ores)

A.H. Zimmerman..... The Pittston Company (natural resources and specialized transport services)

RETIRING DIRECTORS

Mr. G.H.D. Hobbs, Mr. R.E. Harrison, Mr. R.T. Kenny and Mr. J.A. Pattison, who have been directors of the Company since 1972, 1981, 1986 and 1987, respectively, have informed the Company that they are not standing for election at the meeting of shareholders on April 9, 1992. Mr. Harrison and Mr. Hobbs are Corporate Directors. Mr. Kenny is the Vice-Chairman, Noranda Forest Inc. (forest products) and Mr. Pattison is Chairman, President and Chief Executive Officer, The Jim Pattison Group Inc. (holding company). These retiring directors hold directorships in other companies with a class of securities registered pursuant to Section 12 of the United States Securities Exchange Act of 1934 or which are subject to the requirements of Section 15 of such Act or which are registered as investment companies under the United States Investment Company Act of 1940:

R.E. Harrison Campbell Soup Company (food products)

Trans Canada Pipelines Limited (oil and gas transmission, exploration

and production)

G.H.D. Hobbs British Columbia Telephone Company (utilities)

J.A. Pattison Paramount Communications (entertainment, publishing, financial services)

Henley Group Inc. (diversified manufacturing)

BUSINESS RELATIONSHIPS

In the ordinary course of business, the Company enters into transactions with various companies and firms of which certain of its directors are officers, directors or partners. None of these transactions has been material to the Company, and the Company believes that they have not been material to the other companies or firms involved. During the year and in the ordinary course of business, the Company consulted and is continuing to consult Davis & Company, a law firm of which D.C. Davenport is a partner. The Company is related to Trilon Securities Corporation (Trilon) by virtue of the indirect ownership by Brascan Limited of equity shares in each of the

Company and Trilon. Trilon acted as an underwriter of the issue by the Company in 1991 of common shares and debentures. None of the net proceeds of the offering were applied for the benefit of Trilon. Senator Eyton is the President and Chief Executive Officer of Brascan Limited. During the year R.V. Smith, who retired at the end of 1990 as President and Chief Executive Officer and who then became Chairman of the Board, has been retained as a consultant. At December 31, 1991 four directors held shares and loans under the Company's senior management share purchase plan which is described below in the executive compensation section: R.B. Findlay 34,977 shares (\$586,086); J.St.C. Ross 37,324 shares (\$625,119); R.V. Smith 85,098 shares (\$1,425,449); and A.H. Zimmerman 18,502 shares (\$315,181).

APPOINTMENT OF AUDITORS

Unless otherwise directed, the persons named in the enclosed form of proxy will vote for the appointment of Price Waterhouse as the auditors of the Company for the ensuing year, and for the delegation to the Board of Directors of the power to set their fees. Representatives of this firm will be present at the Annual General Meeting to respond to questions asked at the meeting, and will have the opportunity to make a statement if they see fit.

EXECUTIVE COMPENSATION

(a) Cash compensation

In 1991, 23 executive officers as a group received cash salaries of \$3,325,767 which excludes 1991 benefits of \$134,834 not available to all employees. The group of 23 includes part year salaries for two executives who retired during 1991.

(b) Compensation pursuant to plans

Remuneration payments made in 1991 pursuant to the plans described below and proposed to be made in the future to the executive officers are as follows:

(1) Management incentive compensation plan

The Company has a management incentive compensation plan which applies to a number of key employees throughout the Company. The plan provides for the creation of an annual fund equal to 4% of adjusted consolidated net earnings in excess of a percentage (9% in 1991) of the average consolidated capital employed, or as determined by the Compensation Committee of the Board of Directors. It also provides for distribution of all or part of that fund to participants according to individual and unit performance without carryover to future years. There were no bonuses awarded in 1991.

(2) Senior management share purchase plan

The Company has a senior management share purchase plan which is intended to provide a long term incentive and capital appreciation opportunity for selected key employees of the Company directly related to corporate performance and to the market price of the Company's shares. Between March 1 and June 30 of each year, participants may have the opportunity to buy a specified number of shares at the then current market price on The Toronto Stock Exchange. The number of shares which each participant may buy under the plan depends on the Company's return on investment for the previous year, the participant's salary during such year and the share price. The purchase is financed by a ten year non-recourse interest free loan granted to the participant by the Company and secured by a pledge of the shares. Cash dividends on the pledged shares are applied to reduce the loan. At any time within the ten year period the participant may repay the loan and take possession of the pledged shares. There were no shares issued under the plan during 1991. Common shares held and loans outstanding by the 21 executive officers as a group at December 31, 1991 were 336,440 shares (\$5,641,684). The market price for the Company's common shares on January 31, 1992 was \$19% per share.

(3) Noranda share purchase plan

Noranda Inc. has a share purchase plan which is offered by the directors of Noranda Inc. to senior employees of subsidiary or affiliated companies, and is intended to provide an opportunity for capital appreciation to key employees. Participants have the opportunity to purchase shares of Noranda Inc., financed by a seven year interest free recourse loan provided by Noranda Inc., and secured by a promissory note and the shares which are held as collateral. The participant is entitled to receive dividends on the shares, but is not required to apply

cash dividends to reduce the outstanding loan. The participant may repay the loan at any time within the seven year period and take possession of the pledged shares. No shares were issued under the plan during 1991 and no shares were received during 1991 by executive officers. Common shares held and loans outstanding as at December 31, 1991 by executive officers were 1,817 shares (\$36,800). The market price for Noranda Inc.'s common shares on January 31, 1992 was \$19½ per share.

(4) Retirement plans

The total estimated annual pension benefits payable upon normal retirement to the 21 executive officers who at December 31, 1991 had not retired, as a group is \$2,406,775 based upon remuneration received and accrued to December 31, 1991.

(i) As at December 31, 1991 nineteen executive officers were members of the executive pension plan under which executive officers retire at age 65 with a monthly pension amounting to 2% for each accredited year of service to a maximum of thirty-five years applied to the average monthly salary and bonus (one half bonus for 1991 onwards) during the thirty-six consecutive months when the salary and bonus was highest, with a widow's benefit of 50% of the employee's pension.

The following table sets forth various annual retirement benefits that become payable under the Company's executive pension plan. Benefits are not reduced by government pension payments.

Annual average			Years	of service		
covered remuneration	10	15	20	25	30	35
\$100,000	\$20,000	\$ 30,000	\$ 40,000	\$ 50,000	\$ 60,000	\$ 70,000
\$150,000		\$ 45,000	\$ 60,000	\$ 75,000	\$ 90,000	\$105,000
\$200,000	\$40,000	\$ 60,000	\$ 80,000	\$100,000	\$120,000	\$140,000
\$250,000	\$50,000	\$ 75,000	\$100,000	\$125,000	\$150,000	\$175,000
\$300,000	\$60,000	\$ 90,000	\$120,000	\$150,000	\$180,000	\$210,000
\$350,000	\$70,000	\$105,000	\$140,000	\$175,000	\$210,000	\$245,000

- (ii) As at December 31, 1991 one executive officer had a supplemental retirement plan agreement with a U.S. subsidiary company which will supplement the normal retirement benefits for U.S. salaried employees. The agreement provides that the pension benefit is to be based on the thirty-six consecutive months when pensionable earnings was highest; it provides for an unreduced pension for retirement after age 60, and a widow's benefit of 50% of the employee's pension; and overrides the limitations on the maximum pension which can be paid.
- (iii) As at December 31, 1991 one executive officer had a service agreement with the Company pursuant to which he agrees to retire at age 65, and the Company agrees to pay him a monthly pension at the rate of 50% of his average monthly pensionable earnings and to pay to his widow a pension of 50% of his pension. Pensionable earnings are earnings for the thirty-six consecutive months during which his salary plus 50% of his bonus was highest. This service agreement provides for termination prior to age 65 by either party on six months' notice. Under certain circumstances he will be entitled to the pension calculated as above or as reduced by a formula based on age and years of service under contract. Benefits are not reduced by government pension payments.

(c) Remuneration of directors

Directors who are not in receipt of salaries as executive officers of the Company or its subsidiaries are each paid an annual retainer of \$8,000 and \$1,500 for each board meeting attended. Members of the Executive Committee who are not in receipt of salaries are each paid \$1,000 for each meeting attended. Directors who are not in receipt of salaries acting on other committees of the board are paid \$750 for each meeting attended, except for the Nominating Committee in respect of which no fees are paid. Committee chairmen receive an additional fee of \$125 for each meeting attended, except for the chairman of the Audit Committee who receives an additional fee of \$750. In addition the directors are reimbursed for their reasonable expenses in connection with such meetings. The annual retainer portion of the directors' fees is paid, at the director's option, in cash or in common shares of the Company. During 1991, \$236,574 was paid and 1,187 shares were allocated to directors.

1991 ANNUAL STATUTORY REPORT

GLOSSARY OF TERMS

MEASUREMENTS

fbm — foot board measure (board foot) — one square foot of lumber one inch thick

hectare — 2.471 acres

m³ — cubic metre or 35.315 cubic feet

M cubic feet — thousand cubic feet

Mfbm (MMfbm) — thousand (million) foot board measure

MM sq.ft. 36" — million square feet, 36 inch thick used to measure panelboard volumes

tonne — metric ton — 1,000 kilograms or 2,204 pounds

k tonnes — thousand tonnes

annual capacity at year-end — the number of units which can be produced in a year based on operations

over a long term period with the normal number of shifts and maintenance

interruptions

capacity utilization - production divided by the annual capacity averaged over the production

period

PRODUCTS

Pulp

Bleached pulp — pulp that has been brightened using bleaching chemicals

Chemi-thermomechanical pulp — pulp produced from wood chips using heated mechanical and chemical

(CTMP) processes to break the bonds between the wood fibres

Chemical pulp — pulp produced from wood chips using chemical processes to break the bonds

between the wood fibres

Groundwood pulp
— pulp produced by grinding blocks of wood to break bonds between wood

fibres

Kraft or sulphate pulp — chemical pulp produced by an alkaline cooking process using sodium

sulphate

Market pulp — pulp produced for sale on the open market

Mechanical pulp — pulp produced from roundwood or woodchips by mechanically breaking the

bonds between wood fibres

Softwood pulp — pulp produced from coniferous wood species noted for its strength

Paper

Coated paper — paper which is coated with clay and treated to impart a smooth glossy surface

Lightweight coated paper - high quality two-sided coated paper used mainly in magazines

Groundwood and specialty — paper with mechanical pulp as its major component which differs from

printing paper newsprint in brightness, surface characteristics and end uses

Newsprint — paper produced principally from mechanical pulp or "CTMP" for use in

newspapers

Fine paper — paper with bleached chemical pulp as its major component

Woodfree coated paper
— very high quality coated paper of which just over half the content is chemical

pulp and the rest is coating materials

Building materials

High value/quality cedar	_	numerous grades of green and kiln dried
lumber products		channel sidings and tongue and groove prod

numerous grades of green and kiln dried bevel siding and green and dry channel sidings and tongue and groove products (suitable for panelling) and patio grades for decking

High value/quality whitewood lumber products

— lumber extracted from hemlock, balsam, spruce and fir logs to achieve the maximum value for specific customers and exporting markets. A significant amount of this lumber is sent to local remanufacturers for further reprocessing and custom processing in window frames and many decorative products

Dimension lumber

lumber cut and planed to standard sizes and lengths nominally 2 x 4 inches through 2 x 12 inches in cross section by 8 to 24 feet in length

Panelboard Particleboard

comparatively thin flat sheets of wood used for panelling

 panelboard produced by chemically bonding small wood shavings and sawdust under pressure

Plywood Waferboard

Joist

panelboard consisting of laminated veneers of solid wood

panelboard produced by chemically bonding wafers of wood under pressure

Structural panelboard

- plywood and waferboard

Engineered wood

Parallam® — reconstituted lumber manufactured by bonding long strands of veneer into structural beams using waterproof adhesives

PSL 300 — engineered wood manufactured by bonding woodstrands in parallel using a steam process and waterproof adhesives to form panels which are then cut

into specific dimensions required by customers

a beam of wood used parallel to other similar beams to reinforce and support

floors, ceilings, etc.

"I" joist — a vertical joist with top and bottom chords joined by a web member of

structural panelboard to form an efficient structural member

Open web joist
— joists in which the parallel chords of wood are separated by diagonal web members allowing easy pass through for ducts, plumbing and wiring

Truss — structural frames of various shapes generally composed of straight members disposed to make the frame rigid under loads

MICRO-LAM®
Laminated veneer lumber
(LVL)

laminated veneer lumber (LVL) made by Trus Joist MacMillan
 lumber consisting of many layers of thin veneer laid up with all the later than the la

 lumber consisting of many layers of thin veneer, laid up with all the veneer faces in parallel direction and glue laminated at high temperatures by large presses

Engineered structural components

 joists, trusses and other structural elements designed and made out of a combination of products to meet specific engineering requirements

Containerboard and packaging

Containerboard — linerboard and corrugating medium used to produce corrugated boxes (containers)

Corrugated containers — containers made from sheets of linerboard with medium corrugated (fluted) between the linerboard

1991 ANNUAL INFORMATION FORM

THE COMPANY

Incorporation

MacMillan Bloedel Limited (the "Company"), a British Columbia corporation, is a corporation resulting from the amalgamation of MacMillan Bloedel Limited, incorporated under the laws of the Province of British Columbia by Memorandum of Association registered July 13, 1911, and certain of its wholly-owned subsidiaries.

Subsidiaries

A list of the Company's subsidiaries is set out in Note 18 to the Consolidated Financial Statements, which can be found on page 59 of this report.

Corporate profile

The Company together with its subsidiaries ("MacMillan Bloedel" or "MB") on the basis of 1990 revenue was ranked as the thirteenth largest forest products company in North America and the twenty-ninth in the world and has integrated operations in Canada and the United States as well as major investments in Canada, the United States, the United Kingdom and Continental Europe. MB manages 1.5 million hectares of productive timberlands which supply most of its fibre requirements. Of these timberlands, one million hectares are in British Columbia where approximately two thirds of MB's property, plant and equipment and the Company's head office are located. The products of MacMillan Bloedel and its affiliated companies which are marketed throughout the world include lumber, panelboards, engineered wood, kraft pulp, newsprint, groundwood printing papers, fine papers, containerboard and corrugated containers.

GENERAL DEVELOPMENTS OF MacMILLAN BLOEDEL OVER PRECEDING FIVE YEARS

The following table summarizes total revenue, contributions to earnings (loss) and assets for each of MB's three industrial segments during the last five years:

	Building materials	Pulp and paper	Containerboard and packaging	Other	Total operations
			(\$ millions)		
Total revenue —					
1991	1,323.4	928.7	419.2	54.9	2,726.2
1990	1,358.9	1,127.5	456.1	60.7	3,003.2
1989	1,408.6	1,310.2	504.1	50.8	3,273.7
1988	1,404.7	1,282.5	530.1	56.2	3,273.5
1987	1,429.8	1,145.3	506.1	53.3	3,134.5
Contributions to earnings (loss) —					
1991	(22.1)	(33.4)	(16.0)	4.9	(66.6)
1990	43.1	54.6	44.7	2.9	145.3
1989	139.1	180.8	113.6	2.3	435.8
1988	186.8	254.9	118.0	3.9	563.6
1987	206.4	229.6	88.9	4.5	529.4
Assets —					
December 31, 1991	1,034.2	1,206.2	503.0	33.5	2,776.9
December 31, 1990	1,210.9	1,155.2	499.4	13.0	2,878.5
December 31, 1989	1,152.0	1,080.7	457.0	28.0	2,717.7
December 31, 1988	958.8	922.4	437.0	32.1	2,350.3
December 31, 1987	837.0	779.6	451.8	32.4	2,100.8

MB also owns substantial interests in affiliates operating in related fields, which are described under investments in affiliates section in this report.

MB's results included a record profit and a record loss in the last business cycle. During that period MB continued to focus on moving its product lines into the higher value items and was particularly successful in

improving the extraction of specialty high quality lumber to the point where dimension construction grades are not significant. The Company has not progressed to the same degree in pulp and groundwood printing papers as substantial capital was required for environmental projects. Therefore, capital was temporarily diverted from spending on technological enhancements to improve product quality and change facilities into the production of more specialty grades which traditionally obtain more stable demand and price. MacMillan Bloedel has a very strong international marketing capability which provides early and useful knowledge of evolving product improvements in time to effectively support customers and meet their changing needs.

In the containerboard and packaging sector MB has spent significant sums to upgrade the quality and cost competitiveness of its containerboard mill in Alabama, which is highly competitive in the commodity sector, while the corrugated container plants do supply many value added products.

MB entered into a major joint venture with TJ International, Inc. (TJI) to better realize the potential of the MB developed engineered woods, Parallam®and PSL 300 ®. TJI has a long history of successful manufacturing and marketing of sophisticated engineered structural products.

In the same period MB continued to strengthen its position in the EEC through its investment in the prosperous and rapidly growing fine paper and container supplier, Koninklijke Nederlandse Papierfabrieken N.V. (KNP).

The Company believes these have been and will continue to be appropriate and successful business strategies.

Capital expenditure program

Over the past five years MB's capital expenditures totalled \$1,746.6 million, with major expansions and modernizations completed at several locations. Of the \$241.1 million incurred in 1991, \$152.4 million was for non-discretionary environmental projects, logging roads and routine maintenance of business capital. A significant portion of recent expenditures has resulted from environmental concerns and related legislation (see pulp and paper segment and environment sections). Major discretionary capital expenditures are described in the facilities section of each industry segment.

The following table summarizes consolidated capital expenditures by business segment over the past five years:

	1991	1990	1989	1988	1987	Total
			(\$ m	illions)		
Building materials	76.3	130.6	246.8	170.0	73.5	697.2
Pulp and paper		153.9	194.5	146.5	122.6	727.5
Containerboard and packaging	43.0	76.6	59.4	32.8	19.5	231.3
Other and corporate	11.8	5.4	_17.7	14.7	41.0	90.6
	<u>241.1</u>	366.5	518.4	364.0	256.6	1,746.6

BUSINESS OF MacMILLAN BLOEDEL

Financial information and explanatory notes pertaining to each of MB's industry and geographic segments and export sales are presented in Note 17 of notes to consolidated financial statements included on pages 57 and 58 of this report.

BUILDING MATERIALS SEGMENT

Logging operations

MB has a number of log harvesting operations, primarily on the West Coast of British Columbia and in Alabama, which supply the wood fibre requirements of its converting plants. In order to extract maximum value, the logs are manufactured, sorted and directed to the converting unit according to species, size and quality. Imbalances in supply and demand in both grade and species are corrected by the sale and purchase of logs in the open market. High grade logs are used mainly in the manufacture of lumber. Lower grade logs, together with small or defective parts of trees and chips from plywood and sawmill operations, form the basic raw material supply for pulp and paper, and containerboard mills. Wood waste, principally sawdust and bark, is used to produce energy required by the converting facilities.

The following table shows the volumes of logs harvested as part of the activity of supplying the fibre requirements of MB's major converting facilities in each of the years 1991, 1990 and 1989:

	Year e	ended Decem	nber 31
	1991	1990	1989
	(thousands of cubic m		metres)
British Columbia	6,660	6,694	7,849
Alabama and Mississippi (includes hardwood)	741	802	880

Reforestation

In order to assure a continuing supply of raw materials for the future, the Company maintains an active reforestation program in British Columbia. Company managed lands in British Columbia in the process of being restocked currently represent about three years of logging which is reflective of the restocking process and consistent with the Company's experience over the last two decades. This is considered professionally sound reforestation practice.

The Company operates the A.P. MacBean Nursery at Nanaimo, British Columbia, which relies on tree improvement and reforestation research to provide healthy, fast growing seedlings of indigenous species for planting on Company managed lands.

MB also carries out reforestation in Alabama and Mississippi. An integral part of this is the nursery and seed orchard which provides genetically superior seedlings. The Robert E. Mitchell Tree Nursery has an annual crop of over 30 million top quality seedlings which are planted on MB controlled forest lands or sold commercially.

Forest lands

The total area of commercial forest lands under MB's control is:

	Commercial hectares	
	(Note 1)	
British Columbia: (Note 2)		
Area operated on a sustained yield basis:		
Tree farm licences:		
Crown lands (Note 3)	659,000	
Timber licences (Note 4)	125,000	
Owned lands (Note 5)	79,000	
	863,000	
Managed forest lands (owned lands) (Note 5)	142,000	1,005,000
Other tenures:		
Timber licences (Note 6)	39,000	
Owned lands		42,000
		1,047,000
Saskatchewan (Note 7)		309,000
Alabama and Mississippi: (Note 8)		
Owned lands	80,000	
Long term cutting rights	102,000	182,000
2016 10111 1011116 1611		
		1,538,000

Notes

- (1) Land is considered commercial if it is feasible to grow timber on it which can be economically harvested using present technology. Lands controlled by MB in Alabama, Mississippi and Saskatchewan are considered commercial. In British Columbia 60,000 hectares controlled by MB are presently considered inaccessible and hence not commercial.
- (2) The Province of British Columbia owns approximately 95% of all forest lands in the province. Under the Forest Act, the Government is empowered to grant "tree farm licences" (TFL) to a licensee who undertakes to manage an area of Crown forest land, often in conjunction with forest land held by the licensee, to yield an annual erop on a sustained yield basis (i.e. in perpetuity).

Effective January 1, 1990, MB's available annual allowable cut from accessible timberlands operated on a sustained yield basis was 7.4 million cubic metres. Since January 1, 1989, some 265,000 cubic metres of annual allowable cut has been allocated to small business operators from MB managed areas. This volume is not included in the 7.4 million cubic metres noted above. The sustainable cut, together with timber harvested from other MB tenures, is sufficient to provide, on average, about 80% of the fibre requirement (logs and chips) for the present production facilities in British Columbia.

On January 2, 1992 the British Columbia Government announced a sustainable cut reduction of 418,000 cubic metres in one TFL. This reduction represents a 5.7% decrease in MB's allowable cut from accessible timberlands operated on a sustained yield basis. With the current unfavourable market conditions this reduction should not adversely affect production facilities in British Columbia. British Columbia's Chief Forester sets the allowable annual cut for tree farm licences. In this particular instance, he cites operability restrictions and environmental constraints as the reasons for this allowable cut reduction. There were no land withdrawals attached to this allowable cut reduction, except for Meares Island which is subject to a court injunction on behalf of aboriginal people (see forestry and the environment section).

- (3) These are contained within MB's two tree farm licences. These tree farm licences were renewed for 25 year terms in the early 1980's.
- (4) The Company owns exclusive rights to harvest timber on the land held under timber licences. A royalty is payable upon harvesting the timber. After the timber is harvested on these lands, the Company has the responsibility to reforest them. They then revert to the Crown but will be retained within the tree farm licences as "Crown lands". Approximately 32,000 hectares of these lands have been logged but not reverted.
- (5) Certain owned lands have been put into tree farms, known as "managed forest lands", by the Company to obtain an incentive property tax rate.
- (6) Included are approximately 14,000 hectares of lands which already have been logged and will revert to the Crown when restocked at the Company's expense.

Saskatchewan

(7) MB's cutting rights in Saskatchewan, which are limited to species used by the waferboard plant at Hudson Bay, Saskatchewan, are held under a forest management licence expiring in 1994. The licence is renewable for 20 year periods on terms and conditions to be negotiated at the time of renewal. These resources are sufficient to supply the fibre requirements of the waferboard plant.

Alabama and Mississippi

(8) The wood supply from its own timber resources (36% in 1991) together with outside purchases are sufficient for the present operations of the Pine Hill, Alabama mills.

Stumpage and Royalty

British Columbia

A stumpage charge that will generate a revenue target for the British Columbia Government is assessed by the Government on all Crown timber harvested. On those lands held under timber licences a fixed royalty is payable when the timber is harvested. No royalty or stumpage charges are payable on timber harvested on Company owned lands.

Saskatchewan

Stumpage rates have been confirmed at the present fixed rate level to June 30, 1994.

Countervailing duty on Canadian softwood lumber

In October, 1991 the United States Department of Commerce (DOC) announced an investigation into the potential subsidy afforded to Canadian softwood lumber by provincial stumpage systems. About half of the Company's harvest in British Columbia is from owned timber. For the Crown timber the Company harvests it pays economic rent. Consequently, the Company applied on November 22, 1991 for an outright exemption from a company specific rate or for any countervailing duty which might result from this investigation. This was denied on January 17, 1992.

The DOC has declared the softwood lumber case "extraordinarily complicated". The DOC's preliminary determination of subsidy is now due March 5, 1992 and final determination of subsidy is not expected until May 19, 1992. The International Trade Commission (ITC) determined preliminarily on December 16, 1991 that the U.S. lumber industry has been injured by Canadian stumpage subsidies, but final determination of injury is not expected until July 3, 1992.

In December, 1991 a coalition of the U.S. lumber industry filed a petition with the DOC requesting expansion of the investigation to include British Columbia log export restraints. The Company and the British Columbia and Canadian governments have urged the DOC to dismiss the coalition's request. The DOC, however, has decided to include the subsidy impact of log exports in its investigation.

These issues are ongoing and in the opinion of the Company, there are cogent arguments for defeating a countervail duty on softwood lumber sold in the United States.

Forestry and the environment

MacMillan Bloedel's business is to grow and harvest trees, and purchase and convert logs into quality forest products. As a steward of the forest, the Company finds the most cost effective ways to manage the forests under its control and stewardship. It also takes into account the other resource values contained within a forest when developing its harvest programs.

Public concern about the effect of logging on the environment continues. Government harvesting regulations, aboriginal land claims, deferrals of logging areas and other set asides are disruptive of efficient and productive harvesting. They reduce the available annual harvest and increase harvesting costs. Special interest groups, advocating the preservation of old-growth timber on the British Columbia Coast, have engaged in civil disobedience in a number of areas of the Company controlled forest to prevent logging and are intent on having these lands withdrawn from timber production. On January 21, 1992 the Provincial Government announced an eighteen month moratorium covering several harvesting areas on Crown lands under MB's control for review by a special government commission. The commission is charged with the responsibility of developing a land use strategy, including a dispute settlement mechanism to resolve conflicts over the use of forest land for timber harvesting.

Specific areas which are subject to major action are:

	Commercial hectares	Action by
	(Note 1)	
Clayoquot Sound (Note 2)	106,000 3,000 57,000 166,000	Special interest groups and aboriginal people Special interest groups Special interest groups

Notes:

- (1) In addition, in 1990 approximately 3,600 commercial hectares of forest land in the Carmanah Valley were set aside as a park to preserve old-growth Sitka Spruce believed to be the tallest in North America. Compensation will be payable to MB for timber licences expropriated for the park establishment. The amount and timing are yet to be determined. Compensation will also be payable to MB for timber licences expropriated for a federal park reserve on South Moresby Island in the Queen Charlotte Island chain. These licences contain a significant volume of high grade Sitka Spruce. (Includes second-growth and old-growth forest lands.)
- (2) Includes Meares Island with 3,573 commercial hectares subject to court injunction on behalf of aboriginal people.

The British Columbia Government is advocating a policy of settling aboriginal land claims through negotiation, which envisages compensation and the right of aboriginals to use these lands for traditional sustenance. It is not expected that there will be outright expropriation of present ownership to meet the demands of aboriginal people in British Columbia. MB supports this approach and feels confident that its ownership interest and rights to harvest will largely be preserved throughout the negotiation process.

Special interest groups have also attempted to deter European buyers of British Columbia forest products. The Company believes that it will be subject to more of these types of actions as the debate about the environment and preservation of old-growth forests grows and the pressure to settle aboriginal claims continues.

The Company has a long record of responsible, sound management of the managed forest lands and tree farm licences entrusted to its care. The Company believes the Government recognizes the importance of a secure resource base to the Company's ability to raise funds to invest in the capital intensive pulp and paper sector of the Province's forest industry.

The Company believes that despite all the activity calculated to limit the industry in British Columbia, the economic importance of forestry to the Province will be recognized and loss of Company cutting rights will be modest and largely compensable.

Building materials manufacturing operations

MB manufactures a wide variety of building materials products including lumber, plywood, waferboard and particleboard and carries on wholesale building materials distribution businesses. MB also purchases significant amounts of lumber from other suppliers for resale, utilizing its marketing and transportation services. For the years ended December 31, 1991, 1990 and 1989 lumber accounted for 34.8%, 32.5% and 30.8% respectively of MB's consolidated sales values to unaffiliated customers. By-products of building materials production include wood chips which are an important raw material for the Company's pulp and paper mills and also sawdust and bark which are a significant source of energy for the mills.

Building materials facilities

			Annual	
	Division	Location	capacities at year-end 1991	1991 Production
Lumber and lumber	Alberni Pacific	Port Alberni, British Columbia	202	151
specialties	Somass	Port Alberni, British Columbia	72(1)	75
(MMfbm)	Island Phoenix	Nanaimo, British Columbia	155	79
	Thunderbird	Nanaimo, British Columbia	 (2)	24
	Chemainus	Chemainus, British Columbia	106	106
	Canadian White Pine	Vancouver, British Columbia	127	105
	New Westminster	New Westminster, British Columbia	84	60
	Powell River	Powell River, British Columbia	49	35
	Pine Hill	Pine Hill, Alabama	_76	67
			<u>871</u>	<u>702</u>
Plywood	Alberni Plywood	Port Alberni, British Columbia	— (3)	21
(MM sq.ft. %")	Pine Hill	Pine Hill, Alabama	123	105
	Nipigon	Nipigon, Ontario	_30	_25
			<u>153</u>	<u>151</u>
Parallam®	Parallam®	New Westminster, British Columbia	— (4)	483
(M cubic feet)	Parallam®II	Colbert, Georgia	(4)	377
				860
Waferboard	Hudson Bay	Hudson Bay, Saskatchewan	191	90
(MM sq.ft. 3%")		Tradeon Bay, Saskatonowan	171	
Particleboard	Particleboard	Vancouver, British Columbia	57	41
(MM sq.ft. ¾")				
Hardboard (MM sq.ft.)	Sturgeon Falls	Sturgeon Falls, Ontario	(5)	_14
Specialty Board (MM sq.ft.)	Specialty Board	Vancouver, British Columbia	_24	_11
Mouldings (MM lineal ft.)	Kingtrim	Toronto, Ontario	_79	

Notes

- (1) Somass A mill permanently closed on August 16, 1991.
- (2) Indefinitely closed March 30, 1991.
- (3) Permanently closed on April 30, 1991.
- (4) Transferred as of October 1, 1991 to Trus Joist MacMillan a Limited Partnership.
- (5) Permanently closed on December 9, 1991.

Lumber

MB's lumber products together with lumber purchased from other producers account for 71.6% of building materials segment sales and are essentially divided into appearance and construction grades. The range of appearance lumber products is concentrated in the Western Red Cedar species of which the Company controls more than 10% of the world's resource. The cedar products are manufactured at the New Westminster, Canadian White Pine, and Somass mills. MB produces approximately 40 sizes and grades of green and kiln dried bevel sidings, approximately 45 sizes and grades of green and dry channel sidings and tongue and groove products (suitable for wall panelling) and patio grades for decking. The Company's whitewood sawmills are Alberni Pacific, Chemainus, Powell River, and Island Phoenix and direct their output to export markets. The Chemainus mill specializes in producing a range of high valued products from high grade logs. The Alberni Pacific mill produces a wide variety of products primarily for the Japanese housing market. The Chemainus and Island Phoenix mills also ship lumber to Japan. The Pine Hill mill continues to produce mostly dimension lumber for the U.S. market. The Thunderbird sawmill at Nanaimo, British Columbia which had an annual capacity of 134 MMfbm of dimension lumber was indefinitely closed on March 30, 1991 due to high production costs and low sales values which made it uncompetitive. The old part of the Somass sawmill at Port Alberni, British Columbia was permanently closed on August 16, 1991, reducing cedar lumber capacity by 55 MMfbm. The Company's Custom Processing Division further processes whitewood lumber from the Company's mills to meet the specifications of customers worldwide for uses such as European window frames and special Japanese decorative applications.

Panelboards

Panelboard products are presently produced at four mills. Standard plywood sold in the U.S. market is produced from pine logs at the Alabama mill. A specialty hardwood plywood plant at Nipigon, Ontario produces such products as shafts for hockey sticks. The Alberni Plywood mill, which produced softwood plywood products for a highly competitive market, was closed April 30, 1991. It had an annual production capacity of 168 MM sq.ft. %". Competition from substitute products and continuous losses forced the closure. On December 9, 1991 the Company permanently closed its hardboard siding mill at Sturgeon Falls, Ontario which had an annual capacity of 47 MM sq.ft. It too suffered from substitute products and continuous losses. Other Company panelboard products are also no longer cost competitive and their continued manufacture remains under review.

Engineered wood

On October 1, 1991 MB signed an agreement with TJ International, Inc. to form a limited partnership to produce and market a wide range of engineered wood products. MB's Parallam® parallel strand lumber operations at New Westminster, British Columbia and Colbert, Georgia, having a combined annual capacity of 3.1 MM cubic feet and previously included in the building materials segment, were transferred to the new partnership (see investment in affiliates section — Trus Joist MacMillan a Limited Partnership (TJM)). The Parallam® plant in New Westminster commenced commercial production in 1988. A second Parallam®plant in Colbert, Georgia was completed in July, 1990 at a cost of US\$68.6 million. The PSL 300 ® engineered wood parallel strand lumber plant at Deerwood, Minnesota which MacMillan Bloedel commenced constructing in 1990 started production at the end of 1991. The cost of the plant is approximately US\$74 million and has an annual capacity of 4.6 MM cubic feet. It was transferred to the new partnership.

Capital expenditures

Capital expenditures in the building materials segment in 1991 amounted to \$76.3 million, compared to \$130.6 million and \$246.8 million in 1990 and 1989 respectively. During 1989 the construction of the Island Phoenix mill was completed at a cost of \$61 million, the new Hival sawmill at Somass was completed at a cost of \$31 million and a new planer mill was completed at Alberni Pacific at a cost of \$14 million. \$92.4 million of MB's 1990 and 1991 capital expenditures was in regard to Parallam® and PSL 300 ® which were transferred to TJM.

Building materials marketing

The Company's marketing activities for building materials extend into most major world markets through sales offices and independent sales agents. In 1991 sales values were divided approximately as follows: 32.1% in Canada, 34.6% in the United States, 23.4% in Japan and the Orient and 9.9% elsewhere. The following table shows the distribution by market of MB's building materials sales in 1991, 1990 and 1989:

		Canada	United States	Japan & Orient	Europe & Other	Total
Lumber (MMfbm)	1991	395.9	786.5	292.5	146.8	1,621.7
	1990	386.8	895.9	264.6	163.1	1,710.4
	1989	417.3	994.3	247.1	155.1	1,813.8
Structural panelboards	1991	478.4	282.3	20.4	9.3	790.4
(MM sq.ft. 3%")	1990	520.1	322.2	20.1	31.2	893.6
	1989	511.5	360.8		30.7	903.0

MB operates nineteen distribution centres in the United States. In Canada its customers are serviced nation-wide by 22 distribution centres. MB has a lumber distribution company in Japan to market the high valued products demanded. Building materials sales offices in Hong Kong and Australia also market a full range of species and products oriented to regional preferences. In Europe MB utilizes established independent sales agents.

The markets in which MB sells its products are very competitive with a number of major companies in each market. Competition is on the basis of quality of product, price and service. Many of MB's products also compete with substitutes of various kinds. No material part of the business is dependent upon a single customer or small group of customers, although the Japanese market is the principal market for MB's high value whitewood lumber products, which are a major contributor to MB's results. Because of the time span and the wide diversity of specifications involved and market volatility, it is not appropriate to consolidate a back order file.

The European community has imposed a non-tariff barrier on green lumber from North America on the premise that after more than 100 years of importing green lumber to Europe, the pine Nematode beetle may now represent an infestation threat to Europe's forests. The Nematode is a minor pest in British Columbia. In December, 1991 a twelve month deferral of the ban was granted by the EEC. The Company has available to it sufficient capacity to dry the volume of higher grade lumber directed to the European market; however, there could be some reduction in the volume of other grades. There is concern that by 1993 other producers' lumber originally scheduled for the European market will be redirected to other offshore markets and could result in short term disruptions to those markets.

PULP AND PAPER SEGMENT

MB operates pulp and paper mills at three locations in British Columbia —integrated pulp and newsprint mills at Powell River and at Port Alberni, and a pulp mill at Harmac. These mills manufacture newsprint and groundwood printing papers and bleached and unbleached kraft pulp. For the years ended December 31, 1991, 1990 and 1989 newsprint and groundwood printing papers accounted for 23.0%, 24.2% and 23.6% respectively of MB's consolidated sales values to unaffiliated customers while for market pulp the percentages were 9.4%, 11.5% and 14.1% respectively.

Pulp and paper facilities

	Division	Location	capacities at year-end	1991 Production
Market pulp	Harmac	Nanaimo, British Columbia	370	278
(k tonnes)	Alberni Pulp and Paper	Port Alberni, British Columbia	79	67
	Powell River	Powell River, British Columbia	_50	_36
			499	381
Newsprint and groundwood	Alberni Pulp and Paper	Port Alberni, British Columbia	342	249
printing papers	Powell River	Powell River, British Columbia	629*	455
(k tonnes)			971	704

^{*}It was announced in December, 1991 that the Number 7 paper machine at Powell River will be closed permanently March 9, 1992. Annual productive capacity will be reduced by 82,000 tonnes.

Standard white newsprint is the Company's largest single paper product. Powell River currently has two machines manufacturing standard newsprint, two machines manufacturing groundwood printing papers and one machine which manufactures both products. Alberni has three machines, two currently manufacture telephone directory and one which currently manufactures standard newsprint. Alberni is one of the largest producers of telephone directory paper in the world. Recently equipment has been installed at Alberni to allow the use of recycled pulp in its newsprint and telephone directory paper. Powell River also has the capability to use recycled pulp on a limited scale. Groundwood printing papers are typically used for publications such as Sunday magazines, newspaper advertising inserts, flyers, computer printout forms and telephone and commercial directories. These publications are normally printed offset or rotogravure. Groundwood printing papers used in advertising and magazines provide improved strength, opacity, smoothness and brightness. Telephone directory papers are normally produced in lighter basis weights and in some cases to a higher brightness level. In 1991 poor demand conditions resulted in production shutdowns at both mills with the result that production of all grades was 229,000 tonnes lower than in 1990.

The Company's main market pulp grade is bleached softwood kraft pulp manufactured at Harmac. Oversupply for softwood pulp that started in 1990 continued throughout 1991 and resulted in curtailments at the Harmac pulp division.

Capital expenditures in the pulp and paper segment in 1991 amounted to \$110.0 million, compared to \$153.9 million and \$194.5 million in 1990 and 1989 respectively.

At Alberni construction of a chemi-thermomechanical pulp line at a cost of \$100 million, a hydrogen peroxide bleaching plant at a cost of \$19 million, and a power boiler precipitator at a cost of \$16 million were completed during 1989. Expenditures are currently underway on a \$23 million wrap line and management production system at Alberni to be completed mid 1992. The \$33 million project to upgrade the Alberni Number 4 paper machine which included the installation of a twin wire gap former and improved computerization to improve product quality was completed in May, 1991. The \$17 million project to equip the mill to use recycled newsprint was operational at the end of 1991. That project provided the necessary equipment to produce standard newsprint and telephone directory papers with up to 40% recycled content.

Powell River completed in 1990 a \$61 million project to increase the quality and quantity of standard newsprint from the mill's Number 10 paper machine.

In 1990 and 1991 the major pulp and paper capital expenditures have been to reduce dioxins and to treat secondary effluent.

The project at Harmac, aimed at reducing dioxins to non-detectable levels, was completed in late 1991 at a cost of \$37 million, of which \$12 million was spent in 1991. At Powell River a similar reduction project was also completed in late 1991 at a capital cost of \$28 million. In 1991 work commenced on three effluent treatment facility projects.

At Harmac the \$63 million secondary effluent treatment facility, of which \$13 million was spent in 1991, should be operational by July, 1993 and will meet all current effluent discharge standards for biochemical demand, total suspended solids and toxicity and will maximize the removal of chlorinated solids from the pulp mill effluent. In conjunction with the project, Harmac will proceed with a significant water use reduction program at a cost of

\$30 million and will also upgrade mill power supply at a cost of \$9 million to meet the additional energy requirements.

At Alberni the upgrading of effluent treatment facilities will cost \$75 million, of which \$4 million was spent in 1991. It should be completed by June, 1993 and is a project to install a new activated sludge plant and operate it in conjunction with the existing aeration stabilization basin which will allow the mill to treat 100% of its effluent.

At Powell River the secondary effluent treatment facility is expected to be finished in December, 1992 with a capital cost of \$98 million, of which \$15 million was spent in 1991. This project includes an oxygen activated sludge bio-reactor, three clarifiers and associated equipment to provide secondary treatment of its mill effluent. In the process, organic wastes in the effluent are consumed by bacteria living within the system.

During 1991 the three mills completed projects to convert to natural gas (see energy section).

Pulp and paper marketing

MB pulp and newsprint are shipped worldwide. Newsprint sales are mainly in North America (70.2% of 1991 shipments) while pulp sales are mainly to offshore markets (83.4% of 1991 shipments). In its largest newsprint market, the western and central U.S., MB operates four sales offices. MB also has sales offices in Tokyo, Hong Kong, Kuala Lumpur and Sydney and employs sales agents in other Pacific Rim markets. These offices and sales agents are responsible for both pulp and newsprint sales. United Kingdom newsprint and groundwood paper customers are serviced from a sales office in London. European pulp markets are serviced from Brussels and U.S. pulp customers from Danbury, Connecticut. MB also markets pulp and paper products for other companies including lightweight coated papers from KNP. MB has a marketing agreement with Alberta Newsprint Company (ANC) which operates a mill at Whitecourt, Alberta. This new mill, which commenced operations in the third quarter of 1990, has an annual capacity of 220,000 tonnes of standard newsprint. MB is committed to sell most of the tonnage produced by ANC, and the principal market is the U.S. Midwest.

The following table shows where pulp and paper products were sold in 1991, 1990 and 1989:

		Canada	United States	Japan & Orient	Europe	Other	Total
Newsprint (k tonnes)	1991	90.4	493.5	119.7	45.3	83.4	832.3
	1990	100.3	652.1	129.9	21.7	59.5	963.5
	1989	103.8	667.0	118.4	25.9	79.7	994.8
Market pulp (k tonnes)	1991	11.5	56.8	81.7	232.3	28.7	411.0
	1990	16.3	61.2	77.6	215.7	36.1	406.9
	1989	13.5	67.1	133.0	245.9	43.8	503.3

Most of MB's pulp and newsprint shipments are covered by contracts which are subject to prices as announced from time to time. Contracts which may be firm as to quantity are not firm as to price and thus a meaningful figure for the value of contractual shipments is not possible. No material part of the business is dependent upon a single customer or small group of customers.

For the grades supplied, MB is competitive in major markets on quality and service. There are many suppliers of pulp and paper in all of the major markets. MB does not have a dominant position in any market.

Newsprint capacity in North America has increased substantially as twelve new machines began production in 1989, 1990 and 1991. Beginning in the fall of 1987, total U.S. newsprint consumption stagnated, dropping in the East but still growing in the West. It then dropped dramatically throughout the U.S. in the second half of 1990 and through most of 1991. The combination of weak demand and increased supply has led to severe price competition. With considerable new capacity operating in the U.S., Canada's share of the U.S. market has eroded. Concurrently, U.S. legislation and customer requirements increasingly call for recycled content in newsprint. The economics of recycled newsprint production give a competitive advantage to mills located close to large urban centres in the U.S. where substantial quantities of waste newsprint are available (see recycling section for MB's possible entry into the U.S. recycled newsprint market). Given an oversupplied market, high costs aggravated by the strong Canadian dollar, and limited potential for recycled newsprint production, some older Canadian machines have been retired in recent years but as yet not enough to restore the industry to healthier operating rates.

New Canadian pulp capacity came on stream in 1990 and 1991 adding to a world oversupply situation. Shipments of northern bleached softwood kraft pulp continue to suffer from substitution of lower cost fibre from the U.S. South and additional tonnage from Chile. More of this competitive pulp will become available in 1992.

CONTAINERBOARD AND PACKAGING SEGMENT

MB manufactures containerboard (linerboard and corrugating medium) at Pine Hill, Alabama, corrugating medium at Sturgeon Falls, Ontario, and corrugated containers in the United States. In 1991 containerboard sold outside the consolidated enterprise accounted for 7.8% of consolidated sales values as compared to 7.7% in 1990 and 8.3% in 1989. For the years ended December 31, 1991, 1990 and 1989 corrugated containers accounted for 7.5%, 7.5% and 7.0% respectively of MB's consolidated sales values to unaffiliated customers.

Containerboard and packaging facilities

	Division	Location	Annual capacities at year-end 1991	1991 Production
Linerboard (k tonnes)	Pine Hill	Pine Hill, Alabama	413	330
Corrugating medium (k tonnes)	Pine Hill Sturgeon Falls	Pine Hill, Alabama Sturgeon Falls, Ontario	$\frac{233}{71}$	206 72 608
Combined corrugated containers including lamp wrap and sheet plants (k tonnes)	9 locations	United States	<u>267</u>	252

The Pine Hill mill produces a first-class corrugating medium and its linerboard machine is one of the industry's most efficient. The mill's testing laboratory continues to ensure consistently high quality, and upgrading equipment will further improve quality.

The U.S. corrugated container group consists of facilities in nine states between New York and Texas. Six facilities are full line corrugated plants; two facilities are full line corrugated plants combined with specialty singleface operations (lamp wrap); one facility is a sheet plant; and one is lamp wrap only. MB has a significant portion of the U.S. singleface market. The Chicago corrugated plant was sold in 1991. Assets from that sale will be redeployed to the South and Southwest U.S.

Capital expenditures in the containerboard and packaging segment in 1991 amounted to \$43.0 million compared to \$76.6 million and \$59.4 million in 1990 and 1989 respectively. A US\$62 million project undertaken to upgrade the quality of Pine Hill's linerboard was completed in June, 1991. As a result the linerboard mill annual production capacity was increased to 455,000 tonnes, an increase of 55,000 tonnes. At December 31, 1991 the annual capacity is rated at only 413,000 tonnes reflecting the three year phase in period. The start up has been difficult and downtime during construction resulted in a low operating rate in 1991.

Certain Alabama facilities and equipment at two United States corrugated container plants are leased under industrial development programs with options to purchase at nominal amounts. All other containerboard and packaging manufacturing facilities are owned by MB.

Containerboard and packaging marketing

A substantial amount of the linerboard and corrugating medium sold by the Pine Hill, Alabama mill is utilized by MB's packaging operations in the United States. The mill also sells linerboard to affiliated corrugated container plants in Canada and the United Kingdom (see investment in affiliates section). The corrugating medium sold by Sturgeon Falls, Ontario is primarily utilized by affiliated Canadian corrugated container plants (see investment in affiliates section). The large number of producers of containerboard in North America and offshore compete on the basis of quality, price and service. There is no material backlog of sales orders to unaffiliated customers. The following table shows where MB's containerboard and corrugated containers were sold in 1991, 1990 and 1989:

		Canada	United States	Europe & Other	Total
Containerboard (k tonnes)	1991	72.0	319.7	102.6	494.3
	1990	69.2	329.0	102.5	500.7
	1989	73.8	375.2	82.8	531.8
Corrugated containers (k tonnes)	1991	.1	247.2		247.3
	1990		259.8		259.8
	1989		245.8		245.8

The manufacture and marketing of corrugated containers is a specialized regional business. Custom design of corrugated containers is part of MB's marketing services provided through sales offices at plant locations or division headquarters. The market for these products is highly competitive, with competition on the basis of service, quality and price. Information on the dollar value of order backlogs is not aggregated for corrugated containers.

OTHER SEGMENT

This segment of MB's business consists mainly of its transportation operations which are not related to the movement of MB forest products. (Transportation related to the movement of MB forest products is allocated to product segments for reporting purposes.)

Transportation

MB's policy is to control through long term charters, a fleet of vessels capable of transporting to market approximately one half of MB's forest products volume shipped by water. MB currently has five vessels, totalling approximately 200,000 deadweight tonnes under charter for initial periods in excess of one year. All are designed for the carriage of forest products, but can also be used to transport containers, general freight and dry bulk commodities. While these vessels are principally engaged in the carriage of MB forest products, they also carry forest products for other shippers and participate in steel, container and general freight backhaul trades in order to minimize empty steaming.

Remaining MB deep sea freighting requirements are met through a combination of spot charters, short term charters and contracts of affreightment with independent shipping companies.

To meet other freighting requirements, MB contracts with Canadian and U.S. railroads and trucking firms for varying periods. MB also operates a fleet of tugs, barges and log carriers which are used primarily between logging divisions and mill storage grounds in British Columbia.

FOREIGN EXCHANGE

MB's export sales are principally denominated in United States dollars. Any significant change in the Canadian dollar against the U.S. dollar has a significant effect on Canadian dollar amounts realized.

If the U.S. dollar is weaker against other foreign producer currencies, prices quoted in U.S. dollars can be substantially increased in those countries having strong currencies. New opportunities for export arise in those markets as traditional suppliers with strong currencies have a competitive disadvantage. However, when the U.S. dollar is very strong relative to a number of foreign currencies, prices quoted in U.S. dollars fall, traditional North American markets become more competitive as a result of foreign penetration, and foreign markets are considerably less profitable.

MB's sales to Japanese customers from Canada and by its subsidiary in Japan are substantial. The amount of Canadian dollars realized is affected by any significant change in the U.S. dollar against the Japanese yen, and can be further affected by any significant change in the Canadian dollar against the U.S. dollar.

INVESTMENT IN AFFILIATES

MB has investments in various affiliated companies to provide steady markets for its products manufactured in North America and to achieve a degree of geographic and product diversification complementary to its North American base.

As at December 31, 1991 investments in affiliates accounted for by the equity method were carried in the financial statements at a value of \$673.5 million, up \$202.3 million from \$471.2 million at December 31, 1990 primarily as a result of the recent investment in Trus Joist MacMillan a Limited Partnership.

Koninklijke Nederlandse Papierfabrieken

The most significant investment is Koninklijke Nederlandse Papierfabrieken N.V. (KNP), a Dutch public company with headquarters in the Netherlands. KNP has a 47% fully diluted interest in VRG Group N.V., a major paper distribution company in Europe. KNP also has a 50% interest in R.P. Europe B.V., a producer of containerboard with an annual capacity of 650,000 tonnes, and a 50% interest in Corrugated Europe B.V. with an annual capacity of 425,000 tonnes of corrugated cases. In 1991 KNP's consolidated position includes Leykam Mürztaler AG., a major Austrian fine paper company which operates two paper mills with an annual capacity of 700,000 tonnes of coated paper and 200,000 tonnes of pulp. At December 31, 1991 MacMillan Bloedel's shareholding in KNP stood at 30.5% on a fully diluted basis. KNP is a major producer of coated and uncoated specialty printing paper in the European Economic Community. KNP owns and operates two paper mills in the Netherlands and one in Belgium, with an annual aggregate productive capacity of 800,000 tonnes and purchases pulp from MB. As at December 31, 1991 KNP also had packaging facilities with an annual capacity of 480,000 tonnes of paperboard and packaging material.

Trus Joist MacMillan

On October 1, 1991 MacMillan Bloedel (49%) and TJ International, Inc. (TJI) (51%) formed Trus Joist MacMillan a Limited Partnership (TJM) to manufacture and distribute engineered wood products. TJM manages the Parallam®and PSL 300® assets as well as MICRO-LAM® laminated veneer lumber, I-beams and open web trusses and markets them all in an integrated manner.

The engineered wood plants are located across North America and manufacture beams, headers, trusses, joists, open web joists and "I" joists. Engineered woods generally have uniform strength, dimensional stability and target on maximum structural efficiency with minimal waste. TJM is considered one of the world leaders in manufacturing and marketing of engineered wood products. During the initial years of the partnership MB will bear the major share of start up losses in Parallam® and PSL 300® while receiving a small interest in the results of TJM from other products until the value of the respective contributions by TJI and MB are appropriately equalized, at which date the earnings will be allocated 49% to MB and 51% to TJI.

Island Paper Mills

The Company has a 50% partnership interest in Island Paper Mills (IPM), at New Westminster, British Columbia. IPM is a fine paper mill in western Canada and manufactures uncoated free sheet papers such as printing copy, envelope, converting and register grades. Free sheet high quality coated grades are manufactured in both sheet and roll. At December 31, 1991 the aggregate annual capacity was 120,000 tonnes. In mid 1990 IPM completed construction of an off-machine coater costing \$82 million.

MacMillan Bathurst

The Company has a 50% partnership interest in MacMillan Bathurst, which is one of Canada's largest corrugated container manufacturing companies owning thirteen corrugated container plants throughout Canada. At December 31, 1991 these plants had an annual productive capacity of 425,000 tonnes of corrugated containers.

UK Corrugated

MB owns 50% of UK Corrugated Limited and its subsidiaries. UK Corrugated Limited ranks as the third largest producer of corrugated containers in the United Kingdom at December 31, 1991 owning eight corrugator plants having an annual capacity of 250,000 tonnes of corrugated containers. It also has interests in ten sheet plants.

Norcal

MB is considering a recycling newsprint joint venture in California with Haindl Papier GmbH (see recycling section — Norcal).

RESEARCH AND DEVELOPMENT

During the past three years MB spent the following amounts on research and development programs aimed at development of new processes and products, greater utilization of timber resources, technical improvements to existing processes and products, and improved methods of silviculture and environmental protection:

	1991	1990 (\$ millions)	1989
Gross expenditures	16.9	21.1	23.3
Less: government grants	2.4	.8	.8
Less: investment tax credits	3.3	3.2	3.9
Net	11.2	<u>17.1</u>	18.6

Of those Canadian employees engaged in such research, 109 professional, technical and support staff are located at MB's Research and Development Centre in Burnaby, British Columbia (in 1990 — 114).

In late 1991 the Company entered into a five year \$45 million agreement with the Canadian Federal Government to assist the Company in continuing, during the current difficult economic times, its wide variety of research and development programs in environmental protection, computer control and wood-based building materials development. The Company, the Government, and other research and development partners to be selected, each agree to spend up to \$15 million over five years.

HUMAN RESOURCES

At December 31, 1991 MacMillan Bloedel employed approximately 10,900 people in Canada, 3,000 in the United States of America and 75 elsewhere.

In British Columbia MB employs 4,000 people in logging, lumber and panelboard operations who are represented by the IWA-Canada; 3,800 people who work in our three pulp and paper operations are represented by either the Canadian Paperworkers Union or the Pulp, Paper and Woodworkers of Canada. The collective agreements with all three B.C. unions expired in mid 1991. The two pulp and paper agreements were extended without change for ten months and expire April 30, 1992. A new three year IWA agreement was concluded in February 1992, pending ratification and will expire June 15, 1994. It provides for no annual hourly wage increase in the first two years and an 85¢ per hour increase in the third year and pension funding improvements of 70¢ per hour in the second year. The estimated annual increase in total labour cost is nil, 2.5% and 3.1%.

In Alabama MB employs the largest group of people outside British Columbia, including 800 who are represented by the United Paperworkers International Union. A three year contract for our logging operation was signed in 1990, providing for a US\$500 lump sum payment in the first year and 2.5% in each of the second and third years. A new four year contract extension was negotiated with the linerboard and corrugated medium workers. The new agreement was negotiated during the third year of the previous four year agreement. The new agreement provides for annual wage increases of 2.5%, 2.5%, 3% and 3% and now expires October 4, 1996. A three year contract covering lumber and plywood manufacturing was renegotiated in the second quarter of 1991 and provides for a 2.5% increase each year. New contracts were also negotiated at Magnolia, Mississippi; Cleveland, Ohio; and Elmira, New York container plants without work interruption.

MB's British Columbia operations have experienced a remarkable decline in labour disputes over the past five years, losing approximately 0.15% of available hours.

ENVIRONMENT

Since 1989 the number of environmental regulations that MB is subject to increased rapidly, particularly in Canada. The regulatory initiatives of 1989 focused on concerns with dioxins and required major, continuing expenditures to include process reduction of adsorbable chlorinated organics (AOX) coupled with full secondary treatment of residual acute toxicity in mill effluents. The estimated cost to MB of all these new requirements legislated since 1989 is in excess of \$300 million, depending upon the technology used, to be spent through 1993. In 1991 MB spent approximately \$77 million on environmental capital projects. The pulp and paper segment describes the massive and costly projects the Company is currently undertaking or recently finished at its three British Columbia mills.

In January 1992 the newly elected British Columbia Government announced deadlines for still further reductions of chlorine-based pulp pollutants. The proposed laws would lower the current limit of 2.5 kilograms per tonne on chlorinated organics released into waterways to 1.5 kilograms by the end of 1995 and zero kilograms by the end of 2002.

The "Green Plan" presented by the Federal Government gives rise to another array of real and perceived environmental concerns. MB remains fully supportive of the fundamental objective of maintaining a healthy environment. However, where the benefit is speculative, there are certain economic constraints that necessitate setting priorities to responsibly allocate society's and MB's scarce economic resources. In early 1990 the British Columbia forest industry issued a position paper on sustainable development which called for the setting of standards and regulations which are "scientifically based on environmental and health risk assessment and cost benefit analysis". It also called for determining "priorities objectively and dispassionately, having regard to the nature and the extent of discharge abatement required of industry as well as the time frame and cost for completion".

Until such a scientifically based process is put in place for setting priorities and timetables, society incurs the risk of expending huge sums on fashionable, but potentially trivial concerns, depleting the financial resources, and delaying the response to potentially more important health or environmental risks as reliable scientific knowledge increases. In recent years our ability to measure for trace elements has increased significantly ahead of our ability to meaningfully measure and understand the impact of these trace amounts on the environment. What we need before we commit more capital for environmental controls is scientific measurement of impact and risk assessment rather than hypothetical deductive arguments suggesting possible causal relationships.

ENERGY

MB utilizes wood waste, spent liquors, electric power, petroleum products and natural gas as energy sources in its manufacturing processes. In recent years approximately one third of the electricity consumed by the Company in British Columbia is self-generated while in Alabama the figure is approximately 90%. In 1991 natural gas became available at the Company's three pulp mills as a new pipeline was completed. MB had made a commitment with the British Columbia Government to use significant amounts of natural gas. In 1991 the mills were converted to use natural gas with the major portion of the costs paid by government grants. Approximately 75% of the heat required in MB's manufacturing processes is generated from the burning of waste materials from its manufacturing operations. The balance of the energy and fuel requirements of the manufacturing operations has historically been purchased principally on a long term contract basis and partly on a spot basis from sources which MB believes to be reliable.

RECYCLING

MacMillan Bloedel and Haindl Papier GmbH (Haindl) of Germany are jointly studying the feasibility of a major recycled newsprint mill in California (Norcal). The facility would include a 258,000 metric tonne newsprint machine and would be owned 50% by MacMillan Bloedel and 50% by Haindl. The Company considers Haindl one of the world's foremost producers of groundwood printing papers. Haindl has produced recycled printing papers in Europe since 1961.

In 1990 the Company signed an agreement with Newstech Recycling Inc. (Newstech) to purchase one half of the 122,500 tonnes a year of pulp production from an \$83 million newspaper recycling plant in the Vancouver, British Columbia area. California, the largest single market for MB newsprint, has recently enacted legislation requiring 25% of their newsprint contain 40% recycled fibre. This agreement is a first step in meeting the Company's

goal to include some recycled fibre in the production of newsprint, both to help alleviate the solid waste disposal problem, and at the same time make a concerted effort to meet our North American customers' requirements.

With the 1991 opening of the Newstech mill and the installation of the necessary equipment at the Port Alberni mill, the Company produced in December, 1991, for waiting customers, the first recycled telephone directory paper in British Columbia. This represents a step up the ladder in using recycled fibre in higher quality specialty grades. The Company plans to produce more than 250,000 tonnes of newsprint, telephone directory and other specialty papers in 1992 at mills in Port Alberni and Powell River utilizing Newstech recycled pulp. Up to 40% of the fibre content of the groundwood papers can be from recycled furnish.

Fibres International, Inc., a company owned 51% by MB, operates in Washington and Utah. It has been in the recycling business for over fifteen years with primary activities comprising the purchase, resale and brokerage of about 400,000 tonnes per year of waste paper as well as other recyclable material.

As a result of the recently completed expansion, the Pine Hill, Alabama mill can recycle an average of 605 tons per day of used corrugated containers that have been collected in the southeastern U.S. This constitutes about 25% of production requirements.

MB has a significant interest in KNP of the Netherlands. KNP's packaging activities in the Solid Board Division and in the joint ventures Corrugated Europe B.V. and R.P. Europe B.V. are substantially waste paper-based.

Island Paper Mills, a 50% owned partnership has been awarded the use of the ECOLOGO by the Federal Government. The ECOLOGO certifies IPM is a manufacturer of recycled uncoated papers that include copy paper, printing paper, and envelope grades. These recycled products include a minimum 10% post consumer fibre in addition to 40% post commercial fibre.

SUMMARY OF FINANCIAL INFORMATION

DIVIDENDS

During the two years ended December 31, 1991, the Company declared the following dividends:

	1991	1990
	(\$ mil	lions)
Class B Preferred shares		
Series 4	1.3	1.5
Series 8	3.8	4.6
Series 9	4.2	4.4
Series 10	5.5	5.0
Common shares	64.0	82.1

In 1990 all dividends on common shares were paid in cash. In 1991 common share dividends were paid either in cash or common stock at the shareholder's option. Preferred share dividends are paid by cash monthly or quarterly.

The terms of issue of the Company's preferred shares prohibit the declaration or payment of any dividends, other than stock dividends in common shares, unless all accrued dividends on such preferred shares have been paid or set apart for payment.

Dividends paid to United States shareholders are subject to a 15% Canadian non-resident withholding tax.

FIVE YEAR FINANCIAL DATA

	1991	1990	1989 (\$ millions)	1988	1987
Funds generated by operations	81.5	289.6	555.1	592.9	554.2
Depreciation, depletion and amortization	156.6	156.5	130.4	124.6	127.4
Capital expenditures	241.1	366.5	518.4	364.0	256.6
Interest paid	111.1	77.0	51.7	44.9	52.9
Preferred share dividends paid	14.1	15.5	15.6	16.9	26.1
Common share dividends paid in cash	38.4	82.1	82.1	92.4	82.8
Current assets	1,162.7	992.0	982.7	932.0	875.7
Current operating liabilities	413.5	390.6	404.4	374.7	313.1
Operating working capital	749.2	601.4	578.3	557.3	562.6
Property, plant and equipment	1,943.3	2,065.8	1,869.6	1,504.4	1,350.6
Investments and other assets	713.9	516.8	421.2	316.7	289.5
Net assets employed	3,406.4	3,184.0	2,869.1	2,378.4	2,202.7
Short term interest-bearing debt	140.1	48.5	79.0	67.6	13.3
Current portion of long term debt	8.5	30.7	18.8	12.0	13.7
Long term debt	1,233.1	1,035.1	661.2	350.5	398.8
Interest-bearing debt (excluding convertible					
subordinated debentures)	1,381.7	1,114.3	759.0	430.1	425.8
Convertible subordinated debentures	149.9	150.0	150.0	150.0	150.0
Redeemable term preferred shares	13.8	15.4	17.0	19.0	72.3
Other redeemable preferred shares	98.1	104.1	106.5	108.9	109.4
Common equity	1,487.7	1,477.4	1,509.1	1,376.4	1,194.3
Deferred credits	275.2	322.8	327.5	294.0	250.9
Total invested capital (Note 2)	3,406.4	3,184.0	2,869.1	2,378.4	2,202.7
Total assets	3,819.9	3,574.6	3,273.5	2,753.1	2,515.8
Total long term debt, convertible subordinated debentures and redeemable preferred shares	1,494.9	1,304.6	934.7	628.4	730.5
Interest-bearing debt (excluding convertible subordinated debentures) as a percentage of invested capital	40.6%	35.0%	26.5%	18.1%	19.3%
Interest-bearing debt (excluding convertible subordinated debentures) and redeemable term preferred shares as a percentage of invested capital	41.0%	35.5%	27.0%	18.9%	22.6%

Notes:

⁽¹⁾ For a summary of U.S. and Canadian dollar exchange rates see Note 2 accompanying five year earnings data on page 30 of this report.

^{(2) &}quot;Invested capital" is defined as the sum of interest-bearing debt, long term obligations, deferred income taxes, convertible subordinated debentures and shareholders' equity.

SELECTED QUARTERLY FINANCIAL DATA

	1990 Quarters				1991			
					Quarters			
	I	II	III	IV	I	II	III	IV
				(\$ mi	llions)			
Sales of products and services	781.3	806.9	719.4	<u>695.6</u>	677.6	727.9	665.3	655.4
Costs and expenses:								
Materials, labour and other operating			440000000000000000000000000000000000000					
expenses	646.2	667.2	618.2	607.1	584.2	654.9	611.6	618.7
Depreciation, depletion and			0000	20.0				
amortization	36.9	42.1	37.5	40.0	40.3	42.2	36.8	37.3
Selling, general and administrative	51.8	54.0	54.1	56.8	53.5	54.1	59.2	50.9
	734.9	763.3	709.8	703.9	678.0	751.2	707.6	706.9
Operating earnings (loss)	46.4	43.6	9.6	(8.3)	(.4)	(23.3)	(42.3)	(51.5)
Other income (expense)	4.3	2.2	1.8	(21.3)	6.3	12.6	6.5	(37.1)
Interest expense	(17.1)	(19.8)	(22.0)	(22.1)	(25.8)	(25.0)	(27.2)	(31.7)
Earnings (loss) before income taxes	33.6	26.0	(10.6)	(51.7)	(19.9)	(35.7)	(63.0)	(120.3)
Income tax (recovery) expense	11.7	8.7	(4.3)	(28.0)	(8.8)	(16.4)	(27.7)	(54.9)
Earnings (loss) before undernoted item	21.9	17.3	(6.3)	(23.7)	(11.1)	(19.3)	(35.3)	(65.4)
Equity in earnings of affiliates	8.1	11.5	12.5	9.5	14.9	8.0	5.8	9.0
Net earnings (loss)	30.0	28.8	6.2	(14.2)	3.8	(11.3)	(29.5)	(56.4)
Provision for dividends on preferred				2.40119021-4				
shares	(3.3)	(3.2)	(3.0)	(3.6)	(3.7)	(2.4)	(2.5)	(2.6)
Net earnings (loss) attributable to								
common shareholders	26.7	25.6	3.2	(17.8)	1	<u>(13.7</u>)	(32.0)	(59.0)
Earnings (loss) per common share	24		-					
(dollars)	.26	.25	.03	(.17)	_	(.13)	(.29)	(.53)
Price range of common shares on							,	
Toronto Stock Exchange (dollars)								
high	18%	183/4	18%	173/8	20	225/8	211/4	191/2
low	16%	157/8	15	141/4	163/8	19	171/4	151/2
Dividends per common share (dollars)								
cash dividends	.20	.20	.20	.20	.15	.15	.15	.15

Common share dividends declared in 1991 were payable in either cash or common stock at the shareholder's option.

FIVE YEAR EARNINGS DATA

	1991	1990	1989 (\$ millions)	1988_	1987
Sales	2,726.2	3,003.2	3,273.7	3,273.5	3,134.5
Contributions to earnings (loss):				N	
Building materials	(22.1)	43.1	139.1	186.8	206.4
Pulp and paper	(33.4)	54.6	180.8	254.9	229.6
Containerboard and packaging	(16.0)	44.7	113.6	118.0	88.9
Eliminations and unallocated items	(46.0)	(51.1)	(68.4)	(71.7)	(59.1)
Operating earnings (loss)	(117.5)	91.3	365.1	488.0	465.8
Other income (expense)	(11.7)	(13.0)	11.5	(9.1)	17.8
Interest expense	(109.7)	(81.0)	(53.6)	(43.5)	(50.7)
Earnings (loss) before income taxes	(238.9)	(2.7)	323.0	435.4	432.9
Income tax (recovery) expense	(107.8)	(11.9)	123.5	161.4	183.8
Equity in earnings of affiliates	37.7	41.6	47.2	55.8	31.5
Net earnings (loss)	(93.4)	50.8	246.7	329.8	280.6
Less: Provision for preferred dividends	11.2	13.1	13.2	13.8	21.3
Net earnings (loss) for common shareholders :	(104.6)	37.7	233.5	316.0	259.3
Net (loss) earnings per common share (dollars):					
basic	(.98)	.37	2.27	3.08	2.56
fully diluted	(.98)	.37	2.21	2.97	2.50
Cash dividends on common shares	.60	.80	.80	.90	.82

Notes:

The above data reflect the subdivision of each common share into three common shares on April 9, 1987.
 Financial information is expressed in Canadian dollars. Canadian, U.S. dollar exchange rates as reported by the Bank of Canada were as

	One Canadian dollar						
	High	Low	Average	Year-end			
1991	US\$.8934	US\$.8573	US\$.8728	US\$.8654			
1990	.8859	.8275	.8570	.8621			
1989	.8652	.8254	.8445	.8632			
1988	.8444	.7688	.8124	.8386			
1987	.7721	.7248	.7541	.7696			

MANAGEMENT'S DISCUSSION AND ANALYSIS

RESULTS OF OPERATIONS

To assist the reader in this discussion, reference is made to five year earnings data on page 30 of this report.

COMPARISON OF 1991 LOSS AND 1990 EARNINGS

In 1991 MB reported a record net loss of \$93.4 million. This compares to 1990 net earnings of \$50.8 million, an unfavourable change of \$144.2 million. Net earnings decreased from \$.37 per common share in 1990 to a net loss of \$.98 per common share in 1991.

The major items contributing to the decrease were a \$208.8 million decline in operating earnings, a \$28.7 million increase in interest expense and a \$15.8 million increase in provisions for closures. Other income partially offset the loss by improving \$17.1 million.

In each quarter in 1991, except the first, MB reported a net loss reflecting poor market conditions for most products. The first quarter net earnings were only \$3.8 million and came on the heels of the fourth quarter 1990 net loss of \$14.2 million — the only one in that year following three successive quarters of declining net earnings. Through the remainder of 1991 demand for our products, particularly for pulp and paper products, weakened reflecting the recessionary North American economies. Oversupply conditions forced production curtailments at most mills. The last three quarters of 1991 respectively showed losses of \$11.3 million, \$29.5 million and \$56.4 million.

Sales of products and services amounted to \$2,726.2 million, a decrease of \$277.0 million from the \$3,003.2 million reported in 1990. The following table provides an analysis of the change in key product sales from 1990 to 1991:

	Change in sales	Change att	ributed to:	
Product	1990 to 1991*	Volume	Price**	
	(\$	millions)		
Pulp	(91.0)	2.9	(93.9)	
Newsprint — specialty papers	(76.4)	(83.5)	7.1	
— standard	(27.2)	(9.2)	(18.0)	
Containerboard	(19.8)	(1.8)	(18.0)	
Corrugated containers	(21.3)	(8.5)	(12.8)	
Panelboards	(14.0)	(13.8)	(.2)	
Lumber	(22.8)	(38.6)	15.8	
Export logs	12.9	18.0	(5.1)	
	(259.6)	<u>(134.5)</u>	(125.1)	
Transportation services	(9.3)			
Other items	(8.1)			
Total	(277.0)			

Change in sales by product excludes freight.

Operating earnings decreased by \$208.8 million from \$91.3 million to a loss of \$117.5 million. This was principally due to lower prices for pulp, newsprint, containerboard and packaging products. However, most of MacMillan Bloedel's sales are non-Canadian and are quoted in U.S. dollars, and the effect of a 2% stronger Canadian dollar against the United States dollar in 1991 as compared to 1990 accounted for a significant portion of the price drop for those products and negated any significant price improvement for other products. Reduced shipments for newsprint and underutilization of ongoing capacity related costs also contributed to the poorer operating results. The volume decline of MB produced standard newsprint was 112,000 tonnes which was substantially offset by the increase in tonnage acquired from Alberta Newsprint Company and sold through MB's distribution business.

^{**} Includes the effect of foreign currency exchange rate changes.

The impact of the stronger Canadian dollar against the U.S. dollar on sales was partially offset by payments required in U.S. dollars. Had there been no change in the Canadian dollar against the U.S. in 1991, it is estimated that MB's after tax loss would have been reduced by approximately \$10 million.

The market place is intensely competitive with only low cost, efficient producers of quality products being able to sustain profitable operations. Customers are able to obtain quality products at prices equal to or lower than the cash costs of the highest cost producers. Canadian forest products companies are faced with high cost labour and high government tax burdens coupled with expensive environmental projects and an over priced Canadian dollar. During 1991 a number of significant closures were announced, particularly in eastern Canada — more are expected. The Company can meet the customer's quality requirements but some equipment (see building materials and pulp and paper segments) was permanently or indefinitely closed due to lack of competitiveness. The Company is vigorously pursuing efficiency and cost reduction programs, which are reducing fixed and variable costs to keep MB competitive relative to other Canadian companies but remain disadvantaged relative to foreign competitors.

Despite lower sales by \$277.0 million, costs and expenses declined only \$68.2 million reflecting the impact of ongoing production and administration costs. The ongoing costs of this capital intensive business that are related more closely to capacity than to production are items like ad valorem taxes, insurance, semi-annual and annual maintenance and the administrative and sales staff. These functions have and are being carefully reviewed to eliminate non-essential costs amongst the controllable functions. The incremental per unit cost of additional capacity utilization tends to be very low relative to the current average per unit costs — significant operating leverage currently exists waiting to be realized as the markets improve.

The Company, in common with all Canadian producers, over the last five years became disadvantaged competitively due to the Canadian forest products industry experiencing annual total labour cost increases higher than the U.S. industry. Further aggravating Canada's competitive disadvantage was the persistent strengthening of the Canadian dollar — 18 cents against the U.S. dollar since its low point in the mid 1980's.

Other income increased by \$17.1 million to \$28.4 million. In 1991 there were pre-tax profits on the sale of lands amounting to about \$13 million and interest income increased from the temporary investment of the proceeds from financings. Provisions for closures amounted to \$40.1 million in 1991, up \$15.8 million from 1990. MB has closed and announced the closure of certain facilities, undertaken reductions of salary and hourly staff not connected with the closures and provided for the write-off of other facilities determined not to be competitive.

Interest expense increased by \$28.7 million in 1991 due to higher borrowings.

Equity in earnings of affiliates declined \$3.9 million mainly due to MB's new investment in Trus Joist MacMillan a Limited Partnership (TJM). The Company's share of TJM's losses is reported in equity in results of affiliated companies from October 1, 1991 and includes specific loss allocations arising out of the start up periods of the engineered wood operations, Parallam® and PSL 300 ® contributed to TJM by MB (see investment in affiliates section). KNP and IPM benefited from low pulp prices in 1991. KNP, until recent months, was relatively unaffected by recessionary pressures and Europe's political changes and reported strong earnings similar to 1990. Losses related to the launching of IPM's new coater plant and related products in 1990 have been reduced in 1991, but the mill is still not profitable.

Building materials

The building materials segment reported a loss of \$22.1 million in 1991, down from a \$43.1 million contribution to earnings in 1990. Sales decreased from \$1,358.9 million in 1990 to \$1,323.4 million in 1991.

The following table shows sales and production of building materials products and the percentage of capacity utilization in each of the years 1991, 1990 and 1989:

	Sales		Production	
	Value (\$ millions)	Volume	Volume	Operating rate
1991				
Lumber (MMfbm)	947.8	1,622	702	75%
Plywood (MM sq.ft. 3%")	134.3	497	151	71%
Waferboard (MM sq.ft. 3%")		227	90	47%
Other	205.0			
	1,323.4			

	Sales		Production	
	Value (\$ millions)	Volume	Volume	Operating rate
1990				
Lumber (MMfbm)	976.4	1,710	794	74%
Plywood (MM sq.ft. 3/8")	144.9	539	233	70%
Waferboard (MM sq.ft. %")	41.6	282	114	60%
Other	196.0			
	1,358.9			
1989				
Lumber (MMfbm)	1,008.6	1,814	792	78%
Plywood (MM sq.ft. 3/8")	142.5	479	240	71%
Waferboard (MM sq.ft. %")	59.2	351	205	107%
Other	198.3			
	1,408.6			

1991 U.S. housing starts at approximately 1.0 million were at a 45 year low, down from 1.2 million in 1990. Despite falling mortgage rates, new home sales and starts are stalled at a depressingly low level reflecting the poor North American economy and lack of consumer confidence. 1991 overall U.S. lumber consumption is expected to be about 43 billion fbm, a drop of 7% from 1990 but well above the consumption in the 1982 recession.

Interest rates in Japan have increased and 1991 housing starts are expected to be 1.37 million, a sharp drop from the torrid pace of 1.6 to 1.7 million starts experienced in the preceding four years. Despite this, the volume of specialty lumber grades supplied by MB increased but some price weakness was experienced. MB's shipments to Japan and the Orient increased 28 MMfbm to 293 MMfbm.

Sales volumes for wood products were lower in 1991 compared to 1990, but average lumber sales values were higher as a result of MB's continued improvement in lumber product mix. The indefinite closure of the Company's Thunderbird mill at Nanaimo, British Columbia on March 30, 1991 means the Company has taken out of production virtually all of its whitewood dimension commodity lumber in British Columbia. In 1990 sales included 106 MMfbm of lower priced lumber from the Thunderbird mill while in 1991 only 48 MMfbm was sold. The old portion of the Somass cedar mill in Port Alberni, British Columbia was shut down as it was no longer economic. Except for cedar, all other lumber prices on average decreased in 1991. However, MB's improved recovery of higher valued lumber products more than offset the overall lumber price decline resulting in a net increase in average lumber sales value. Although small in volume, production and sales of the high value Yellow Cedar and Sitka Spruce products have noticeably increased in 1991.

The Chemainus, British Columbia sawmill continues to be profitable producing a very high quality product operating at full capacity in 1991. The Island Phoenix sawmill at Nanaimo, completed in 1989, has not reached production expectations and in current soft markets is unprofitable. MB's sawmills in total ran at 75% of capacity in 1991 compared with 74% in 1990.

MB's engineered wood results are included in the building materials segment through September 30, 1991 after which MB's loss from its investment in TJM is reported in equity in earnings of affiliated companies. Parallam® continued to be difficult to market in the recessionary climate and the Georgia mill incurred continuing start up costs.

Sales activities in the plywood markets were also depressed in 1991, and prices were at an uneconomic level for many mills in British Columbia. On April 30, 1991 the Company permanently closed its last plywood mill in British Columbia because of continuing financial losses. Plywood prices no longer are able to support the high wood and labour costs of the West Coast, and the logs were allocated to sawmills. On December 9, 1991 the Company permanently closed its hardboard siding mill at Sturgeon Falls, Ontario which suffered from competition by lower cost substitute products and continuing losses.

Pulp and paper

MB's pulp and paper segment reported a loss of \$33.4 million, a decrease of \$88.0 million from the \$54.6 million contribution to earnings in 1990. Sales decreased by \$198.8 million from \$1,127.5 million in 1990 to \$928.7 million in 1991.

The following table shows sales and production of pulp and paper products and the percentage of capacity utilization in each of the years 1991, 1990 and 1989:

	Sales		Production	
	Value (\$ millions)	Volume k tonnes	Volume k tonnes	Operating rate
1991				
Newsprint — standard	364.6	525	397	
— specialty papers	263.6	307	307	
Total newsprint	628.2	832	704	72%
Market pulp	255.2	411	381	76%
Other	45.3			
	928.7			
1990				
Newsprint — standard	376.9	548	511	
— specialty papers	350.5	415	422	
Total newsprint	727.4	963	933	96%
Market pulp	345.1	407	406	81%
Other	55.0			
	1,127.5			
1989				
Newsprint — standard	413.1	579	575	
— specialty papers	358.8	416	416	
Total newsprint	771.9	995	991	98%
Market pulp	460.5	503	484	97%
Other	<u>77.8</u>			
	1,310.2			

U.S. newsprint consumption declined sharply in 1991, falling 6% from the 1990 level. The U.S. recession and uncertainty during the Gulf war resulted in reduced advertising with retail, real estate and Help Wanted ads declining. Some of these changes were cyclical but others appear to be structural changes in the newspaper and advertising business — some advertisers are moving to more targeted media, and some successful retailers are spending relatively little on advertising.

On the supply side, twelve new newsprint machines have started up in North America since the beginning of 1989. Six of these are in western provinces and states where they directly compete with MB. Some older newsprint machines have been closed in Canada but substantial overcapacity remains. Pressure from customers and legislation in the U.S. calls for newsprint to be produced using recycled fibre. The Company in late 1991 installed at its Port Alberni mill the necessary equipment to produce standard newsprint and telephone directory with up to 40% recycled fibre content. A study is also underway on the feasibility of MB being a partner in a recycled newsprint mill in California (see recycling section).

As a result of reduced demand and oversupply, MB's newsprint production dropped 229,000 tonnes from 933,000 tonnes in 1990 to 704,000 tonnes in 1991 with capacity utilization falling from 96% to 72%. Standard newsprint production decreased 114,000 tonnes and specialty papers dropped 115,000 tonnes. Sales, however, fell only 130,000 tonnes as MB is committed by agreement to sell most of the production of Alberta Newsprint Company (ANC), a standard newsprint mill at Whitecourt, Alberta which started production in August, 1990. In 1991 MB sold 117,000 tonnes of standard newsprint from ANC up from 25,000 tonnes in 1990. ANC sales are focused mainly in the U.S. Midwest.

Throughout 1990 the list price for standard newsprint in the western U.S. remained at US\$630 per tonne and increased on January 1, 1991 by US\$35 per tonne to US\$665 per tonne. However, this list price quickly reverted to US\$630 per tonne and beginning in the second quarter of 1991 discounts expanded dramatically as the supply and demand imbalance forced transaction prices lower. Discounts averaged 8% in 1990 but were substantially higher in 1991.

The Company was able to increase prices for telephone directory papers in the Canadian and U.S. markets. The average gross sales value per tonne for all groundwood printing paper grades sold in 1991 was US\$805 per tonne as compared to US\$755 per tonne in 1990 but discounts expanded throughout 1991.

MB's pulp shipments increased marginally in 1991 compared to 1990. Market pulp demand in 1990 was affected by reduction of inventories held by paper makers so demand growth in 1991 reflected both increased pulp consumption and the absence of inventory reduction. However, Canadian shipments of northern bleached softwood kraft pulp continue to suffer from substitution of lower cost fibre from the U.S. South and additional tonnage from Chile. Canadian mills required considerable downtime in 1991 to keep production and shipments in balance; MB's market pulp production was only 76% of capacity in 1991 (81% in 1990).

When pulp demand slumped in mid 1990, prices began to fall rapidly. A price of US\$840 per tonne was in effect in western Europe from the second quarter of 1989 through second quarter of 1990; but by the latter part of 1991 the price had fallen below US\$500. Since then, two price increases have taken place with the latest effective February 1, 1992 bringing the price up to US\$540 per tonne.

MB's mills need to reduce costs significantly in order to survive in today's markets at current prices. Several older, non-competitive Canadian mills closed in 1991 and others face an uncertain future because of high costs, weak markets, the high Canadian dollar and the necessity of spending large amounts on pollution control.

MB's mills have undertaken effluent treatment and dioxin reduction programs that virtually eliminate dioxins. Powell River's and Harmac's dioxin programs were completed in late 1991 at a cost of \$28 million and \$37 million respectively. New or upgrading of secondary effluent treatment facilities at Powell River, Harmac and Port Alberni started in 1991 and to be completed in 1992 or 1993 will cost the Company \$237 million. \$31 million was spent in 1991. These expenditures are required to comply with new Canadian and provincial environmental protection legislation. The Company's major pulp and paper operating facilities continue to be monitored closely and funds are being committed to meet evolving environmental regulations.

Containerboard and packaging

The following table shows sales and production of containerboard and packaging products and the percentage of capacity utilization in each of the years 1991, 1990 and 1989:

	Sales (outside MB)		Production	
	Value (\$ millions)	Volume k tonnes	Volume k tonnes	Operating rate
1991				
Linerboard	130.4	265	330	80%
Corrugating medium	82.8	229	278	91%
Total containerboard	213.2	494	608	85%
Corrugated containers	204.2	247	252	83%
Other	1.7			
	419.1			
1990				
Linerboard	137.9	290	366	92%
Corrugating medium	92.2	210	280	92%
Total containerboard	230.1	500	646	92%
Corrugated containers	225.9	260	259	77%
Other	.1			
	456.1			
1989				
Linerboard	158.4	305	400	100%
Corrugating medium	114.9	226	294	97%
Total containerboard	273.3	531	694	99%
Corrugated containers	230.3	246	250	74%
Other	.5	2.0	250	7470
	504.1			
	501.1			

MB's containerboard and packaging segment reported a \$16.0 million loss in 1991 as compared to a \$44.7 million contribution to earnings in 1990. This \$60.7 million unfavourable change is due to falling prices and lower operating rates. Published linerboard list prices started in 1990 at US\$410 per ton and then fell by US\$30 per ton in mid 1990, and then fell another US\$30 per ton in early 1991, reaching US\$350 per ton where it remained until late 1991 when the price went up to US\$380 per ton.

The Alabama linerboard mill operated at 80% capacity in 1991 compared with 92% in 1990. The major capital rebuild of the linerboard machine in Alabama was completed in the summer of 1991 and required the linerboard machine to be shut down for almost a month. There have been prolonged operational start up difficulties which further reduced production.

The Alabama and Sturgeon Falls, Ontario corrugating medium mills together operated at 91% of capacity compared with 92% in 1990. Sturgeon Falls in 1991 operated at full capacity selling virtually all its production to MacMillan Bathurst, an affiliated corrugated container manufacturer. The medium market in late 1991 was in tight supply.

MB's corrugated container operations faced substantially lower prices in 1991. However, there has been a 5% price increase in the fourth quarter of 1991 reflecting tight supply. Consumer confidence in the U.S. continues to be very weak reflecting unemployment concerns, and, with very low housing starts in 1991, the retail market is selling fewer items requiring corrugated packaging. The Chicago, Illinois plant was sold in 1991. Some of its production has been picked up by MB's Rock Island, Illinois plant. The operating rate for corrugated containers in 1991 was 83% as compared to 77% in 1990.

EARNINGS SENSITIVITIES

MB's earnings are sensitive to fluctuations in prices for its products and in currency exchange rates. Based on production in 1991, a Cdn\$10 per unit change in the average net sales prices of its principal products or a \$.01 change in the value of the Canadian dollar relative to US\$1.00 affects MB's annualized after tax earnings approximately as follows:

	effect on net earnings	
	(\$ millions)	
Price sensitivity		
Lumber — \$10 change per Mfbm	4	
Newsprint and specialty papers — \$10 change per tonne	4	
Containerboard — \$10 change per tonne	4	
Pulp — \$10 change per tonne	2	
Exchange sensitivity		
Canadian dollar/U.S. dollar — change of Cdn\$.01	5	

Approximate annual

COMPARISON OF 1990 AND 1989 EARNINGS

In 1990 MB recorded net earnings of \$50.8 million. This compares to 1989 net earnings of \$246.7 million. On a per common share basis, net earnings decreased from \$2.27 per common share in 1989 to \$0.37 per common share in 1990.

The major items contributing to the decrease were a \$273.8 million decline in operating earnings, a \$27.4 million increase in interest expense and a \$17.9 million decrease in other income.

Operating earnings declined steadily throughout the year due to rising costs and falling markets with the fourth quarter incurring a loss. This was in part due to severe winter conditions in December but principally derives from poor markets as volumes were again off in all major product sectors.

The \$273.8 million decrease in operating earnings was mainly attributable to ongoing production facility costs, lower sales volumes, lower prices and the stronger Canadian dollar. On average, the Canadian dollar was approximately 2% stronger in 1990 than in 1989 which adversely affected net earnings by approximately \$12 million.

MB's building materials segment's contribution to earnings decreased \$96.0 million largely due to lower sales volumes for most wood products. However, MB's average lumber sales values were higher in 1990 than in 1989 due to MB's continued improvement in the product mix of value added products. The Japanese market economy performed well in 1990 and the strengthening of the yen drew a larger supply of wood from North America.

The pulp and paper segment's contribution to earnings decreased by \$126.2 million due to sharply lower pulp shipments and lower prices for pulp and newsprint, resulting from increasingly competitive markets arising from new capacity additions and high inventories.

The containerboard and packaging segment's contribution to earnings decreased \$68.9 million. Containerboard prices and volumes decreased. Corrugated container operations in the U.S. suffered a decline from 1989 despite an increase in volume.

Other income declined \$17.9 million to \$11.3 million in 1990. Provisions recorded to write-off certain unprofitable facilities and associated closure costs amounted to \$24.3 million in 1990 as compared to \$17.7 million in 1989.

Equity in earnings of affiliates declined \$5.6 million due to losses reported by Island Paper Mills and UK Corrugated.

FINANCIAL POSITION

MB accesses the world's major financial markets and, in order to obtain the most advantageous terms of credit, maintains a flexible financial structure. MB's objective in respect of debt leverage has been to maintain a ratio of debt to invested capital of 25% or less at the top of the business cycle and 35% at the bottom of the business cycle. However, the severity of the current recession together with the mandatory capital expenditures, particularly environmental, have resulted in a ratio exceeding our objective.

At December 31, 1991 interest-bearing debt and redeemable term preferred shares as a ratio to invested capital was 41.0% compared to 35.5% at the end of 1990. MB's short term investments at December 31, 1991 of \$227.6 million represents 6.7% of invested capital (1990 — 2.4%). These funds reflect the proceeds of financings completed in 1991.

As at December 31, 1991 MB's available borrowing capacity was as follows:

	Available	Utilized
	(\$ mill	lions)
Short term lines of credit	358.4	61.4
Long term lines of credit	650.0	_
	1,008.4	61.4

In January, 1991 the Company completed two \$50 million term loans with two major Canadian banks. They are for seven years and interest fluctuates at the Canadian Banker's Acceptance rate plus 0.75%.

On July 3, 1991 the Company sold 7.2 million common shares at a price of \$21.00 per share for net proceeds of \$145 million. The proceeds were added to the general funds of the Company and invested in short term investments pending use to fund capital expenditures.

On November 26, 1991 the Company issued \$100 million in unsecured senior debentures. The debentures bear interest at the rate of 10.125% per annum and the proceeds were invested and are available to fund capital expenditures.

On January 15, 1992 MacMillan Bloedel (Delaware) Inc. issued US\$150 million unsecured senior debentures, guaranteed by the Company, in a public U.S. offering. The debentures bear interest at the rate of 8.5% per annum. A portion of the proceeds were used to pay off short term indebtedness held by other U.S. subsidiaries and the remainder added to MB's substantial short term investments.

At December 31, 1991 MB's total interest bearing debt (excluding \$149.9 million of convertible subordinated debentures) was \$1,381.7 million, up \$267.4 million from December 31, 1990.

Funds generated by operations in 1991 amounted to \$81.5 million (1990 —\$289.6 million) with net funds required of \$317.6 million (1990 — \$309.6 million) after capital expenditures and investments of \$264.4 million (1990 —\$425.3 million), payment of preferred dividends, interest and taxes of \$96.3 million (1990 — \$91.8 million) and payment of common share dividends of \$38.4 million (1990 — \$82.1 million).

Operating earnings declined \$208.8 million from \$91.3 million in 1990 to a loss of \$117.5 million in 1991. The cash flow from operations did not cover the interest costs and other debt service requirements. MB has closed a number of losing operations and reduced costs in virtually all areas to improve gross margins and reduce fixed costs. The immediate market outlook is depressed but there is some indication the bottom has been reached for pulp and containerboard. The actions MB has taken are expected to enable it to service its debt obligations from current operations, but it will continue to rely on debt for incremental capital to fund the capital expenditures in progress.

MB has undrawn contractual lines of credit of \$650.0 million in addition to short term investments of \$227.6 million at December 31, 1991. MB has world scale competitive equipment in newsprint, containerboard and sawmilling which with current actions can be expected to earn a competitive return as the markets return to a balanced supply/demand position.

Capital expenditures in 1991 on property, plant and equipment were \$241.1 million of which \$152.4 million related to ongoing environmental and safety items and the replacement of existing capacity and technological updating. Details of specific capital expenditures have been described in each segment's section.

In 1991, the Company paid dividends on its common shares amounting to \$.60 per share. At its meeting on February 5, 1992 the Board of Directors declared a dividend of \$.15 per common share payable on March 16, 1992 to shareholders of record on February 21, 1992. The common share dividend will be payable in cash or in common shares at the shareholder's option. The Board of Directors also declared the stated dividends on the preferred shares.

SHAREHOLDER INFORMATION AND EXCHANGE LISTINGS

Montreal Trust Company of Canada (Vancouver, Calgary, Regina, Winnipeg, Toronto, Montreal) and Mellon Securities Trust Company (New York) are the Company's transfer agents and registrars.

Distribution of common shares and registered common shareholders as at February 1, 1992:

	Common shares	Common shareholders*
Canada	107,878,849	6,834
United States	3,415,422	648
Other	19,277	70
	111,313,548	7,552
Share warrants	552	
	111,314,100	

^{*}Excluding approximately 16,000 beneficial shareholders, 8,600 of whom are employees of the Company.

Exchange listings:

Common shares listed: Toronto, Montreal and Vancouver stock exchanges.

Common shares quoted: NASDAQ.

Class B preferred share listings: Toronto, Montreal and Vancouver stock exchanges.

Ticker symbols: Canadian stock exchanges — MB; NASDAQ — MMBLF.

DIRECTORS AND OFFICERS

DIRECTORS

Information on the Company's directors is presented in the Information Circular on pages 5 to 9.

OFFICERS

Name	Address	Age at Feb. 1, 1992	Positions held during past five years
Executive officers			
R.B. Findlay	West Vancouver, B.C.	58	President and Chief Executive Officer since December, 1990; prior to which he was Senior Vice-President, Marketing since 1989; prior to which he was Senior Vice-President, Alberni Region
J. St.C. Ross	West Vancouver, B.C.	60	Executive Vice-President and Chief Operating Officer since December, 1990; prior to which he was Senior Vice-President, Regional Operations since 1989; prior to which he was Senior Vice-President, Nanaimo Region
O.L. Forgacs	Vancouver, B.C.	61	Senior Vice-President, Research and Development
A.N. Grunder	North Vancouver, B.C.	55	Senior Vice-President, Finance and Administration since 1989; prior to which he was Vice-President, Information Systems & Services
J.L. Howard, Q.C	Vancouver, B.C.	60	Senior Vice-President, Law and Corporate Affairs
W.W. Shorter	Montgomery, Alabama	59	Senior Vice-President, Containerboard and Packaging since 1989 and President, MacMillan Bloedel Inc.
G.A. Adams	West Vancouver, B.C.	53	Vice-President, Transportation
W.A. Adams	Nanaimo, B.C.	51	Vice-President, Nanaimo Region since 1989; prior to which he was President and Chief Executive Officer, Island Paper Mills Company
G.M. Ferguson	North Vancouver, B.C.	51	Vice-President, Treasurer
J.C. Finkbeiner	North Vancouver, B.C.	44	Vice-President, Tax, Properties and Risk Management
W.E. Hawkings	Richmond, B.C.	60	Vice-President, Engineering (retired March 1, 1992)
$G.H.\ John cox\dots\dots$	West Vancouver, B.C.	51	Vice-President, Human Resources
E. Lauritzen	West Vancouver, B.C.	53	Vice-President, Pulp and Paper Marketing
W.G. Low	Powell River, B.C.	61	Vice-President, Powell River Region since 1989; prior to which he was General Manager, Alberni Pulp and Paper Division

Executive officers (continued)

Executive officers (continues	4)		D 22 - 1 11
Name	Address	Age at Feb. 1, 1992	Positions held during past five years
J.N. MacFarlane	Vancouver, B.C.	54	Vice-President, Chief Forester since January, 1992; prior to which he was Chief Forester since February, 1991; prior to which he was General Manager, Powell River Woodlands
R.V. Matthews	Vancouver, B.C.	48	Vice-President, Controller
F.H. Moonen	West Vancouver, B.C.	63	Vice-President, Government Affairs (retired March 1, 1992)
H. Reithaug	Port Alberni, B.C.	53	Vice-President, Engineering since March 1, 1992; prior to which he was Manager, Maintenance and Distribution, Alberni Pulp and Paper Division since 1990; prior to which he was Manager, Maintenance and Engineering Services, Alberni Pulp and Paper Division
D.W. St. John	Vancouver, B.C.	60	Vice-President, Building Materials Marketing since December, 1990; prior to which he was Vice-President, Lumber Marketing
A.C. Stubbs	North Vancouver, B.C.	47	Vice-President, Corporate Communications since 1988; prior to which he was Director, Public Relations
R.D. Tuckey	Port Alberni, B.C.	51	Vice-President, Alberni Region since 1989; prior to which he was General Manager, Harmac
V.R. Worthy	West Vancouver, B.C.	54	Vice-President, Engineered Wood Products since December, 1990; prior to which he was Vice-President, Panelboards
G.E. Mynett	Vancouver, B.C.	45	Corporate Secretary
Other officers			
A.D. Laberge	Vancouver, B.C.	35	Assistant Treasurer since May, 1991; prior to which she was Director, Corporate Finance since 1988; prior to which she was Manager, Corporate Finance
Claire-Marie Jadot	North Vancouver, B.C.	49	Associate Corporate Secretary
The second secon			

During 1991 two executive officers retired — D.L. McLauchlin, Executive Vice-President, and R.N. Wiewel, Senior Vice-President, Product Development.

ADDITIONAL INFORMATION

Additional information, including directors' and executive officers' remuneration and indebtedness, principal holders of MacMillan Bloedel Limited's common shares, options to purchase securities and interests of insiders in material transactions, where applicable, is contained in MacMillan Bloedel Limited's Information Circular in connection with the meeting to be held on April 9, 1992 (pages 4 to 9 of this document). Additional financial information is provided in Consolidated Financial Statements (pages 41 to 59 of this document).

Consolidated Financial Statements December 31, 1991

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MacMILLAN BLOEDEL LIMITED

Consolidated Statements of Earnings (Loss)

	Year ended December 31		
	1991	1990*	1989*
		(\$ millions)	
Sales of products and services	\$2,726.2	\$3,003.2	\$3,273.7
Costs and expenses:			
Materials, labour and other operating expenses	2,469.4	2,538.7	2,561.0
Depreciation, depletion and amortization	156.6	156.5	130.4
Selling, general and administrative	217.7	216.7	217.2
	2,843.7	2,911.9	2,908.6
Operating earnings (loss)	(117.5)	91.3	365.1
Other income	28.4	11.3	29.2
Provisions for closures	(40.1)	(24.3)	(17.7)
Interest expense	(109.7)	(81.0)	(53.6)
Earnings (loss) before income taxes	(238.9)	(2.7)	323.0
Income tax (recovery) expense:			
Current	(62.4)	(1.7)	90.4
Deferred	(45.4)	(10.2)	33.1
	(107.8)	(11.9)	123.5
Earnings (loss) before undernoted item	(131.1)	9.2	199.5
Equity in earnings of affiliates	37.7	41.6	47.2
Net earnings (loss)	(93.4)	50.8	246.7
Provision for dividends on preferred shares	11.2	13.1	13.2
Net earnings (loss) attributable to common shareholders	<u>\$ (104.6)</u>	\$ 37.7	\$ 233.5
Earnings (loss) per common share (dollars)	<u>\$ (.98)</u>	\$.37	\$ 2.27

^{*}Certain prior year amounts have been reclassified to conform with the presentation in 1991.

Consolidated Statements of Financial Position Net Assets Employed

	December 31	
	1991	1990*
	(\$ mi	illions)
Current assets:		
Cash	\$ —	\$.7
Short term investments and deposits	227.6	77.8
Accounts receivable —	226.1	205.4
Trade	336.1 49.2	305.4
Other Income taxes recoverable	61.5	43.5 28.0
Inventories (Note 2)	483.6	531.3
Prepaid expenses	4.7	5.3
Trepaid expenses	-	
	1,162.7	992.0
Deduct current liabilities (excluding interest-bearing debt):		
Bank overdrafts in excess of cash	11.8	_
Trade accounts payable	142.8	153.5
Accrued payroll and related liabilities	126.4	117.4
Accrued interest on borrowed funds	19.1	20.5
Other accounts payable and accrued liabilities	113.4	99.2
	413.5	390.6
Operating working capital	749.2	601.4
Investments and other assets:		
Investments in affiliates (Note 3)	673.5	471.2
Other investments and assets, at cost	40.4	45.6
	713.9	516.8
Property, plant and equipment: (Note 4)	710.5	
Buildings and equipment	3,068.6	3,005.1
Less: Accumulated depreciation	1,383.2	1,316.2
Less. Accumulated depreciation		
C	1,685.4	1,688.9
Construction in progress	41.8	152.5
	1,727.2	1,841.4
Timber and land less accumulated depletion	203.2	211.0
Logging roads	12.9	13.4
	1,943.3	2,065.8
	\$3,406.4	\$3,184.0

^{*}Certain 1990 figures have been reclassified to conform with the presentation in 1991.

Approved by the Board:

R.B. Findlay, Director

R.V. Smith, Director

Consolidated Statements of Financial Position Invested Capital

	December 31	
	1991	1990*
	(\$ mil	lions)
Short term interest-bearing debt: Bank indebtedness (Note 5)	\$ 61.4	\$ 47.4
Notes payable	78.7	1.1
Current portion of long term debt (Note 6)	8.5	30.7
	148.6	79.2
Long term obligations:		
Term loans (Note 7)	951.6	859.0
Notes, bonds and debentures (Note 8)	266.1	157.0
Other	16.3	22.2
	1,234.0	1,038.2
Deferred income taxes	274.3	319.7
	1,656.9	1,437.1
Convertible debentures and shareholders' equity: Convertible subordinated debentures (Note 9)	149.9	150.0
Shareholders' equity Share capital: (Note 10)		
Preferred shares	111.9	119.5
Common shares	730.9	552.0
	842.8	671.5
Retained earnings	800.3	976.1
	1,643.1	1,647.6
Foreign exchange translation adjustment	(43.5)	(50.7)
Shareholders' equity	1,599.6	1,596.9
	1,749.5	1,746.9
Commitments (Notes 10 and 11) Subsequent event (Note 16)		
Subsequent event (110te 10)	\$3,406.4	\$3,184.0

^{*}Certain 1990 figures have been reclassified to conform with the presentation in 1991.

Consolidated Statements of Changes in Financial Position

	Year ended December 31		er 31
	1991	1990**	1989**
		(\$ millions)	
Internal funds:			
Generated (used) by operations			
Operating earnings (loss)	\$ (117.5)	\$ 91.3	\$ 365.1
Depreciation, depletion and amortization	156.6	156.5	130.4
Other income	28.4	11.3	29.2
Provision for closures	(40.1)	(24.3)	(17.7)
Distributions from affiliated companies	25.8	21.1	17.2
Decrease (increase) in operating working capital —			
Receivables	(28.6)	41.5	11.4
Inventories	42.3	(5.2)	(26.4)
Other	14.6	(2.6)	45.9
Generated by operations	81.5	289.6	555.1
D 1 C			
Required for:	1111	77.0	61.7
Interest	111.1 14.1	77.0	51.7 15.6
Dividends to preferred shareholders		15.5	115.2
Income taxes currently paid (recovered)	(28.9)	(.7)	
	96.3	91.8	182.5
Net internal funds	(14.8)	197.8	372.6
Funds invested long term:			
Capital expenditures	241.1	366.5	518.4
Investments and other assets	23.3	58.8	76.4
	264.4	425.3	594.8
	(279.2)	(227.5)	(222.2)
Dividends to common shareholders	38.4	82.1	82.1
Funds required	(317.6)	(309.6)	(304.3)
Financing transactions:			
Net interest-bearing debt incurred	274.3	333.9	327.0
Conversion of subordinated debentures	(.1)	_	
Issue of common shares	153.3	_	_
Retraction and redemption of preferred shares	(7.7)	(4.1)	(4.0)
Disposal of investments and other	35.1	28.0	6.4
Financing provided	454.9	357.8	329.4
Increase in funds*	\$ 137.3	\$ 48.2	\$ 25.1
increase in funds	Ψ 157.5	y 70.2	Ψ 23.1

^{*}Funds are defined as cash, short term investments and deposits less bank overdrafts.

^{**}Certain prior year amounts have been reclassified to conform with the presentation in 1991.

Consolidated Statements of Retained Earnings

	Year ended December 31		
	1991	1990 (\$ millions)	1989
Balance at beginning of year	\$ 976.1	\$1,023.3	\$ 874.6
Net earnings (loss)	(93.4)	50.8	246.7
	882.7	1,074.1	1,121.3
Deduct:			
Cash dividends:			
Preferred shares — Class B	14.1	15.5	15.6
Common shares — \$.60 per share			
(1990 and 1989 \$.80 per share)	38.4	82.1	82.1
Stock dividends:			
Common shares — \$.60 per share	25.6	_	_
Dividends declared; payable in January and February, 1992:			
Preferred shares — Class B	7		
	78.8	97.6	97.7
Costs of issue and redemption of shares less applicable income taxes of			
\$2.6 million (1990 and 1989 — nil)	3.6	4	3
	82.4	98.0	98.0
Balance at end of year	\$ 800.3	\$ 976.1	\$1,023.3

Common share dividends declared in 1991 were payable in either cash or common stock at the shareholder's option.

AUDITORS' REPORT

To the Shareholders of MacMillan Bloedel Limited:

We have audited the consolidated statements of financial position of MacMillan Bloedel Limited as at December 31, 1991 and 1990 and the consolidated statements of earnings, retained earnings and changes in financial position for each of the years ended December 31, 1991, 1990 and 1989. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 1991 and 1990 and the results of its operations and the changes in its financial position for the years ended December 31, 1991, 1990 and 1989 in accordance with generally accepted accounting principles. As required by the British Columbia Company Act, we report that, in our opinion, these principles have been consistently applied.

Price Waterhouse Chartered Accountants Vancouver, British Columbia February 5, 1992

Notes to Consolidated Financial Statements December 31, 1991, 1990 and 1989

In these notes "MacMillan Bloedel" means MacMillan Bloedel Limited and its consolidated subsidiaries, and "Company" means MacMillan Bloedel Limited as a corporation.

1. Accounting policies:

MacMillan Bloedel follows accounting principles generally accepted in Canada. Information with respect to generally accepted accounting principles in the United States is provided in Note 15.

(a) Principles of consolidation

The consolidated financial statements include all subsidiaries.

(b) Foreign currency translations

The assets and liabilities of self-sustaining foreign operations are translated at current rates of exchange while those of integrated foreign operations are translated at current rates for items measured at current prices, and at historical rates for items measured at past prices. Other assets and liabilities denominated in foreign currencies are translated at the year-end rate of exchange.

MacMillan Bloedel considers that its foreign currency denominated debt represents an effective hedge of its foreign currency investments in subsidiary and partly-owned companies. Accordingly, foreign currency translation adjustments relating to long term debt are included with the foreign exchange translation adjustment relating to self-sustaining foreign operations as a separate component of shareholders' equity.

(c) Valuation of inventories

Inventories of operating and maintenance supplies and raw materials are valued at the lower of average cost and replacement cost or net realizable value. Inventories of manufactured products are valued at the lower of average cost and net realizable value.

(d) Property, plant and equipment

Property, plant and equipment are recorded at cost.

MacMillan Bloedel employs the units-of-production basis for depreciation of manufacturing assets. Non-manufacturing assets are depreciated on a straight line basis.

The rates of depreciation being applied are intended to fully depreciate manufacturing assets (at normal production levels) and non-manufacturing assets over the following periods:

Buildings	20 and 40 years
Pulp and paper mill machinery and equipment	20 years
Logging machinery and equipment	5 to 7 years
Other manufacturing machinery and equipment	7 to 13 years
Vessels	10 to 13 years

Depletion of timber and amortization of main logging roads are determined on a basis related to log production.

(e) Capitalized interest

Interest is capitalized during construction of major capital projects.

(f) Goodwill

The goodwill component of investments in affiliates is generally amortized over 20 years.

2. Inventories:

	December 31	
	1991	1990
	(\$ mi	llions)
Operating and maintenance supplies	\$ 78.8	\$ 80.2
Logs, pulp chips and pulpwood*	124.9	154.0
Lumber, panelboards and other building materials	198.6	210.0
Pulp and paper products*	50.7	56.3
Containerboard and packaging products	30.6	30.8
	\$483.6	\$531.3

^{*}At December 31, 1991 these inventories are valued at net realizable value, which is lower than cost.

3. Investments in affiliates accounted for by the equity method:

	December 31				
	1991			1990	
	% Owned	Cost	Undistributed earnings (losses) (\$ millions)	Total	Total
Koninklijke Nederlandse					
Papierfabrieken N.V. (KNP)	30.5	\$147.0	\$241.0	\$388.0	\$361.3
Trus Joist MacMillan (TJM)	49.0	186.4	(7.3)	179.1	_
UK Corrugated	50.0	37.4	(9.7)	27.7	30.8
MacMillan Bathurst	50.0	21.6	9.7	31.3	33.7
Island Paper Mills	50.0	57.6	(16.6)	41.0	41.8
Other		7.6	(1.2)	6.4	3.6
		\$457.6	\$215.9	\$673.5	\$471.2

During 1990 MacMillan Bloedel acquired an additional 2.4% of KNP for \$35.9 million. The unamortized goodwill attributable to MB's investment in KNP at December 31, 1991 is \$26.9 million.

Summarized financial information -

Financial position:

			December 31		
		1990			
	KNP	TJM	Other	Total	Total
			(\$ millions)		
Current assets	\$ 925.3	\$ 46.0	\$ 250.7	\$1,222.0	\$ 761.4
Investments in affiliates accounted for					
by the equity method	358.9	_	_	358.9	502.7
Other non-current assets	1,922.4	234.5	361.5	2,518.4	1,260.6
Intangibles	230.4	37.0	3.3	270.7	198.6
	\$3,437.0	\$ 317.5	\$ 615.5	\$4,370.0	\$2,723.3
Current liabilities	\$ 706.8	\$ 49.8	\$ 185.8	\$ 942.4	\$ 442.8
Non-current liabilities	1,309.0	22.4	204.0	1,535.4	976.3
Minority interests	286.4			286.4	52.7
	2,302.2	72.2	389.8	2,764.2	1,471.8
Shareholders' equity	1,134.8	245.3	225.7	1,605.8	1,251.5
	\$3,437.0	\$ 317.5	\$ 615.5	\$4,370.0	\$2,723.3

3. Investments in affiliates accounted for by the equity method: (continued)

Results of operations:

			Year ended I	December 31		
		19	91		1990	1989
	KNP	TJM	Other	Total	Total	Total
			(\$ mil	lions)		,
Net sales	\$1,300.8	\$ 60.4	\$ 929.7	\$2,290.9	\$2,310.0	\$2,394.4
Gross profit (loss)	\$ 119.9	\$ (12.5)	\$ 31.0	\$ 138.4	\$ 184.9	\$ 220.0
Net earnings (loss)	\$ 162.3	\$ (13.1)	\$ (4.4)	\$ 144.8	\$ 154.0	\$ 172.8

Effective October 1, 1991 MacMillan Bloedel agreed with TJ International, Inc. to form "Trus Joist MacMillan a Limited Partnership" to manufacture and distribute engineered wood products. MacMillan Bloedel invested three engineered wood products divisions. During the initial years of the partnership MacMillan Bloedel will bear the major share of start-up losses in Parallam® and PSL 300® while receiving a small interest in the results of TJM from other products until the value of the respective contributions by TJ International, Inc. and MacMillan Bloedel are appropriately equalized, at which date the earnings allocated will be 49% MacMillan Bloedel and 51% TJ International, Inc.

Investment in Trus Joist MacMillan at October 1, 1991:

	(\$ millions)
Working capital	\$ 3.9
Long term assets	175.2
Investment in Trus Joist MacMillan	\$179.1

4. Property, plant and equipment:

Buildings and equipment -

	Cost	Accumulated depreciation	Net	Construction in progress	
		(\$ mil	(\$ millions)		
December 31, 1991					
Building materials	\$ 712.1	\$ 355.6	\$ 356.5	\$ —	
Pulp and paper	1,582.1	705.4	876.7	41.8	
Containerboard and packaging	661.3	263.2	398.1		
Corporate assets and other	113.1	59.0	54.1		
	\$3,068.6	\$1,383.2	\$1,685.4	\$ 41.8	
December 31, 1990					
Building materials	\$ 828.4	\$ 349.3	\$ 479.1	\$ 41.7	
Pulp and paper	1,456.6	658.3	798.3	76.4	
Containerboard and packaging	602.1	244.8	357.3	34.4	
Corporate assets and other	118.0	63.8	54.2		
	\$3,005.1	\$1,316.2	\$1,688.9	\$ 152.5	

Assets having an aggregate historical cost of \$184.6 million (1990 — \$184.6 million) (mainly the Alabama facilities and certain ships) and the related depreciation and long term debt included in these financial statements are held under capital leases.

Construction in progress as at December 31, 1991:

Environmental projects at Harmac, Powell River and Port Alberni.

The estimated total cost of these projects, including capitalized interest, is \$274.0 million. These projects are expected to be completed in 1993.

5. Short term bank indebtedness:

At December 31, 1991 MacMillan Bloedel had short term bank lines of credit aggregating \$358.4 million (1990 — \$343.6 million) of which \$61.4 million (1990 — \$47.4 million) had been drawn down.

6. Payments required on long term debt in the next five years:

	bor	lotes nds & entures	200	erm k loans (\$ milli	liab	other oilities	_1	<u> Total</u>
1992	\$.7	\$	3.5	\$	4.3	\$	8.5
1993		4.4		2.8		4.4		11.6
1994		.8		92.2		4.9		97.9
1995		.1	2	93.5		1.7	2	295.3
1996	1	15.7	1	45.1		.4	2	261.2

7. Term loans (unsecured):

	Decer	mber 31
	1991	1990
		illions)
7.39% Dutch Guilders 32.1 million	\$ —	\$ 22.0
6.8% Yen 500 million maturing 1993	4.6	4.3
8.31% to 8.54% US\$75.0 million maturing 1994	86.7	87.0
9.4% to 9.54% US\$250.0 million maturing 1995	288.9	290.1
6.13% Yen 1,275 million maturing 1995	11.8	13.9
8.1% Dutch Guilders 215.0 million maturing 1996	145.1	147.7
9.47% US\$50.0 million maturing 1997	57.8	58.0
\$129.0 million maturing 1997*	129.0	29.0
9.2% US\$200.0 million maturing 1999	231.2	232.0
	955.1	884.0
Less: Payments due within one year	3.5	25.0
	\$951.6	\$859.0

At December 31, 1991 MacMillan Bloedel had available contractual term bank lines of credit aggregating \$650.0 million. These contractual term lines provide for loans on a revolving basis for up to three years, followed by repayment periods of five years.

8. Notes, bonds and debentures:

	Decer	nber 31
	1991	1990
	(\$ m	illions)
9% Notes (unsecured) maturing 1996		
(US\$100.0 million)	\$115.6	\$116.0
10.125% senior debentures, series 1 (unsecured), maturing 2002	100.0	
Industrial development revenue and pollution control bonds at interest rates ranging from 4.9% to 10.25% and maturing from 1993 to 2009 (US\$35.3 million)*	40.8	41.7
(US\$9.1 million)*	10.4	
	266.8	157.7
Less: Payments due within one year	7	7
	\$266.1	\$157.0

^{*}These bonds are direct obligations of Industrial Development Boards and municipal authorities in Alabama, Arkansas and Mississippi.

^{*}Interest rates related to bankers acceptance rates

9. Convertible subordinated debentures (unsecured):

On May 21, 1987 the Company issued \$150.0 million twenty year adjustable rate convertible subordinated debentures.

Interest -

The interest rate is the greater of (i) 5% and (ii) 1% plus the percentage that two times the dividends paid per common share in the previous six months is of the then applicable conversion price.

Conversion features -

The debentures are convertible at the holder's option into common shares on or before the earlier of the last business day prior to the maturity date of the debentures or the last business day prior to redemption, at a conversion price of \$28.625 per common share subject to adjustment under certain antidilution or other provisions.

Redemption features -

At the Company's option, the debentures are redeemable after May 1, 1990; upon maturity they are redeemable for common shares. The characteristics and attributes attaching to the convertible subordinated debentures, including the Company's option to require the trustee to apply the proceeds and purchase common shares, causes the Company to view these securities as substantially permanent capital and consequently these debentures are shown under the heading "convertible debentures and shareholders' equity".

10. Share capital:

The Company's authorized capital consists of 250.0 million common shares, 3.4 million class A preferred shares and 20.0 million class B preferred shares issuable in series, all without par value.

Decem	ber 31
1991	1990
(\$ mil	lions)
\$ 13.8	\$ 15.4
45.1	47.3
_	_
53.0	56.8
111.9	119.5
730.9	552.0
\$842.8	\$671.5
	\$ 13.8 45.1 - 53.0 111.9

The Class B Preferred Shares -

These shares rank prior to the common shares of the Company.

	Date	Price
Redemption features		
Series 4:		
Company's redemption options —		
redeemable before	September 1, 1992	US\$100.00
Company's redemption obligations —	September 1, 1987	
redeem 4,687 shares each quarter	through June 1, 1992	US\$100.00
redeem remaining shares on	September 1, 1992	US\$100.00
Series 8:		
Company's redemption options —		
redeemable before	September 1, 1992	\$25.50
redeemable on or after	September 1, 1992	\$25.00
Company's redemption obligations —		
make all reasonable efforts to purchase, during each calendar		
quarter — 1% of the shares outstanding on August 31,		\$25.00
1990	September 1, 1990	maximum
Series 10:		
Company's redemption options —		
redeemable before	March 1, 1993	\$25.50
redeemable on or after	March 1, 1993	\$25.00

Dividends

- Series 4 Cumulative preferential equal to the sum of 1.5% and one half of the defined average U.S. prime rate per annum, payable quarterly.
- Series 8 Cumulative preferential of 9.25% to September 1, 1990 and 73% of the Canadian prime interest rate thereafter.
- Series 9 Dividends are payable only to the extent of revenues received by the Company from certain oil and gas property interests. The holder of the series 9 preferred shares is also entitled to participate in dividends distributed to common shareholders.
- Series 10 Cumulative preferential; until March 1, 1991 of \$2.175 per share (8.7%) per annum payable quarterly (thereafter, payable monthly). Commencing March 1, 1991 the dividend rate is related to changes in prime. The annual floating dividend rate is based on 73% of prime.

Share purchase plans —

Employee

The Company has reserved 7.5 million common shares for issuance pursuant to the employee share purchase plan of which 6.4 million had been taken up as at December 31, 1991.

Senior management

At December 31, 1991 loans to employees under the senior management share purchase plan amounted to \$10.8 million (1990 — \$11.4 million). The loans are non-recourse, interest free, maturing at various dates to the year 2000 and secured by a pledge of the common shares.

Convertible subordinated debentures

The Company has reserved 5.2 million common shares for issuance pursuant to the terms of issue of the convertible subordinated debentures.

10. Share capital: (continued)

Changes in share capital -

	Issued and outstanding	
	Number of shares	(\$ millions)
Class B preferred shares Series 4		
January 1, 1989	221,877 (18,748)	\$ 19.0 (2.0)
December 31, 1989	203,129 (18,751)	17.0 (1.6)
December 31, 1990	184,378 (18,752)	15.4 (1.6)
December 31, 1991	165,626	\$ 13.8
Series 8 January 1, 1989 Purchased during 1989 December 31, 1989 Purchased during 1990	1,979,800 (60,000) 1,919,800 (27,000)	\$ 49.5 (1.5) 48.0 (.7)
December 31, 1990 Purchased during 1991 December 31, 1991	1,892,800 (88,000) 1,804,800	47.3 (2.2) \$ 45.1
Series 9 December 31, 1989, 1990, 1991	1,000	\$ —
Series 10 January 1, 1989 Purchased during 1989 December 31, 1989 Purchased during 1990 December 31, 1990 Purchased during 1991 December 31, 1991	2,376,000 (34,800) 2,341,200 (68,300) 2,272,900 (153,000) 2,119,900	\$ 59.4 (.9) 58.5 (1.7) 56.8 (3.8) \$ 53.0
Common shares December 31, 1989 and 1990 Issued during 1991 Conversion of subordinated debentures Employees share purchase plan Stock dividends December 31, 1991	102,649,825 7,200,000 1,815 107,261 1,342,739 111,301,640	\$552.0 151.2 .1 2.0 25.6 \$730.9

11. Commitments:

In addition to commitments for capital expenditures and the future supply of operating services and materials, MacMillan Bloedel is committed at December 31, 1991 in respect of the following —

(a) Ship charters and rentals under non-cancellable operating leases having an initial term of more than one year as follows —

	Ship charters	Leases (\$ millions)	Total
1992	\$23.4	\$ 15.4	\$ 38.8
1993	6.6	11.6	18.2
1994	_	9.6	9.6
1995	_	6.3	6.3
1996	_	5.4	5.4
1997 - 2001	_	23.2	23.2
2002 - 2006	_	22.6	22.6
2007 - 2011	_	21.6	21.6
2012 - 2013		8.7	8.7
	\$30.0	\$124.4	\$154.4

(b) The acquisition of timber in Alabama under long term cutting contracts requiring minimum annual payments (extending in some cases to the year 2034); payment of approximately \$5.9 million is required in each of the next five years.

12. Earnings statements supplementary information:

(a) Costs and expenses

	Year ended December 31		
	1991	1990	1989
		(\$ millions)	200
Interest expense			
Long term debt interest	\$102.4	\$ 64.5	\$ 34.2
Convertible debenture interest	7.5	7.5	7.6
Other interest	10.8	22.3	26.0
	120.7	94.3	67.8
Less: Interest capitalized	11.0	13.3	14.2
	\$109.7	\$ 81.0	\$ 53.6
Effective average interest rate	8%	8%	8%
Other income			
Income from investments	\$ 15.6	\$ 5.7	\$ 4.3
Other	12.8	5.6	24.9
	\$ 28.4	\$ 11.3	\$ 29.2
Provision for closures	\$ 40.1	\$ 24.3	\$ 17.7

MacMillan Bloedel has closed and announced the closure of certain facilities, undertaken reductions of salaried and hourly staff not connected with closures and determined that other facilities were not competitive.

12. Earnings statements supplementary information: (continued)

			Year	Year ended December 31		
			1991	1990 (\$ millions)	1989	
	Depreciation		. 11.2	\$138.6 10.9 7.0	\$109.8 13.0 7.6	
	Research and development expenses			\$156.5 \$ 16.8 3.4 \$ 13.4	\$130.4 \$ 16.1 3.6 \$ 12.5	
	Rental expense		\$ 47.6	\$ 48.5	\$ 49.7	
	Remuneration of directors and executive officers		-	\$ 4.1	\$ 6.9	
	Wages, salaries and benefits			\$794.7	\$773.3	
	Pension expense (Note 14)		. \$ 61.7	\$ 64.5	\$ 60.7	
(b)	Income taxes Income tax (recovery) expense:					
	Years ended December 31	Canadian federal	Canadian provincial (\$ mill	Foreign ions)	Total	
	1991			,		
	Current	\$(21.9) (38.2)	(21.9) (4.1)	(3.1)	\$ (62.4) (45.4)	
		<u>\$(60.1)</u>	<u>\$(26.0)</u>	<u>\$(21.7)</u>	<u>\$(107.8)</u>	
	1990 Current Deferred	\$ 26.0 (13.6)	\$ (8.3) (6.8)	\$(19.4) 10.2	\$ (1.7) (10.2)	
	Deletted	\$ 12.4	\$(15.1)	\$ (9.2)	\$ (11.9)	
	1989					
	Current	\$ 30.4 17.6	\$ 19.7 12.0	\$ 40.3 3.5	\$ 90.4 33.1	
		\$ 48.0	\$ 31.7	\$ 43.8	\$ 123.5	

The principal items giving rise to deferred income tax expense are depreciation, depletion and amortization.

MacMillan Bloedel has available investment tax credits of \$76.1 million that have been recognized in the results of prior years. The majority of these investment tax credits expire in 1998.

Income tax rate reconciliation:

	Year ended December 31	
	1991*	1989
Canadian federal income tax rate	38.0%	38.0%
Provincial and state taxes and federal surtax		4.0
Canadian manufacturing and processing allowance		(1.2)
Foreign tax rates	1.3	(3.3)
Other items	4.2	.7
Effective income tax rate	45.1%	38.2%

^{*}Recovery

The Company's income tax recovery of \$11.9 million for the year ended December 31, 1990 is greater than that which would be derived from application of the Canadian federal income tax rate of 38% to the loss of \$2.7 million before income taxes primarily as a result of losses in high tax rate jurisdictions and income in low tax rate jurisdictions. Therefore, the 1990 rate analysis is not considered meaningful by the Company.

(c) Net earnings per common share

Basic net earnings per common share is computed by dividing the net earnings, after providing for dividends on the preferred shares, by the weighted average number of shares outstanding during the year. The provision for dividends on the preferred shares is made on a time elapsed basis rather than on a declared basis.

Fully diluted net earnings per common share is computed by dividing basic net earnings (adjusted for the after tax interest expense on the convertible subordinated debentures) by the weighted average number of shares outstanding during the period (adjusted for the number of common shares which would have been issued had the conversion taken place at the beginning of the year).

13. Related party transactions:

MacMillan Bloedel sells products and services in the ordinary course of business and at fair market values to related parties and also purchases certain services and products for resale from related parties. These transactions include the sale of pulp to Koninklijke Nederlandse Papierfabrieken N.V., and Island Paper Mills, the sale of containerboard to MacMillan Bathurst and UK Corrugated, the purchase of lumber from Noranda Forest Inc. and the purchase of engineered wood products from Trus Joist MacMillan. The Company is also related to Trilon Securities Corporation, one of the Underwriters for the issue in 1991 of \$100 million, 10.125% Senior Debentures, Series 1 and the issue in 1991 of 7.2 million common shares.

	Year ended December 31		
	1991	1990	1989
		(\$ millions)	
Sales to related parties	\$107.1	\$123.3	\$115.4
Purchases from related parties	\$ 64.8	\$ 65.3	\$ 73.8
Sale of common shares to Noranda Forest Inc.	\$ 50.4	<u>\$ —</u>	<u>\$ —</u>
		Decem	ber 31
		1991	1990
		(\$ mil	lions)
Accounts receivable from related parties		\$ 44.3	\$ 19.8

14. Pension plans:

Substantially all employees may participate in pension plans after one or two years service. All the salaried employees are eligible to be members of company sponsored plans. The hourly employees are generally members of negotiated plans to which the Company contributes amounts specified by collective agreements. In addition, the Company has agreements with some of its officers and executives (including retirees) which call for payments to be made under certain conditions following retirement.

Consolidated summary of Company sponsored pension plans:

	December 31		
	1991	1990	1989
		(\$ millions)	
Obligations for pension benefits	\$517.6	\$487.4	\$454.6
Pension fund assets at market related values	435.3	410.4	398.8
Excess of obligations over fund assets	82.3	77.0	55.8
Provisions	50.9	34.7	24.1
Excess of obligations over provision and fund assets	\$ 31.4	\$ 42.3	\$ 31.7

15. Information with respect to United States generally accepted accounting principles (U.S. GAAP):

There are no material differences between MacMillan Bloedel's consolidated net earnings determined in accordance with U.S. GAAP and consolidated net earnings determined in accordance with generally accepted accounting principles in Canada.

The balance sheet captions listed below are specifically shown for compliance with requirements of the United States Securities and Exchange Commission (SEC):

	December 31		
	1991	1990	
	(\$ millions)		
Total assets	\$3,819.9	\$3,574.6	
Current assets		992.0	
Current liabilities	562.1	469.8	

The SEC requires that redeemable preferred shares not be shown as part of shareholders' equity. Accordingly, under SEC requirements shareholders' equity would be:

	December 31		
	1991	1990	
	(\$ m	illions)	
Common shares	\$ 730.9 800.3	\$ 552.0 976.1	
Foreign exchange translation adjustment	1,531.2 (43.5)	1,528.1 (50.7)	
	\$1,487.7	\$1,477.4	

16. Subsequent event:

In January, 1992 MacMillan Bloedel (Delaware) Inc., a wholly owned subsidiary of the Company, issued US\$150.0 million of 8.5% guaranteed debentures due January 15, 2004 for net proceeds of US\$148.7 million.

17. Segment information:

	Sales Originating in Canada	Sales to unaffiliated customers from	Contributions to operating earnings (2)	Assets
		(\$ mill	ions)	
Year ended December 31, 1991				
Canada	\$ 538.9	\$1,207.7	\$ (46.7)	\$1,811.6
United States	606.4	1,197.2	(22.9)	852.7
Europe	292.0	95.3	.5	31.0
Japan and other	544.6	226.0	9.4	103.2
	1,981.9	2,726.2	(59.7)	2,798.5
Eliminations and adjustments:				* 00 PM 00 PM 00 00 00 00 00 00 00 00 00 00 00 00 00
Inter-segment			(6.9)	(21.6)
General corporate			(62.6)	1,043.0
Interest expense			_(109.7)	
Consolidated totals	\$1,981.9	\$2,726.2	\$ (238.9)	\$3,819.9
Year ended December 31, 1990				
Canada	\$ 572.6	\$1,266.7	\$ 134.8	\$1,859.7
United States	730.8	1,419.2	30.3	936.1
Europe	338.4	87.6	(.3)	27.8
Japan and other	559.8	229.7	(2.0)	69.5
	2,201.6	3,003.2	162.8	2,893.1
Eliminations and adjustments:				_,075.1
Inter-segment			(17.5)	(14.6)
General corporate			(67.0)	696.1
Interest expense			(81.0)	
Consolidated totals	\$2,201.6	\$3,003.2	\$ (2.7)	\$3,574.6
Year ended December 31, 1989				
Canada	\$ 609.4	\$1,468.6	\$ 313.2	\$1,764.4
United States	836.1	1,523.8	110.9	879.9
Europe	348.9	42.4	1.0	12.2
Japan and other	647.6	238.9	15.6	81.4
	2,442.0	3,273.7	440.7	2,737.9
Eliminations and adjustments:		9 -		2,707.15
Inter-segment			(4.9)	(20.2)
General corporate			(59.2)	555.8
Interest expense			(53.6)	
Consolidated totals	\$2,442.0	\$3,273.7	\$ 323.0	\$3,273.5

17. Segment information: (continued)

	Total revenue	Contributions to earnings (1)(2)	Depreciation, depletion and amortization (\$ millions)	Capital expenditures	Assets
Year ended December 31, 1991					
Building materials	\$1,323.4	\$ (22.1)	\$ 60.1	\$ 76.3	\$1,034.2
Pulp and paper	928.7	(33.4)	57.0	110.0	1,206.2
Containerboard and packaging	419.2	(16.0)	29.9	43.0	503.0
Other	54.9	4.9	1.5	2	33.5
Total operations	2,726.2	(66.6)	148.5	229.5	2,776.9
General corporate		(62.6)	8.1	11.6	1,043.0
Interest expense		(109.7)			
Consolidated totals	\$2,726.2	\$ (238.9)	\$156.6	\$241.1	\$3,819.9
Year ended December 31, 1990					
Building materials	\$1,358.9	\$ 43.1	\$ 64.0	\$130.6	\$1,210.9
Pulp and paper	1,127.5	54.6	59.7	153.9	1,155.2
Containerboard and packaging	456.1	44.7	23.9	76.6	499.4
Other	60.7	2.9	1.5	1.3	13.0
Total operations	3,003.2	145.3	149.1	362.4	2,878.5
General corporate	ĺ	(67.0)	7.4	4.1	696.1
Interest expense		(81.0)		S	
Consolidated totals	\$3,003.2	\$ (2.7)	\$156.5	\$366.5	\$3,574.6
Year ended December 31, 1989					
Building materials	\$1,408.6	\$ 139.1	\$ 57.0	\$246.8	\$1,152.0
Pulp and paper	1,310.2	180.8	42.1	194.5	1,080.7
Containerboard and packaging	504.1	113.6	22.2	59.4	457.0
Other	50.8	2.3	1.8	1	28.0
Total operations	3,273.7	435.8	123.1	500.8	2,717.7
General corporate		(59.2)	7.3	17.6	555.8
Interest expense		(53.6)			
Consolidated totals	\$3,273.7	\$ 323.0	\$130.4	\$518.4	\$3,273.5

(1) Basis of segmentation

MacMillan Bloedel carries on an integrated forest products business which involves extensive transfers of raw materials and products among operations. Segmenting an integrated forest products business into product and service categories involves allocating conversion and other costs and raw material costs. Raw material costs are allocated on a basis proportionate to the end product net revenue before deducting fibre cost. Other pricing policies and methods of allocating costs are possible but at this time the Company believes the above determined method to be appropriate to its circumstances.

(2) Contributions to operating earnings

Contributions to operating earnings represent sales of products and services less cost of sales and services, selling expenses and allocated general and administrative expenses.

General corporate profit and loss items consist of unallocated corporate staff expenses, profit and loss on asset disposals, corporate research, foreign exchange and one time items not attributed to a line of business. General corporate items in assets are mainly short term investments, investments and other assets and certain fixed assets such as computers and research facilities.

18. Subsidiary companies and jurisdiction of incorporation: (100% owned unless otherwise noted)

British Columbia

Altair Property and Casualty Corporation

Canadian Transport Company

(International) Limited

Canadian Transport Company Canada Limited

Forest Industries Flying Tankers Limited

(57.5% interest)

International Stevedoring Services Limited*

Island Paper Mills Limited*

Kingcome Navigation Company Ltd.

MacMillan Bloedel Building Limited*

MacMillan Bloedel Parallam Services Limited*

Port Royal Development Limited

Port Royal Village Developments Inc.

Vancouver Marine Engines Ltd.

Ontario

MacMillan Bloedel Export Sales Ltd.*
MBS Ontario Ltd.*

Alabama

MacMillan Bloedel of America Inc.

MacMillan Bloedel Inc.

MacMillan Bloedel Financial Inc.

MacMillan Bloedel Holdings Inc.*

MacMillan Bloedel Particleboard Inc.

MacMillan Bloedel Radio System, Inc.*

MacMillan Bloedel Timberlands Inc.

Delaware

Powell River-Alberni Sales Corporation

MacMillan Bloedel (USA) Inc.

MacMillan Bloedel (Delaware) Inc.*

Washington

Fibres International, Inc. (51% interest)

Lawson Disposal, Inc.

Pacific Resource Management Inc.

Australia

Canadian Transport Company Pty. Limited* MacMillan Bloedel Pty. Limited

Barbados

Canadian Transport Company (Overseas)

Limited*

Camarin Limited

MacMillan Bloedel Finance Limited

MacMillan Bloedel FSC Ltd.

Transmacan Limited*

England

Hygrade Corrugated Cases Limited*

MacMillan Bloedel Containers Holdings Limited*

MacMillan Bloedel Holdings (UK) Limited*

MacMillan Bloedel Pulp and Paper Sales Limited

Hong Kong

MacMillan Bloedel (Asia) Limited

Japan

MacMillan Bloedel K.K.

Malaysia

MacMillan Bloedel (South East Asia) SDN.BHD.

Netherlands

MacMillan Bloedel Europe B.V.

MacMillan Bloedel (Limburg) N.V.

Netherlands Antilles

Canadian Maas River Investment N.V.

MacMillan Bloedel (Curacao) N.V.*

MacMillan Bloedel St. Maarten N.V.

^{*}Inactive