Information Circular
& Annual Statutory Report
1990

MacMillan Bloedel Limited

**INFORMATION CIRCULAR AND ANNUAL STATUTORY REPORT FOR 1990
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), Annual Information Form 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 1075 West Georgia Street, Vancouver, British Columbia, V6E 3R9, (604) 661-8302, until June 1, 1991. After June 1, 1991 the head office will be at 925 West Georgia Street, Vancouver, British Columbia, V6C 3L2.

This document contains the majority of the information required by the United States Securities and Exchange Commission (Form 10-K). Form 10-K information not included herein 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 in the B.C. Ballroom of the Hotel Vancouver, 900 West Georgia Street, Vancouver, British Columbia on Thursday, March 28, 1991 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, 1990;
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 21st day of February, 1991.

BY ORDER OF THE BOARD

G.E. MYNETT, FCIS
Corporate Secretary

INFORMATION CIRCULAR
In connection with the meeting to be held on March 28, 1991
Dated as of February 21, 1991

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, March 28, 1991 at the time and place and for the purposes set out in the Notice of Meeting.

The Board of Directors 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 Central Guaranty Trust Company, 800 West Pender Street, Vancouver, British Columbia, 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 Central Guaranty Trust Company.

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 them. **If there are no instructions, on any poll they 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 resolutions to be presented to the meeting are ordinary resolutions: these require the affirmative votes of the holders of a majority of the shares represented at the meeting in person or by proxy.

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 U.S. $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 8, 1991. Each person who is listed in the register of members of the Company as a holder of one or more common shares on March 28, 1991 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, 1991, 102,649,273 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, other than Noranda Forest Inc., owns or exercises control over, directly or indirectly, shares carrying more than 5% 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, 1991	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	51,193,663	49.9%

The directors and executive officers as a group beneficially own 844,934 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 eighteen members, presently made up of five executive officers and thirteen directors who are not executive officers. The Board of Directors held six meetings during 1990.

From among its members, the Board appoints a number of committees with specific duties: an Executive Committee, an Audit Committee, a Compensation Committee, a Nominating Committee, an Environmental Committee, a Donations Committee and a Pension Fund Investment Advisory Committee.

Subject to any restrictions imposed by the Board, the Articles or law, the Executive Committee, during the intervals between the meetings of the Board, possesses all the powers of the Board in the management of the business of the Company. Five meetings of the Executive Committee were held during 1990.

The Audit Committee assists the Board in fulfilling its responsibilities relating to financial accounting and reporting practices; reviews any financial statement to be included in any prospectus or to be presented at an annual general meeting; considers the report of the external auditors on the Company's financial statements; reviews the overall integrated audit plan of its internal and external auditors and receives their reports on the assessment of financial accounting controls and the adequacy of the Company's record keeping; examines the fees and expenses for both audit and non-audit services; recommends to the Board a firm of independent auditors for appointment by the shareholders; and, at least annually, receives and reviews the chief executive officer's certificate under the Company's code of corporate behavior. Four meetings of the Audit Committee were held during 1990.

Within the framework of the basic compensation policy established by the Board, the Compensation Committee determines salary scales and general salary structures, fixes the compensation of the Chairman, Vice-Chairman, and President and Chief Executive Officer and, on the recommendation of the President and Chief Executive Officer, approves the salaries of all other officers of the Company. It also oversees the administration of the Company's benefit programs for salaried employees, the employee share purchase plan, pension plan, management incentive compensation plan and senior management share purchase plan. Five meetings of the Compensation Committee were held during 1990.

The Nominating Committee recommends to the Board the size and composition of the Board and the names of persons to be nominated as directors for the ensuing year or to fill casual vacancies as they occur during the year. One meeting was held during 1990. The advance notice of the Annual General Meeting to be held on Thursday, March 28, 1991, which was published in Vancouver on January 31, 1991, included an invitation for written nominations signed by members holding in the aggregate not less than ten percent of the Company's common shares. The Company had received no such nominations for inclusion in this information circular by February 21, 1991.

Each of the directors except Senator J.T. Eyton and Messrs. F.J. de Wit, R.E. Harrison, D.W. Kerr, and A. Powis attended 75% or more of the total number of meetings of the board and the committees on which he served. Directors who were unable to attend or participate in meetings held by conference telephone were informed of the matters to be discussed, had an opportunity to express their views and to review the minutes of the meetings and, in respect of committees, were in most instances represented by alternate directors.

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 sixteen 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, 1991	Director since	Shares held*
D.C. Davenport . . . . Vancouver, Canada	Partner of Davis & Company (barristers and solicitors). (Notes 1, 2, 4 and 7)	58	1981	525
F.J. de Wit . . . . Blaricum, The Netherlands	Chairman, Board of Management, Koninklijke Nederlandse Papierfabrieken N.V. (manufacturers of fine and coated papers). (Note 4)	51	1986	3,646
Senator J.T. Eyton, O.C. . . . . . . Caledon, Canada	President and Chief Executive Officer, Brascan Limited (natural resources, financial services and consumer products), Member of The Senate of Canada. (Notes 4 and 5)	56	1985	9,120
R.B. Findlay, ... West Vancouver, Canada	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. (Notes 1 and 5)	57	1990	37,738
R.E. Harrison . . . . Toronto, Canada	Corporate Director. (Notes 1, 4 and 5)	69	1981	5,364
G.H.D. Hobbs . . . . Vancouver, Canada	Corporate Director. (Notes 3 and 4)	69	1972	7,200
R.T. Kenny . . . . Buckingham, Canada	President and Chief Operating Officer, Noranda Forest Inc. (forest products) and Senior Vice-President — Forest, Noranda Inc. (mining and metallurgy, manufacturing, forest products, oil and gas exploration). (Notes 4 and 7)	61	1986	1,826
D.W. Kerr . . . . Toronto, Canada	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. since 1987; prior to which he was Senior Vice-President, Strategic Planning, Noranda Inc. from 1986; prior to which he was Executive Vice-President, Brascan Limited. (Notes 2 and 4)	47	1988	5,000
C.C. Knudsen . . . . Seattle, U.S.A.	Corporate Director since December 1990; prior to which he was Vice-Chairman of the Board. (Notes 1, 2 and 4)	67	1976	14,479
J.A. Pattison . . . . West Vancouver, Canada	Chairman, President and Chief Executive Officer, The Jim Pattison Group Inc. (holding company). (Notes 1, 3, 4 and 5)	62	1987	3,932

Name and residence	Principal occupation of nominee during the past five years	Age at Feb. 1, 1991	Director since	Shares held*
A. Powis, O.C. .... Toronto, Canada	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. (Notes 3 and 4)	60	1981	5,315
J. St.C. Ross .... West Vancouver, Canada	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. (Notes 1 and 7)	59	1990	51,821
R.V. Smith .... West Vancouver, Canada	Chairman of the Board since December 1990; prior to which he was President and Chief Executive Officer of the Company.	64	1980	128,009
Dr. D.W. Strangway.......... Vancouver, Canada	President of The University of British Columbia. (Notes 2, 4, 6 and 7)	56	1986	1,065
J.S. Walton .... Vancouver, Canada	President, Endeavour Capital Corporation (corporate & financial advisory services) since 1989 and Corporate Director since 1988; prior to which he was President and Chief Executive Officer, Placer Dome Inc. (international mining) since 1987; prior to which he was President and Chief Executive Officer, Placer Development Limited (mining, oil and gas). (Notes 3, 4 and 7)	60	1988	2,000
A.H. Zimmerman........... Toronto, Canada	Vice-Chairman of the Board since December 1990; prior to which he was Chairman of the Board of the Company; Chairman and Chief Executive Officer, Noranda Forest Inc. (forest products). (Notes 1 and 3)	63	1981	38,219

*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 .1 percent.

Note: (1) Member of the Executive Committee
(2) Member of the Audit Committee
(3) Member of the Compensation Committee
(4) Member of the Nominating Committee
(5) Member of the Pension Fund Investment Advisory Committee
(6) Member of the Donations Committee
(7) Member of the Environmental 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:

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)
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)
D.W. Kerr	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) Portland General Electric (utilities) 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)
J.A. Pattison	Paramount Communications (entertainment, publishing, financial services) Henley Group Inc. (diversified manufacturing)
A. Powis, O.C.	Gulf Canada Resources (oil and gas) Norcen Energy Resources Limited (oil and gas) North Canadian Oils Ltd. (oil and gas)
A.H. Zimmerman	The Pittston Company (coal mining, air freight, armoured transport and security services)

RETIRING DIRECTORS

Mrs. Jean M. Southam has been a director since 1981, but has informed the Company that she will not be standing for re-election at the meeting of shareholders on March 28, 1991. She is a Trustee, Lester B. Pearson College of the Pacific; Governor of the Vancouver Public Aquarium; and Member of the Board, World Wildlife (Canada). She is the Chairman of the Donations Committee and a member of the Nominating Committee.

Mr. D.L. McLauchlin, who has been a director since 1988, has also informed the Board that he does not wish to stand for re-election at the meeting of the shareholders to be held March 28, 1991.

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.

APPOINTMENT OF AUDITORS

Unless otherwise directed, the persons named in the enclosed form of proxy will vote for the re-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.

1992 ANNUAL GENERAL MEETING

The Company should receive any proposal of shareholders intended to be presented at the Annual General Meeting to be held in 1992 for inclusion in the information circular relating to that meeting by October 23, 1991.

EXECUTIVE COMPENSATION

The following table shows cash compensation in 1990 for each of the five most highly compensated executive officers of the Company and for all executive officers as a group.

(a) **Cash Compensation Table**

Name of individual or number in group	Capacities in which served	Cash salaries
R.V. Smith	Chairman of the Board/ President and Chief Executive Officer	$ 350,000
D.L. McLauchlin	Executive Vice-President	$ 240,000
W.W. Shorter	Senior Vice-President, Containerboard and Packaging	$ 216,325
R.B. Findlay	President and Chief Executive Officer/ Senior Vice-President, Marketing	$ 214,772
J. St. C. Ross	Executive Vice-President and Chief Operating Officer/ Senior Vice-President, Regional Operations	$ 213,105
24	All executive officers as a group (including the five individuals named above)	$3,816,674

There were no cash bonuses accrued for services in 1990.

This table excludes 1990 benefits of $130,982 not available to all employees.

(b) **Compensation pursuant to plans**

Remuneration payments made in 1990 pursuant to the plans described below and proposed to be made in the future to the executive officers listed in section (a) 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 1990) 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 1990.

(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. Shares issued during 1990 to the five named individuals were R.V. Smith 21,950 shares ($406,075), D.L. McLauchlin 9,460 shares ($175,010), W.W. Shorter 6,810 shares ($125,985), R.B. Findlay 6,865 shares ($127,002), J. St.C. Ross 7,015 shares ($129,777) and other executive officers 76,435 shares ($1,396,047). There were no shares received or loans repaid during the year. Common shares held and loans outstanding as at December 31, 1990 by the five named individuals were R.V. Smith 92,277 shares

($1,522,331), D.L. McLauchlin 48,985 shares ($845,349), W.W. Shorter 23,030 shares ($405,071), R.B. Findlay 33,905 shares ($586,145), J. St.C. Ross 43,080 shares ($676,518) and other executive officers 306,703 shares ($5,174,808). The market price for the Company's common shares on February 1, 1991 was $18.00 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 1990 and no shares were received during 1990 by the named individuals or by other executive officers. Common shares held and loans outstanding as at December 31, 1990 by other executive officers were 1,817 shares ($36,800). The market price for Noranda Inc.'s common shares on February 1, 1991 was $17.25 per share.

(4) *Stock Option and Stock Appreciation Rights Plans*

The Company has a stock option plan for selected employees under which options on common shares or stock appreciation rights may be granted to selected key employees. The plan is administered by a committee appointed by the Board of Directors. The number of participants in the plan is limited to 150 and the aggregate number of shares in respect of which options or stock appreciation rights may be outstanding is 200,000 shares. Each option granted shall be for a period not exceeding five years. The committee may grant to optionees stock appreciation rights which may be surrendered for cash, and may accept shares owned by an optionee at market price in exchange for options or stock appreciation rights under the plan. No stock options or stock appreciation rights were granted during 1990. No options are outstanding.

(5) *Retirement Plans*

The estimated annual pension benefits payable upon normal retirement to the twenty-four executive officers covered by the Cash Compensation Table are $3,290,515 based upon remuneration received and accrued to December 31, 1990.

(i) As at December 31, 1990, twenty-two 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 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 covered remuneration	Years of service					
	10	15	20	25	30	35
$100,000	$ 20,000	$ 30,000	$ 40,000	$ 50,000	$ 60,000	$ 70,000
$150,000	$ 30,000	$ 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
$400,000	$ 80,000	$120,000	$160,000	$200,000	$240,000	$280,000
$450,000	$ 90,000	$135,000	$180,000	$225,000	$270,000	$315,000
$500,000	$100,000	$150,000	$200,000	$250,000	$300,000	$350,000
$550,000	$110,000	$165,000	$220,000	$275,000	$330,000	$385,000
$600,000	$120,000	$180,000	$240,000	$300,000	$360,000	$420,000
$650,000	$130,000	$195,000	$260,000	$325,000	$390,000	$455,000

As at December 31, 1990, R.V. Smith had 33 years of service with the Company, D.L. McLauchlin had 39 years of service with the Company, W.W. Shorter had 12 years of service with the Company, R.B. Findlay had 25 years of service with the Company, and J. St.C. Ross had 27 years of service with the Company.

(ii) As at December 31, 1990, W.W. Shorter 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 were highest; it provides for 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. Based on remuneration received to December 31, 1990, his estimated annual retirement benefits upon normal retirement is U.S. $53,000.

(iii) As at December 31, 1990, 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 directors' option in cash or common shares of the Company. During 1990, $246,000 was paid and 1,330 shares were allocated to directors.

GLOSSARY OF TERMS

MEASUREMENTS

fbm	— foot-board measure (board foot) — one square foot of lumber one inch thick
hectare	— 2.471 acres
m^3	— cubic metre or 35.315 cubic feet
M cubic feet	— thousand cubic feet
Mfbm (MMfbm)	— thousand (million) foot-board measure
MM sq.ft. ⅜"	— million square feet, ⅜ inch thick used to measure panelboard volumes
tonne	— metric ton — 1,000 kilograms or 2,204 pounds
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 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 sold 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
Groundwood and specialty printing paper	— paper with mechanical pulp as its major component which differs from newsprint in brightness, surface characteristics and end uses
Newsprint	— paper produced principally from mechanical pulp for use in newspapers
Fine paper	— paper with bleached chemical pulp as its major component

Building Materials

Dimension lumber	— lumber cut and planed to standard sizes and lengths nominally 2 × 4 inches through 2 × 12 inches in cross section by 8 to 24 feet in length
Panelboard	— comparatively thin flat sheets of wood used for paneling
Particleboard	— panelboard produced by chemically bonding small wood shavings and sawdust under pressure
Plywood	— laminated veneers of solid wood
Waferboard	— 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 the customer — a new product scheduled to go into commercial production at the end of 1991

Containerboard and Packaging

Containerboard	—	linerboard and corrugated medium used to produce corrugated boxes (containers)
Corrugated containers	—	paper boxes using sheets of linerboard with medium corrugated (fluted) between the linerboard

CORPORATE PROFILE

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.

A list of the Company's subsidiaries is set out in Note 17 to the consolidated financial statements, which can be found on page 54 of this report.

The Company together with its subsidiaries ("MacMillan Bloedel" or "MB") is one of North America's largest forest products companies, with integrated operations in Canada and the United States as well as major investments in Canada, 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.

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

	Building materials	Pulp and paper	Containerboard and packaging	Other	Total operations
			($ millions)		
Total revenue —					
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
Contributions to earnings —					
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
Assets —					
December 31, 1990	1,219.7	1,155.6	515.0	13.0	2,903.3
December 31, 1989	1,161.3	1,081.1	473.1	28.0	2,743.5
December 31, 1988	960.9	922.7	443.8	32.1	2,359.5

MB also owns substantial interests in companies operating in related fields, which are described under Investments in affiliates on page 22 of this report.

Further financial information and explanatory notes pertaining to each of MB's industry and geographic segments and export sales are presented in Note 16 of notes to consolidated financial statements included on pages 52 and 53 of this report.

BUILDING MATERIALS

Logging Operations

MB has a number of log harvesting operations, primarily on the 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, diameter 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 1990, 1989 and 1988:

	Year ended December 31		
	1990	1989	1988
	(thousands of cubic metres)		
British Columbia	6,694	7,849	7,959
Alabama and Mississippi (includes hardwood)	802	880	877

Reforestation

In order to assure a continuing supply of raw materials for the future, the Company maintains an active reforestation program in British Columbia.

In 1988 the British Columbia Forest Act was amended to transfer financial responsibility for reforestation on Crown lands to licencees for lands logged after October 1, 1987. 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 practice.

The Company operates the A.P. MacBean Nursery at Nanaimo, British Columbia, which builds on tree improvement and reforestation research to provide healthy, fast-growing seedlings for planting on Company-managed lands. These seedlings are of a native species and type most appropriate to the site on which they will be planted.

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 36 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)	657,000	
Timber licences (Note 4)	127,000	
Owned lands (Note 5)	79,000	
	863,000	
Managed forest lands (owned lands) (Note 5)	146,000	1,009,000
Other tenures:		
Timber licences (Note 6)	40,000	
Owned lands	1,000	41,000
		1,050,000
Saskatchewan (Note 7)		309,000
Alabama and Mississippi: (Note 8)		
Owned lands	80,000	
Long term cutting rights	102,000	182,000
		1,541,000

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 57,000 hectares controlled by MB are considered inaccessible and hence not commercial.

(2) The Province of British Columbia owns approximately 95 percent of all forest lands in the province. Under the Forest Act, the Government is empowered to grant "tree-farm licences" to a licencee who undertakes to

manage an area of Crown forest land, often in conjunction with forest land held by the licencee, to yield an annual crop 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 is 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 percent of the wood requirements (logs and chips) for the present production facilities in British Columbia.

(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 standing 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 31,000 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 13,000 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.

United States

(8) The wood supply from its own timber resources (32 percent in 1990) 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.

Forestry and the Environment

MacMillan Bloedel is in business to grow and harvest trees and turn them into quality forest products. As a steward of the forest, the Company is responsible for finding the best ways to protect and manage trees, plus all the other values of the forest, for the benefit of present and future generations.

There is a continuing public concern about the effect of logging on the environment. Land and land use claims are becoming more disruptive to proper sustained yield forest management. Special Interest Groups have taken action in a number of areas of Company controlled forest to prevent logging and are intent on having lands withdrawn from timber production.

Specific areas which are subject to major action are:

	Commercial Hectares	Action By
Carmanah Valley*	3,000	Special Interest Groups
Clayoquot Sound**	106,000	Special Interest Groups and Native Indians
Tsitika Valley	3,000	Special Interest Groups
Other areas	54,000	Special Interest Groups and Native Indians
	166,000	

*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.

**Includes Meares Island with 3,573 commercial hectares subject to court injunction on behalf of Native Indians.

Special Interest Groups have also attempted to deter European buyers of B.C. 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 Licenses entrusted to its care. It is believed the Government recognizes the importance of a secure resource base to the Company's ability to raise funds to invest in the very 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, particleboard and Parallam® 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, 1990, 1989 and 1988 lumber accounted for 32.5%, 30.8% 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

MB operates the following converting facilities for the manufacture of building materials:

	Division	Location	Annual capacities at year-end 1990	1990 Production
Lumber & Lumber Specialties (MMfbm)	Alberni Pacific	Port Alberni, British Columbia	182	155
	Somass	Port Alberni, British Columbia	115	81
	Northumberland	Nanaimo, British Columbia		
	Island Phoenix		155	88
	Thunderbird		134	101
	Chemainus	Chemainus, British Columbia	106	98
	Canadian White Pine	Vancouver, British Columbia	127	114
	New Westminster	New Westminster, British Columbia	84	66
	Powell River	Powell River, British Columbia	49	36
	Pine Hill	Pine Hill, Alabama	70	55
			1,022	794

	Division	Location	Annual capacities at year-end 1990	1990 Production
Plywood (MM sq.ft. ⅜″)	Alberni Plywood*	Port Alberni, British Columbia	168	93
	Pine Hill	Pine Hill, Alabama	133	115
	Nipigon	Nipigon, Ontario	30	25
			331	233
Waferboard (MM sq.ft. ⅜″)	Hudson Bay	Hudson Bay, Saskatchewan	191	114
Particleboard (MM sq.ft. ¾″)	Particleboard	Vancouver, British Columbia	57	48
Hardboard (MM sq.ft.)	Sturgeon Falls	Sturgeon Falls, Ontario	47	22
Parallam® (M cubic feet)	Parallam®	New Westminster, British Columbia	980	768
	Parallam®II**	Colbert, Georgia	2,100	56
Specialty Board (MM sq.ft.)	Specialty Board	Vancouver, British Columbia	37	15
Mouldings (MM lineal ft.)	Kingtrim	Toronto, Ontario	79	35

* To be closed April 30, 1991.
**Parallam® II commenced production July, 1990.

MB's lumber products together with lumber purchased from other producers account for 71.9% 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 produced 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 paneling), and patio grades for decking and exposed beams. The producing mills for the Company's whitewood products include Alberni Pacific, Chemainus, Thunderbird, Powell River, and Island Phoenix which commenced production in July, 1989, largely directing its output to the local remanufacturing and 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 for the Japanese housing market. Thunderbird and Pine Hill lumber continue to produce mostly dimension lumber for the U.S. market. 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 uses.

Panelboard products are presently produced at various mills across Western and Central Canada. Standard plywood sold in the U.S. market is produced from pine logs at the Alabama mill. A specialty hardwood plywood plant at Nipigon produces such products as shafts for hockey sticks. It has been announced that Alberni Plywood, which produces softwood plywood products sold in a highly competitive market, will be closed April 30, 1991. Competition from substitute products and continuous losses have forced the closure. Other Company panelboard products are also no longer cost competitive and their continued production remains under review.

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 U.S.$68.6 million. For 1990, saleable production was 57.4M cubic feet compared to the plan of 475M cubic feet. However, the Company believes that as customer acceptance grows, expectations will be met. Parallam® parallel strand lumber is manufactured by bonding long strands of wood veneer into uniform structural beams, using a waterproof adhesive. It is made in a continuous process and cut to various lengths, in a wide range of cross sectioned sizes. In addition to its strength, the appearance and dimensional stability is expected to facilitate its market acceptance by architects, engineers and builders in the residential and light commercial construction markets.

Construction was started in 1990 on a manufacturing plant near Deerwood, Minnesota to produce a new product PSL 300™. The new plant will cost approximately U.S.$74.0 million and have an annual capacity of 4.6 million cubic feet of engineered parallel strand lumber. This new technology compresses strands of wood into a dimensionally stable slab which is then cut to customers' specifications. This product is well suited to and will be directed to the window and door manufacturing market. The Company has an assured source of the raw materials from the state of Minnesota and will purchase 130,000 cords a year from independent contractors.

Capital expenditures in the building materials segment in 1990 amounted to $130.6 million, compared to $246.8 million and $170.0 million in 1989 and 1988 respectively. During 1989, the construction of the Island Phoenix mill was completed at a cost of $61 million, the new 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. During 1988, the construction of a gang quad sawmill at New Westminster was completed at a cost of $14 million.

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 1990 sales values were divided approximately as follows: 32.3% in Canada, 35.9% in the United States, 21.1% in Japan and the Orient and 10.7% elsewhere. The following table shows the distribution by market of MB's building materials sales in 1990, 1989 and 1988:

		Canada	United States	Japan & Orient	Europe & Other	Total
Lumber (MMfbm)	1990	386.8	895.9	264.6	163.1	1,710.4
	1989	417.3	994.3	247.1	155.1	1,813.8
	1988	401.2	1,081.9	241.5	165.8	1,890.4
Structural panelboards	1990	520.1	322.2	20.1	31.2	893.6
(MM sq.ft. ⅜")	1989	511.5	360.8		30.7	903.0
	1988	547.4	365.7		36.3	949.4

MB operates 19 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, it is not practicable to consolidate a back-order file.

PULP AND PAPER

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, 1990, 1989 and 1988 newsprint and groundwood printing papers accounted for 24.2%, 23.6% and 24.1% respectively of MB's consolidated sales values to unaffiliated customers while for market pulp the percentages were 11.5%, 14.1% and 12.7% respectively.

Pulp and Paper Facilities

MB operates the following facilities for the manufacture of pulp and paper products:

	Division	Location	Annual capacities at year-end 1990	1990 Production
Market Pulp	Harmac	Nanaimo, British Columbia	370	289
(k-tonnes)	Alberni Pulp and Paper	Port Alberni, British Columbia	80	74
	Powell River	Powell River, British Columbia	50	43
			500	406
Newsprint and Groundwood Printing Papers	Alberni Pulp and Paper	Port Alberni, British Columbia	355	350
	Powell River	Powell River, British Columbia	629	583
(k-tonnes)			984	933

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 which currently manufacture telephone directory and one which currently manufactures standard newsprint. The groundwood printing papers provide our customers with superior strength, opacity, smoothness, higher brightness and lighter weights. They are required for offset, rotogravure, and lithographic printing of publications such as Sunday magazines, newspaper advertising inserts and flyers, computer printout forms, and telephone and other directories.

The Company's main market pulp grade is bleached softwood kraft pulp manufactured at Harmac. A combination of over supply and weaker demand for softwood pulp resulted in market curtailments at the Harmac pulp mill and resulted in a reduction in production of approximately 61,000 tonnes from 1989.

Capital expenditures in the pulp and paper segment in 1990 amounted to $153.9 million, compared to $194.5 million and $146.5 million in 1989 and 1988 respectively. Commentary on major additions during the last three years at each of the three mills follows. 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; and the modernization of a standard newsprint machine to improve its paper quality was completed during 1988 at a cost of $32 million. Expenditures are currently underway on a $23 million wrap line and management production system at Alberni, a $33 million project to upgrade the Alberni #4 paper machine which includes the installation of a twin wire gap former and improved computerization which will improve product quality and an $18 million project to equip the mill to use recycled newsprint. In 1988 Powell River completed the $70 million capital program announced in 1987 to improve product quality and increase production of specialty paper products. Powell River's expanded chemi-thermomechanical pulping and bleaching facilities became operational late in 1987. The twin wire refurbish of #9 paper machine was completed in mid-1988. At the end of 1990, Powell River completed a $61 million project to increase the quality and quantity of standard newsprint from the mill's #10 paper machine. At Harmac, major capital spending has been directed at reducing air and water emissions. The main projects include the "lo-odor" project completed in 1988 at a cost of $30 million, the installation of a power boiler precipitator at a cost of $12 million, the replacement of a recovery boiler precipitator for $7 million and $42 million to reduce dioxins to non-detectable levels, less than a thimble full per year.

Pulp and Paper Marketing

MB pulp and newsprint is shipped worldwide. 78.1% of 1990 newsprint shipments were within North America while 81.0% of the pulp sales were to offshore markets. In its largest newsprint market, the western U.S., MB operates four offices. MB has a marketing agreement with Alberta Newsprint Co. Ltd. of Whitecourt, Alberta. This new mill, which commenced operations in the third quarter of 1990, has a forecast annual capacity of 220,000 metric tonnes of standard newsprint. MB also has sales offices in Tokyo, Hong Kong, Kuala Lumpur and Sydney to market pulp and newsprint in key, high-growth countries of the Pacific Rim and employs sales agents in other Pacific Rim markets. United Kingdom newsprint and groundwood paper customers are serviced from an office in London. European pulp markets are serviced from Brussels, and U.S. pulp customers from the Danbury, Connecticut office. MB also markets pulp and paper products for others, particularly bleached softwood kraft pulp from Northwood and lightweight coated papers from Koninklijke Nederlandse Papierfabrieken N.V. (KNP). The following table shows where pulp and paper products were sold in 1990, 1989 and 1988:

		Canada	United States	Japan & Orient	Europe	Other	Total
Newsprint (k-tonnes)	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
	1988	101.7	676.8	89.6	28.8	87.9	984.8
Market pulp (k-tonnes)	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
	1988	14.8	64.1	123.6	239.7	47.6	489.8

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 fully competitive in major markets on quality, price and service. There are a number of pulp and paper suppliers in all of the major markets. MB does not have a dominant position in any market.

MB's newsprint mills are well situated on Canadian West Coast deep sea ports to assure its customers of a reliable, steady supply.

The anticipation of large capacity increases resulted in strong price competition in 1989 and 1990. In the latter part of 1989 and in 1990 a number of older newsprint machines were shut down so North American capacity in 1990 was virtually unchanged from 1989. A substantial amount of Canadian capacity was lost to strikes in Eastern Canada in 1990 which increased demand on other suppliers. Canadian capacity in 1991 is forecast to be 4.0% higher than 1990. This may be partially offset by additional closures of old newsprint machines. Capacity has been increasing substantially in the U.S. and has tended to cut into the Canadian market share. In the ten year period ending 1987 newsprint consumption grew at approximately 3% per year, however, in 1988 through 1990 consumption marginally declined.

CONTAINERBOARD AND PACKAGING

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 1990 containerboard sold outside the consolidated enterprise accounted for 7.7% of consolidated sales values as compared to 8.3% in 1989 and 8.4% in 1988. For the years ended December 31, 1990, 1989 and 1988 corrugated containers accounted for 7.5%, 7.0% and 7.8% respectively of MB's consolidated sales values to unaffiliated customers.

Containerboard and Packaging Facilities

MB operates the following facilities for the manufacture of containerboard and packaging products:

	Division	Location	Annual capacities at year-end 1990	1990 Production
Linerboard (k-tonnes)	Pine Hill	Pine Hill, Alabama	400	366
Corrugating Medium (k-tonnes)	Pine Hill	Pine Hill, Alabama	233	211
	Sturgeon Falls	Sturgeon Falls, Ontario	71	69
			704	646
Corrugated Containers (k-tonnes)	10 Locations	United States	336	259

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 consistent high quality, and upgrading equipment will further improve quality. The U.S. corrugated container plants, located in nine states between New York and Texas, produce and sell products ranging from bulk-bin industrial boxes to small custom-design display packaging. These plants also have a significant portion of the U.S. lamp wrap market.

Capital expenditures in the containerboard and packaging segment in 1990 amounted to $76.6 million compared to $59.4 million and $32.8 million in 1989 and 1988 respectively. In 1988, MB approved U.S.$17 million for phase II of a program which had commenced in 1987 to enhance the quality of Pine Hill's linerboard. In early 1989, a further U.S.$62 million was approved for phase III of the project. In addition to quality enhancements, annual capacity will increase by 70,000 tons. At December 31, 1990 U.S.$51.9 million had been spent on phases II and III.

Certain Alabama facilities and equipment at two United States corrugated container plants are leased 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. Pine Hill also sells linerboard to affiliated corrugated container plants in Canada and the United Kingdom (see Investment Section). The corrugating medium sold by Sturgeon Falls, Ontario is mainly utilized by affiliated Canadian corrugated container plants (see Investment Section). The large number of producers of containerboard in North America and offshore compete on the basis of quality, price and service. There are no material backlog sales to unaffiliated customers. The following table shows where MB's containerboard and corrugated containers were sold in 1990, 1989 and 1988:

		Canada	United States	Japan & Orient	Europe & Other	Total
Containerboard (k-tonnes)	1990	69.2	329.0		102.5	500.7
	1989	73.8	375.2		82.8	531.8
	1988	72.6	367.1		72.6	512.3
Corrugated Containers (k-tonnes)	1990		259.8			259.8
	1989		245.8			245.8
	1988		266.9			266.9

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.

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.

OTHER

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 six vessels, totalling approximately 230,000 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 back-haul 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 barge system on the Pacific coast for transporting newsprint to California and a fleet of tugs, barges and log carriers which are used primarily between logging divisions and mill storage grounds in British Columbia.

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, 1990 investments in affiliates accounted for by the equity method were carried in the financial statements at a value of $471.2 million.

The most significant investment is in Koninklijke Nederlandse Papierfabrieken N.V. (KNP), a Dutch public company with headquarters in the Netherlands. KNP has a 42.2% interest in a major Austrian fine paper company Leykam-Murztaler and a 46% 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 paper for corrugating board with an annual capacity of 580,000 tonnes and a 50% interest in Corrugated Europe B.V. with an annual capacity of 425,000 tonnes of corrugated cases. At December 31, 1990 MacMillan Bloedel's shareholding in KNP stood at 30.6%. 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 780,000 tonnes and purchases pulp from MB. As at December 31, 1990 KNP also had packaging facilities with an annual capacity of 440,000 tonnes of paperboard and packaging material.

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 produces a broad range of uncoated and coated free sheet and recycled grades. At December 31, 1990 the aggregate annual capacity was 114,000 tonnes. During 1988, IPM commenced construction of an off-machine coater. The $82 million project was completed in mid-1990.

The Company has a 50% interest in MacMillan Bathurst, which is one of Canada's largest corrugated container manufacturing operations owning 13 corrugated container plants throughout Canada. At December 31, 1990 these plants had an annual productive capacity of 425,000 tonnes of corrugated containers.

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, 1990 owning 10 corrugator plants having an annual capacity of 250,000 tonnes of corrugated containers. It also has interests in 10 sheet plants.

CAPITAL EXPENDITURE PROGRAM

Over the past five years MB's capital expenditures totalled $1,605.5 million, with major expansions and modernizations completed at several locations. Of the $366.5 million incurred in 1990, $195.0 million was for non-discretionary projects such as environmental projects, logging roads and routine maintenance of business capital. (Major discretionary capital expenditures are described in the facilities section of each industry segment and Note 4 of the consolidated financial statements.)

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

	1990	1989	1988	1987	1986	Total
			($ millions)			
Building materials	130.6	246.8	170.0	73.5	47.3	668.2
Pulp and paper	153.9	194.5	146.5	122.6	32.1	649.6
Containerboard and packaging	76.6	59.4	32.8	19.5	14.3	202.6
Other	5.4	17.7	14.7	41.0	6.3	85.1
	366.5	518.4	364.0	256.6	100.0	1,605.5

RESEARCH AND DEVELOPMENT

During the past three years MB spent the following 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:

	1990	1989	1988
		($ millions)	
Gross expenditures	21.1	23.3	21.6
Less: government grants	.8	.8	1.2
Less: investment tax credits	3.2	3.9	3.8
Net	17.1	18.6	16.6

Of those Canadian employees engaged in such research, 114 professional, technical and support staff are located at MB's Research and Development Centre in Burnaby, British Columbia (1989 — 115). During 1989, the Company consolidated its research and development facilities in a building acquired in 1987. The total cost to December 31, 1990 of purchasing the land and building, refurbishing the building and moving staff and equipment is $16.4 million.

HUMAN RESOURCES

At December 31, 1990, MacMillan Bloedel employed approximately 12,000 people in Canada, 3,000 in the United States of America and 100 elsewhere.

In British Columbia, MB employs 4,500 people in logging, lumber, plywood and particleboard operations who are represented by the IWA-Canada; 4,000 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 expire mid-1991.

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 $500 lump sum payment in the first year and 2.5% in each of the second and third years. Linerboard and corrugated medium workers are in the third year of a four year contract with a wage increase of 2.5% in the third year and 2% in the final year. The contract covering lumber and plywood manufacturing expires in the second quarter of 1991.

In the past five years, in MB's British Columbia operations, approximately 4.6% of available hours have been lost due to labour disputes, but less than .25% have been lost in each of the last three years.

ENVIRONMENT

Since 1989, the number of environmental regulations that MB is subject to has increased rapidly, particularly in Canada. The regulatory initiatives of 1989 focused on concerns with dioxins and require 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 new requirements is in excess of $300 million, depending upon the technology used, to be spent over the next three-to-five years.

The recent "Green Plan" presented by the Federal Government gives rise to another array of real and perceived environmental concerns which regulatory bodies are eager to write rules about. MB remains fully supportive of the fundamental objective of maintaining a healthy environment. However, there are certain economic constraints that necessitate setting priorities to allocate societies' and MB's scarce economic resources. In early 1990, the BC 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 time tables, 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 periods, our ability to measure for trace elements has increased geometrically; the second step is to measure the impact of these trace amounts on the environment. What we wish for before we commit more capital is scientific measurement of impact and risk assessment rather than hypothetical deductive arguments for possible, rather than probable, causal relationships.

ENERGY

MB utilizes wood waste, spent liquors, electric power, petroleum products and, to a lesser extent, 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%. 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

In 1990 the Company signed an agreement with Newstech Recycling Inc. to purchase one half of the 122,500 tonnes a year of pulp production from an $83 million newspaper recycling plant proposed for the Vancouver, British Columbia area. California, the largest single market for MB newsprint, has recently enacted legislation requiring 25 percent of their newsprint contain 40 percent 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.

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.

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 tons per year of waste paper as well as other recyclable material.

The Pine Hill, Alabama mill recycles an average of 300 tons per day of used corrugated containers that have been collected in the Southeastern U.S. A recently completed expansion will double the recycling capacity to over 600 tons per day, or about 30% of total production when the full benefit of this expansion is realized which is expected to be early 1992.

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

SELECTED QUARTERLY FINANCIAL DATA

	1989				1990			
	Quarters				Quarters			
	I	II	III	IV	I	II	III	IV
	($ millions)							
Sales of products and services	807.0	862.0	818.0	786.7	781.3	806.9	719.4	695.6
Costs and expenses								
Materials, labour and operating expenses	618.2	668.7	639.5	634.6	646.2	667.2	618.2	607.1
Depreciation, depletion and amortization	31.0	33.5	32.3	33.6	36.9	42.1	37.5	40.0
Selling, general and administrative	50.9	55.7	53.9	56.7	51.8	54.0	54.1	56.8
	700.1	757.9	725.7	724.9	734.9	763.3	709.8	703.9
Operating earnings (loss)	106.9	104.1	92.3	61.8	46.4	43.6	9.6	(8.3)
Other income (expense)	2.1	2.4	.2	6.8	4.3	2.2	1.8	(21.3)
Interest expense	(11.2)	(13.3)	(14.0)	(15.1)	(17.1)	(19.8)	(22.0)	(22.1)
Earnings (loss) before income taxes	97.8	93.2	78.5	53.5	33.6	26.0	(10.6)	(51.7)
Income taxes	(39.4)	(38.7)	(24.0)	(21.4)	(11.7)	(8.7)	4.3	28.0
Earnings (loss) before undernoted items	58.4	54.5	54.5	32.1	21.9	17.3	(6.3)	(23.7)
Equity in earnings of partly-owned companies	15.0	13.8	10.9	7.5	8.1	11.5	12.5	9.5
Net earnings (loss)	73.4	68.3	65.4	39.6	30.0	28.8	6.2	(14.2)
Provision for dividends on preferred shares	(3.1)	(3.4)	(3.4)	(3.3)	(3.3)	(3.2)	(3.0)	(3.6)
Net earnings (loss) attributable to common shareholders	70.3	64.9	62.0	36.3	26.7	25.6	3.2	(17.8)
Net earnings per common share (dollars)								
basic	.68	.64	.60	.35	.26	.25	.03	(.17)
fully diluted	.66	.61	.59	.35	.26	.25	.03	(.17)
Price range of common shares on Toronto Stock Exchange (dollars)								
high	20.75	18.63	21.38	20.25	18.88	18.75	18.62	17.37
low	17.63	17.13	17.13	16.75	16.88	15.87	15.00	14.25
Dividends per common share (dollars)								
cash dividends	.20	.20	.20	.20	.20	.20	.20	.20

FIVE YEAR EARNINGS DATA

	1990	1989	1988	1987	1986
Sales ($ millions)	3,003.2	3,273.7	3,273.5	3,134.5	2,511.7
Contributions to earnings ($ millions)					
Building materials	43.1	139.1	186.8	206.4	83.3
Pulp and paper	54.6	180.8	254.9	229.6	141.9
Containerboard and packaging	44.7	113.6	118.0	88.9	19.7
Eliminations and unallocated items	(51.1)	(68.4)	(71.7)	(59.1)	(22.4)
Operating earnings	91.3	365.1	488.0	465.8	222.5
Other income (expense)	(13.0)	11.5	(9.1)	17.8	17.4
Interest expense	(81.0)	(53.6)	(43.5)	(50.7)	(67.3)
Earnings (loss) before income taxes	(2.7)	323.0	435.4	432.9	172.6
Income taxes	11.9	(123.5)	(161.4)	(183.8)	(65.5)
Equity earnings	41.6	47.2	55.8	31.5	26.2
Earnings before extraordinary item	50.8	246.7	329.8	280.6	133.3
Extraordinary item	—	—	—	—	45.0
Net earnings	50.8	246.7	329.8	280.6	178.3
Less: Provision for preferred dividends	13.1	13.2	13.8	21.3	33.5
Net earnings for common shareholders	37.7	233.5	316.0	259.3	144.8
Per common share (dollars per common share)					
Net earnings:					
before extraordinary item					
basic	.37	2.27	3.08	2.56	1.07
fully diluted	.37	2.21	2.97	2.50	—
after extraordinary item					
basic	.37	2.27	3.08	2.56	1.55
fully diluted	.37	2.21	2.97	2.50	—
Cash dividends on common shares	.80	.80	.90	.82	.25

Notes:

(1) The above data reflect the subdivision of each common share into three common shares on April 9, 1987.

(2) Financial information is expressed in Canadian dollars. Canadian, U.S. dollar exchange rates as reported by the Bank of Canada were as follows:

	One Canadian Dollar			
	High	Low	Average	Year-end
1990	US$.8859	US$.8275	US$.8570	US$.8618
1989	.8647	.8286	.8445	.8637
1988	.8433	.7700	.8124	.8384
1987	.7714	.7255	.7541	.7692
1986	.7332	.6950	.7197	.7244

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 26 of this report.

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 $24.5 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.

Sales of products and services amounted to $3,003.2 million in 1990 compared with $3,273.7 million in 1989. The following table provides an analysis of the change in key product sales from 1989 to 1990:

Product	Change in sales 1989 to 1990*	Change attributed to: Volume	Change attributed to: Price**
	($ millions)		
Pulp	(114.7)	(81.2)	(33.5)
Panelboards	(13.9)	9.1	(23.0)
Lumber	(24.4)	(48.3)	23.9
Containerboard	(45.5)	(13.9)	(31.6)
Newsprint	(31.5)	(10.5)	(21.0)
Corrugated containers	(5.3)	12.6	(17.9)
Parallam	8.5	7.5	1.0
Export logs	(8.6)	(8.4)	(.2)
	(235.4)	(133.1)	(102.3)
Transportation services	(18.3)		
Other items	(16.8)		
Total	(270.5)		

* Change in sales by product excludes freight.

** Including the effect of changing foreign currency exchange rates.

The $273.8 million decrease in operating earnings is mainly attributable to increased production 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. Sales volumes for all major products declined, and prices for pulp, newsprint and containerboard were weaker. Average lumber prices were higher in 1990 due to an increased mix of higher value-added products.

Despite declining volumes, costs and expenses increased $3.3 million reflecting a general increase in production costs as well as higher harvesting costs in B.C. The weak markets, particularly for commodity grades, resulted in certain facilities becoming unprofitable. The Company has been conscious of the marginal competitiveness of certain operations and within the capital and manpower constraints has been aggressively upgrading and replacing them. The very soft markets the industry faced in 1990 made start ups more difficult (neither the Island Phoenix sawmill nor the Georgia Parallam® plant came near expected performance, although the sawmill is currently approaching pro forma operating rates) and accelerated the need to close or radically modify certain older facilities.

The Company, in common with all Canadian producers, over the last four years became disadvantaged competitively due to the Canadian forest products industry experiencing annual labour rate increases averaging approximately 4% more than the U.S. industry. Further aggravating Canada's competitive disadvantage was the persistent strengthening of the Canadian dollar — 16 cents on the U.S. dollar since its low point in 1985/86. Since forest products are primarily sold in U.S. dollars or U.S. dollar equivalents, the combination of wage rate and exchange rate movement has dominated any product mix and productivity improvements made by the Company, particularly with demand volume falling.

Other income (expense) declined by $24.5 million to a loss of $13.0 million in 1990. Studies are on-going at this time to fully assess changes in operating modes or other low capital solutions which would allow the Company to maintain employment and market position for facilities losing money. For certain of those operations the Company believes the options to return to profitable operation, barring a rapid market rebound, to be so remote as to dictate the need to exercise prudence and provide for the write-off of the assets and associated closure costs.

Interest expense was higher in 1990 than 1989 due to higher borrowings.

Equity earnings declined $5.6 million due in part to a loss in the Company's investment in the Island Paper Mills partnership and the loss in UK Corrugated. The loss reflected the difficulties facing fine paper mills in Canada as a result of a 65% increase in uncoated freesheet capacity and high pulp prices through most of 1990. The startup of the new coater plant and the launching of new coated paper products in 1990 also impacted on the earnings. Island Paper Mills is expected to be profitable sometime in 1991 as productivity improves. UK Corrugated, the Company's investee in the corrugated container business in the United Kingdom, had a relatively good operating year, but found it necessary to close 2 plants which closure costs adversely impacted their results.

The Company's share in the earnings of Koninklijke Nederlandse Papierfabrieken N.V. (KNP) remained essentially unchanged from 1989. KNP is currently maintaining its profit levels as the European markets grow and raw materials costs decrease.

BUILDING MATERIALS

MB's building materials segment contribution to earnings decreased $96.0 million from $139.1 million in 1989 to $43.1 million in 1990. Sales decreased from $1,408.6 million in 1989 to $1,358.9 million in 1990.

The following table shows sales and production of building materials products and the percentage of capacity utilization in each of the years 1990, 1989 and 1988:

	Sales		Production	
	Value ($ millions)	Volume	Volume	Operating rate
1990				
Lumber (MMfbm)	976.4	1,710	794	74%
Plywood (MM sq.ft. ⅜″)	144.9	539	233	70%
Waferboard (MM sq.ft. ⅜″)	41.6	282	114	60%
Parallam® (M cubic ft.)	16.3	704	824	57%
Other	179.7			
	1,358.9			
1989				
Lumber (MMfbm)	1,008.6	1,814	792	78%
Plywood (MM sq.ft. ⅜″)	142.5	479	240	71%
Waferboard (MM sq.ft. ⅜″)	59.2	351	205	107%
Other	198.3			
	1,408.6			
1988				
Lumber (MMfbm)	1,008.1	1,890	925	84%
Plywood (MM sq.ft. ⅜″)	124.2	453	265	78%
Waferboard (MM sq.ft. ⅜″)	61.6	420	326	91%
Other	210.8			
	1,404.7			

1990 U.S. housing starts at 1.2 million again declined during the year, down from 1.37 million in 1989. Despite relatively moderate and stable mortgage rates, new home sales and starts are stalled at a depressingly low level. Overall U.S. lumber consumption is expected to be about 46 million MFBM, a drop of 4% from 1989 but well above the consumption in the 1982 recession.

The Japanese economy performed well during 1990, particularly in the first half; GNP growth was up 6.5%. 1990 housing starts were 1.7 million, an increase of approximately 2% over 1989. The healthy economy, and the strengthening of the Japanese Yen since the second quarter of 1990, drew a flood of log and lumber supply, mainly from North America. By mid-year, the increased supply had congested the docks and depressed the market, but the situation had improved significantly by year end.

In the U.S. market, commodity sales declined by 9% while the higher value offshore markets improved. Japan is a major market for MB, representing about one third of MB-produced lumber.

Sales volumes for wood products were lower in 1990 compared with 1989, but average lumber sales values were higher as a result of MB's continued improvement in lumber product mix due to the Company's commitment to value-added products. The Island Phoenix mill is having a difficult start up in achieving operating rate and in penetrating a tough abundantly supplied market, but it is achieving the expected enhancement in grade recovery. Thus, as expected operating rates are achieved the Company's overall lumber product mix will further reflect the commitment to value-added products.

Due to weak waferboard demand, the Company's Hudson Bay plant operated on a curtailed basis most of the year. Its sales and production volumes were off more than 40% compared to 1989. Similarly, production volumes of particleboard, specialtyboard and hardboard were all below the 1989 levels.

Sales activities in the plywood markets were also depressed in 1990, and prices were at an uneconomical level for many mills in British Columbia. As a result, the Company announced because of long-standing and continuous financial losses, the Alberni plywood mill will be permanently closed on April 30, 1991.

PULP AND PAPER

MB's pulp and paper segment contribution to earnings decreased $126.2 million from $180.8 million in 1989 to $54.6 million in 1990. Sales decreased by $182.7 million from $1,310.2 million in 1989 to $1,127.5 million in 1990.

The following table shows sales and production of pulp and paper products and the percentage of capacity utilization in each of the years 1990, 1989 and 1988:

	Sales		Production	
	Value ($ millions)	Volume k tonnes	Volume k tonnes	Operating rate
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	77.8			
	1,310.2			
1988				
Newsprint — standard	443.8	592	600	
— specialty papers	343.6	393	393	
Total newsprint	787.4	985	993	96%
Market pulp	416.2	490	480	97%
Other	78.9			
	1,282.5			

U.S. newsprint consumption, although still growing in the western states, was marginally lower in total than 1989 levels and shipments from Canada to the United States were approximately 5% lower. Increased capacity in the United States during 1990, coupled with labour problems in some Eastern Canadian mills, resulted in a loss of market share for Canadian producers, as U.S. customers relied more on U.S. sources for their newsprint supply.

Shipments for standard newsprint were down but specialty papers remained at 1989 levels. For the U.S. as a whole, consumption was weak. New and anticipated capacity had a depressing effect on the market. However, strength in consumption in the western states, and strikes in the Eastern Canadian newsprint industry resulted in firm demand for MB's newsprint. Effective June 1, 1990 the Company was able to eliminate the 5% CPIP discount program on standard newsprint and some specialties. In addition, a US$35 per tonne price increase was announced for the U.S. market on standard newsprint and took effect on January 1, 1991. Increases in other markets and specialty products were also announced effective January 1, 1991.

The table below lists newsprint selling prices in the key U.S. market in 1989 and 1990:

(U.S.$)	1990	1989
Standard News		
List price (per tonne) (Note 1)	630	630 less 5%
Groundwood Printing Papers		
Average gross sales value (per tonne) (Note 2)	755	750

Notes:

(1) Contract Performance Incentive Program discount of 5% was discontinued June 1, 1990. Additional discounts averaging 6% in 1989 and 8% in 1990 have been negotiated to maintain competitive pricing.

(2) Average gross sales value is the weighted average selling price for all groundwood printing paper grades sold in the year.

MB's pulp shipments declined in 1990 compared with 1989. A sharp decline, which started in the first half of 1990, in U.S. southern softwood kraft prices had led to substitution by consumers and a loss of market share for Canadian producers of northern bleached softwood kraft (NBSK); and significant down time had to be taken during the year to keep inventories in line. NBSK prices were reduced in major markets to US$800 per tonne effective July 1 and to US$750 per tonne effective November 1. Prices continue to be under pressure and further erosion has occurred since the end of the year.

The table below lists selling prices for NBSK pulp in MB's key markets for 1989 and 1990:

	1989		1990			
	Quarters		Quarters			
(U.S.$)	I	II-IV	I	II	III	IV
Europe	810	840	840	840	800	750
U.S.A.	800	830	830	830	800	750
Japan	810	840	840	840	800	750

MB's mills have undertaken effluent treatment programs that virtually eliminate dioxins. Powell River's dioxin program has already produced improvements and will be fully operational next fall. MB is spending about $42 million at Harmac and $30 million at Powell River on these two projects.

Environmental protection regulations to be issued by the Canadian and British Columbia Provincial Governments are not yet finalized. These draft regulations could require capital expenditures by the Company of material sums during the period to 1992, in addition to those capital commitments already made.

The Company's major pulp and paper operating facilities continue to be monitored closely and funds are being committed to these profitable operations 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 1990, 1989 and 1988:

	Sales (outside MB)		Production	
	Value ($ millions)	Volume k tonnes	Volume k tonnes	Operating rate
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			
	504.1			
1988				
Linerboard	155.8	283	397	104%
Corrugating medium	118.6	229	302	102%
Total containerboard	274.4	512	699	103%
Corrugated containers	254.6	267	268	87%
Other	1.1			
	530.1			

Sales volumes of linerboard were lower in 1990 than in 1989. Linerboard "yellowsheet" price was reduced to U.S.$380 per tonne in mid 1990 from U.S.$410 per tonne. However, markets were very competitive and price discounting occurred on both linerboard and medium.

A significant portion of Pine Hill's containerboard is sold to its affiliated U.S. corrugated container plants. In 1990 U.S. corrugated box sales volumes were up but prices were lower than in 1989 and continued to show erosion in the latter part of the year reflecting further competitive pricing pressures.

The Company's corrugated container operations in the United States suffered a decline from 1989 results despite an increase in volume. There were a couple of operations with particularly unsatisfactory results which are being carefully studied to reverse the situation.

EARNINGS SENSITIVITIES

MB's earnings are sensitive to fluctuations in prices for its products and in currency exchange rates. Based on production in 1990, 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 $1.00 U.S. effect MB's annualized after tax earnings approximately as follows:

	Approximate annual effect on net earnings ($ millions)
Price sensitivity	
Lumber $10 change per Mfbm	5
Newsprint and specialty papers $10 change per tonne	6
Containerboard $10 change per tonne	4
Pulp $10 change per tonne	2
Exchange sensitivity	
Canadian dollar — change of $.01 Canadian relative to $1.00 U.S.	6

COMPARISON OF 1989 AND 1988 EARNINGS

In 1989 MB recorded net earnings of $246.7 million. This compares to the record 1988 earnings of $329.8 million. On a per common share basis, net earnings decreased from $3.08 per common share in 1988 to $2.27 per common share in 1989. Sales of products and services were virtually unchanged at $3,273.7 million in 1989 compared with $3,273.5 million in 1988.

The major items contributing to the earnings decrease were $122.9 million decline in operating earnings, $10.1 million increase in interest expense, and $8.6 million decrease in equity earnings of partly-owned companies, partially offset by $20.6 million increase in other income.

The $122.9 million decrease in operating earnings was mainly attributable to increased production costs, lower prices for newsprint and containerboard and a stronger Canadian dollar. On average, the Canadian dollar was approximately 4% stronger in 1989 than in 1988 which adversely affected net earnings by approximately $28 million.

MB's building materials segment's contribution to earnings decreased $47.7 million largely due to lower sales volumes for most wood products. However, MB's average lumber sales values were higher in 1989 than in 1988 due to improvement in the product mix of value-added products. The Japanese market significantly contributed to higher 1989 sales values, and the Chemainus and Somass mills were producing higher value-added products than in 1988.

The pulp and paper segment's contribution to earnings decreased by $74.1 million due to lower prices in newsprint, resulting from increasingly competitive markets arising from new capacity additions and high inventories. The Company discounted newsprint prices during 1989 in order to meet competitive prices and to maintain market share. On the other hand, the pulp market continued to be strong throughout 1989, making major contributions to operating earnings. Pulp prices were higher in all geographical markets, and shipments in 1989 increased slightly from 1988.

The containerboard and packaging segment's contribution to earnings decreased $4.4 million from $118.0 million to $113.6 million in 1989. Price discounting began to occur around the middle of 1989 for both linerboard and medium. Corrugated container sales and prices were lower in 1989 than in 1988.

Costs and expenses increased $123.1 million reflecting a general increase in production costs as well as higher harvesting costs in B.C. Increased selling, general and administrative expenses largely reflect salary increases. Other income (expense) was a net expense in 1988 due to the loss on disposal of the Company's Thunder Bay waferboard facility and the writedown of certain other facilities which were no longer competitive. Interest expense was higher in 1989 than 1988 as the Company increased its debt to fund capital expenditures.

Equity earnings declined $8.6 million due to reduced earnings from all the Company's major investments.

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 policy in respect of debt leverage is 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.

At December 31, 1990, interest-bearing debt and redeemable term preferred shares as a ratio to invested capital was 35.5% compared to 27.0% at the end of 1989. MB's short term investments at December 31, 1990 of $77.8 million represents a ratio of 2.4% of invested capital (1989 — 1.7%).

As at December 31, 1990, MB's available borrowing capacity was as follows:

	Available	Utilized
	($ millions)	
Short term lines of credit	343.6	90.6
Long term lines of credit	650.0	—
	993.6	90.6

During the fourth quarter of 1990, MB arranged loans with various banks totalling Cdn.$480 million. A portion of the loans are at fixed rates of interest varying between 9.4% and 9.85% and the balance is at bankers acceptance rates plus a fee. The terms of the loans are for periods of five and seven years. The net proceeds were used to repay short term debt, finance capital expenditures and for other general corporate purposes. At December 31, 1990 total interest-bearing indebtedness including the convertible subordinated debentures amounted to $1,264.3 million, up from the $909.0 million at December 31, 1989.

Funds generated by operations in 1990 amounted to $289.6 million (1989 — $555.1 million) with net funds required of $309.6 million (1989 — $304.3 million) after capital expenditures and investments of $425.3 million (1989 — $594.8 million), payment of preferred dividends, interest and taxes of $91.8 million (1989 — $182.5 million), and payment of common share dividends of $82.1 million (1989 — $82.1 million).

Capital expenditures in 1990 on property, plant and equipment were $366.5 million of which $195.0 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 where the business of MB has been discussed.

In 1990, the Company paid cash dividends on its common shares amounting to $.80 per share. At its meeting on February 6, 1991, the Board of Directors declared a dividend of $.15 per common share payable on March 15, 1991 to shareholders of record on February 22, 1991. The common share dividends 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.

The Company had short-term investments of $77.8 million at December 31, in addition $100 million of the 1990 fourth quarter financings were drawn in January, 1991. These funds together with operating cash flow are expected to substantially finance the committed 1991 capital program.

DIVIDENDS AND SHAREHOLDER INFORMATION

During the two years ended December 31, 1990, the Company declared the following dividends:

	1990	1989
	($ millions)	
Class B Preferred shares		
Series 4	1.5	1.8
Series 8	4.6	4.5
Series 9	4.4	4.1
Series 10	5.0	5.2
Common shares	82.1	82.1

In 1990 and 1989 all dividends on common shares were paid in cash. Preferred share dividends are paid 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 of the Company's shares are subject to a 15% Canadian non-resident withholding tax.

Central Guaranty Trust Company (Vancouver, Calgary, Regina, Winnipeg, Toronto, Montreal) and The Chase Manhattan Bank (New York) are the Company's transfer agents and registrars.

Distribution of common shares and registered common shareholders as at February 1, 1991:

	Common shares	Common shareholders*
Canada	98,843,274	6,979
United States	3,785,619	697
Other	20,380	75
	102,649,273	7,751
Share warrants	552	
	102,649,825	

* Excluding approximately 19,000 beneficial shareholders, 8,700 of whom are employees of the Company.

Exchange listings:

Common shares listed: Toronto, Montreal, Vancouver.

Common shares quoted: NASDAQ.

Class B preferred share listings: Toronto, Montreal, Vancouver.

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

EXECUTIVE OFFICERS

Name	Address	Age at Feb. 1, 1991	Positions held during past five years
R.V. Smith	West Vancouver, B.C.	64	Chairman of the Board since December 1990; prior to which he was President and Chief Executive Officer of the Company
A.H. Zimmerman	Toronto, Ontario	63	Vice-Chairman of the Board since December 1990; prior to which he was Chairman of the Board of the Company; Chairman and Chief Executive Officer, Noranda Forest Inc.
R.B. Findlay	West Vancouver, B.C.	57	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
D.L. McLauchlin	Vancouver, B.C.	64	Executive Vice-President since 1989; prior to which he was Executive Vice-President, Operations of the Company
J. St.C. Ross	West Vancouver, B.C.	59	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.	60	Senior Vice-President, Research and Development
A.N. Grunder	North Vancouver, B.C.	54	Senior Vice-President, Finance and Administration since May 1989; prior to which he was Vice-President, Information Systems & Services
J.L. Howard, Q.C.	Vancouver, B.C.	59	Senior Vice-President, Law & Corporate Affairs
W.W. Shorter	Montgomery, Alabama	58	Senior Vice-President, Containerboard and Packaging and President of MacMillan Bloedel Inc. since 1989; prior to which he was President, MacMillan Bloedel Inc., a wholly owned subsidiary of the Company
R.N. Wiewel	West Vancouver, B.C.	63	Senior Vice-President, Product Development since 1989; prior to which he was Senior Vice-President, Marketing
G.A. Adams	West Vancouver, B.C.	52	Vice-President, Transportation
W.A. Adams	Nanaimo, B.C.	50	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.	50	Vice-President, Treasurer
J.C. Finkbeiner	North Vancouver, B.C.	43	Vice-President, Tax, Properties and Risk Management
W.E. Hawkings	Richmond, B.C.	59	Vice-President, Engineering

Name	Address	Age at Feb. 1, 1991	Positions held during past five years
G.H. Johncox	North Vancouver, B.C.	50	Vice-President, Human Resources since 1986; prior to which he was Vice-President, Industrial Relations
E. Lauritzen	West Vancouver, B.C.	52	Vice-President, Pulp & Paper Marketing
W.G. Low	Powell River, B.C.	60	Vice-President, Powell River Region since 1989; prior to which he was General Manager, Alberni Pulp and Paper Division
R.V. Matthews	Vancouver, B.C.	47	Vice-President, Controller
F.H. Moonen..........	West Vancouver, B.C.	62	Vice-President, Government Affairs
D.W. St. John.........	Vancouver, B.C.	59	Vice-President, Building Materials Marketing since December 1990; prior to which he was Vice-President, Lumber Marketing
A.C. Stubbs...........	North Vancouver, B.C.	46	Vice-President, Corporate Communications since 1988; prior to which he was Director, Public Relations
R.D. Tuckey	Port Alberni, B.C.	49	Vice-President, Alberni Region since 1989; prior to which he was General Manager, Harmac
V.R. Worthy	West Vancouver, B.C.	53	Vice-President, Engineered Wood Products since December 1990; prior to which he was Vice-President, Panelboards
G.E. Mynett	Vancouver, B.C.	44	Corporate Secretary since 1989; prior to which he was Secretary and Solicitor since 1987; prior to which he was a Solicitor with the Company
H.E. Fliessbach........	Vancouver, B.C.	49	Assistant-Treasurer
Claire-Marie Jadot	North Vancouver, B.C.	48	Associate Corporate Secretary since 1987; prior to which she was Assistant Secretary

FIVE YEAR FINANCIAL DATA

	1990	1989	1988	1987	1986
			($ millions)		
Funds generated by operations	289.6	555.1	592.9	554.2	404.5
Depreciation, depletion and amortization	156.5	130.4	124.6	127.4	105.4
Capital expenditures	366.5	518.4	364.0	256.6	100.0
Interest paid	77.0	51.7	44.9	52.9	67.1
Preferred share dividends paid	15.5	15.6	16.9	26.1	35.5
Common share dividends paid	82.1	82.1	92.4	82.8	23.3
Current assets	992.0	982.7	932.0	875.7	683.2
Current operating liabilities	390.6	404.4	374.7	313.1	229.6
Operating working capital	601.4	578.3	557.3	562.6	453.6
Property, plant and equipment	2,065.8	1,869.6	1,504.4	1,350.6	1,258.6
Investments and other assets	516.8	421.2	316.7	289.5	254.1
Net assets employed	3,184.0	2,869.1	2,378.4	2,202.7	1,966.3
Short term interest-bearing debt	48.5	79.0	67.6	13.3	55.9
Current portion of long term debt	30.7	18.8	12.0	13.7	39.1
Long term debt	1,035.1	661.2	350.5	398.8	452.3
Interest-bearing debt (excluding convertible subordinated debentures)	1,114.3	759.0	430.1	425.8	547.3
Convertible subordinated debentures	150.0	150.0	150.0	150.0	—
Redeemable term preferred shares	15.4	17.0	19.0	72.3	214.6
Redeemable convertible preferred shares	—	—	—	—	50.1
Other redeemable preferred shares	104.1	106.5	108.9	109.4	110.0
Common equity	1,477.4	1,509.1	1,376.4	1,194.3	945.7
Deferred credits	322.8	327.5	294.0	250.9	98.6
Total invested capital (Note 3)	3,184.0	2,869.1	2,378.4	2,202.7	1,966.3
Total assets (Note 4)	3,574.6	3,273.5	2,753.1	2,515.8	2,195.9
Total long term debt, convertible subordinated debentures and redeemable preferred shares	1,304.6	934.7	628.4	730.5	827.0
Interest-bearing debt (excluding convertible subordinated debentures) as a percentage of invested capital	35.0%	26.5%	18.1%	19.3%	27.8%
Interest-bearing debt (excluding convertible subordinated debentures) and redeemable term preferred shares as a percentage of invested capital	35.5%	27.0%	18.9%	22.6%	38.7%

Notes:

(1) The conversion of $43.0 million of redeemable convertible preferred shares into common shares in January 1987 has been given effect as at December 31, 1986 in the above table.

(2) For a summary of U.S. and Canadian dollar exchange rates see Note 2 accompanying five year earnings data on page 26 of this report.

(3) "Invested capital" is defined as the sum of short-term bearing debt, long-term obligations, deferred income taxes, convertible subordinated debentures and shareholders' equity.

(4) Prior years have been restated to conform with the presentation in 1990.

MacMILLAN BLOEDEL LIMITED

Consolidated Statements of Financial Position

Net Assets Employed

	December 31 1990	December 31 1989*
	($ millions)	
Current assets:		
Cash	$ .7	$ —
Short term investments and deposits	77.8	47.9
Accounts receivable —		
Trade	305.4	354.0
Other	43.5	36.3
Income taxes recoverable	28.0	15.4
Inventories (Note 2)	531.3	526.1
Prepaid expenses	5.3	3.0
	992.0	982.7
Deduct current liabilities (excluding interest-bearing debt):		
Bank overdrafts in excess of cash	—	17.6
Trade accounts payable	153.5	160.3
Accrued payroll and related liabilities	117.4	129.6
Accrued interest on borrowed funds	20.5	16.4
Other accounts payable and accrued liabilities	99.2	80.5
	390.6	404.4
Operating working capital	601.4	578.3
Investments and other assets:		
Investments in affiliates (Note 3)	471.2	380.4
Other investments and assets, at cost	45.6	40.8
	516.8	421.2
Property, plant and equipment: (Note 4)		
Buildings and equipment	3,018.2	2,744.4
Less: Accumulated depreciation	1,310.1	1,202.8
	1,708.1	1,541.6
Construction in progress	153.2	140.9
	1,861.3	1,682.5
Timber and land less accumulated depletion	215.9	200.1
Logging roads	13.4	12.9
Foreign exchange translation adjustment	(24.8)	(25.9)
	2,065.8	1,869.6
	$3,184.0	$2,869.1

*Certain 1989 amounts have been reclassified to conform with the presentation in 1990.

Approved by the Board:

R.B. Findlay,
Director

R.V. Smith,
Director

MacMILLAN BLOEDEL LIMITED

Consolidated Statements of Financial Position

Invested Capital

	December 31 1990	December 31 1989
	($ millions)	
Short term interest-bearing debt:		
Bank indebtedness (Note 5)	$ 47.4	$ 37.0
Notes payable	1.1	42.0
Current portion of long term debt (Note 6)	30.7	18.8
	79.2	97.8
Long term obligations:		
Term loans (Note 7)	841.6	478.7
Notes and bonds (Note 8)	176.0	176.8
Other	22.7	30.3
Foreign exchange translation adjustment	(2.1)	(17.6)
	1,038.2	668.2
Deferred income taxes	319.7	320.5
	1,437.1	1,086.5
Convertible Debentures and Shareholders' Equity:		
Convertible subordinated debentures (Note 9)	150.0	150.0
Shareholders' equity		
Share capital: (Note 10)		
Preferred shares	119.5	123.5
Common shares	552.0	552.0
	671.5	675.5
Retained earnings	976.1	1,023.3
	1,647.6	1,698.8
Foreign exchange translation adjustment	(50.7)	(66.2)
Shareholders' equity	1,596.9	1,632.6
	1,746.9	1,782.6
Commitments (Notes 10 and 11)	$3,184.0	$2,869.1

MacMILLAN BLOEDEL LIMITED

Consolidated Statements of Earnings

	Year ended December 31		
	1990	1989	1988
		($ millions)	
Sales of products and services	$3,003.2	$3,273.7	$3,273.5
Costs and expenses:			
Materials, labour and other operating expenses	2,538.7	2,561.0	2,451.8
Depreciation, depletion and amortization	156.5	130.4	124.6
Selling, general and administrative	216.7	217.2	209.1
	2,911.9	2,908.6	2,785.5
Operating earnings	91.3	365.1	488.0
Other income (expense)	(13.0)	11.5	(9.1)
Interest expense	(81.0)	(53.6)	(43.5)
Earnings (loss) before income taxes	(2.7)	323.0	435.4
Income tax (recovery) expense:			
Current	(1.7)	90.4	133.3
Deferred	(10.2)	33.1	28.1
	(11.9)	123.5	161.4
Earnings before undernoted item	9.2	199.5	274.0
Equity in earnings of affiliates	41.6	47.2	55.8
Net earnings	50.8	246.7	329.8
Provision for dividends on preferred shares	13.1	13.2	13.8
Net earnings attributable to common shareholders	$ 37.7	$ 233.5	$ 316.0
Earnings per common share (dollars)			
Basic	$ .37	$ 2.27	$ 3.08
Fully diluted	$ .37	$ 2.21	$ 2.97

MacMILLAN BLOEDEL LIMITED

Consolidated Statements of Changes in Financial Position

	1990	1989	1988
	Year ended December 31		
		($ millions)	
Internal funds:			
Generated by operations			
Operating earnings	$ 91.3	$ 365.1	$ 488.0
Depreciation, depletion and amortization	156.5	130.4	124.6
Other income (expense)	(13.0)	11.5	20.0
Dividends from partly-owned companies	21.1	17.2	14.2
Decrease (increase) in operating working capital —			
Receivables	41.5	11.4	(53.1)
Inventories	(5.2)	(26.4)	(55.7)
Other	(2.6)	45.9	54.9
Generated by operations	289.6	555.1	592.9
Required for:			
Interest	77.0	51.7	44.9
Dividends to preferred shareholders	15.5	15.6	16.9
Income taxes currently paid (recovered)	(.7)	115.2	95.3
	91.8	182.5	157.1
Net internal funds	197.8	372.6	435.8
Funds invested long term:			
Capital expenditures	366.5	518.4	364.0
Investments and other assets	58.8	76.4	24.9
	425.3	594.8	388.9
	(227.5)	(222.2)	46.9
Dividends to common shareholders	82.1	82.1	92.4
Funds required	(309.6)	(304.3)	(45.5)
Financing transactions:			
Net interest-bearing debt incurred	333.9	327.0	40.8
Retraction and redemption of preferred shares	(4.1)	(4.0)	(52.0)
Issue of common shares	—	—	4.4
Disposal of investments, subsidiaries and other	28.0	6.4	(3.5)
Financing provided (repaid)	357.8	329.4	(10.3)
Increase (decrease) in funds*	$ 48.2	$ 25.1	$ (55.8)

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

MacMILLAN BLOEDEL LIMITED

Consolidated Statements of Retained Earnings

	Year ended December 31		
	1990	1989	1988
		($ millions)	
Balance at beginning of year	$1,023.3	$ 874.6	$654.7
Net earnings	50.8	246.7	329.8
	1,074.1	1,121.3	984.5
Deduct:			
Cash dividends:			
Preferred shares	15.5	15.6	16.9
Common shares 1990 $.80 per share (1989 $.80 and 1988 $.90 per share)	82.1	82.1	92.4
	97.6	97.7	109.3
Costs of issue and redemption of class B preferred shares	.4	.3	.6
	98.0	98.0	109.9
Balance at end of year	$ 976.1	$1,023.3	$874.6

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, 1990 and 1989 and the consolidated statements of earnings, retained earnings and changes in financial position for each of the years ended December 31, 1990, 1989 and 1988. 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, 1990 and 1989 and the results of its operations and the changes in its financial position for the years ended December 31, 1990, 1989 and 1988 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 6, 1991

MacMILLAN BLOEDEL LIMITED

Notes to Consolidated Financial Statements
December 31, 1990, 1989 and 1988

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.

The foreign exchange translation adjustments which are separately identified in the consolidated financial statements represent the amounts required to adjust the Canadian dollar equivalents from those that are derived from using historical rates of exchange to those that are derived from using the above noted policy.

(c) *Valuation of inventories*

Inventories of operating and maintenance supplies and raw materials are valued at the lower of average cost and replacement cost. 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 partly-owned companies is generally amortized over 20 years.

2. Inventories:

	December 31 1990	1989
	($ millions)	
Operating and maintenance supplies	$ 80.2	$ 72.9
Logs, pulp chips and pulpwood	154.0	176.6
Lumber, panelboards and other building materials	210.0	197.6
Pulp and paper products	56.3	45.2
Containerboard and packaging products	30.8	33.8
	$531.3	$526.1

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

	December 31 1990				1989
	% Owned	Cost	Undistributed earnings (losses)	Total	Total
			($ millions)		
Koninklijke Nederlandse Papierfabrieken N.V. (KNP)	30.6	$134.0	$165.4	$299.4	$236.2
U.K. Corrugated	50.0	37.8	(6.7)	31.1	27.4
MacMillan Bathurst	50.0	21.6	12.1	33.7	36.1
Island Paper Mills	50.0	52.7	(10.9)	41.8	51.0
Other		4.6	(1.0)	3.6	1.2
		250.7	158.9	409.6	351.9
Foreign exchange translation adjustment		15.5	46.1	61.6	28.5
		$266.2	$205.0	$471.2	$380.4

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 is $28.5 million.

Summarized financial information —

Financial position:

	December 31 1990 KNP	Other	Total	1989 Total
		($ millions)		
Current assets	$ 561.4	$ 200.0	$ 761.4	$ 814.4
Investments in affiliates accounted for by the equity method*	622.4	—	622.4	457.3
Other non-current assets	792.7	326.5	1,119.2	1,089.3
Foreign exchange translation adjustment	214.6	5.7	220.3	66.6
	$2,191.1	$ 532.2	$2,723.3	$2,427.6
Current liabilities	$ 313.7	$ 129.1	$ 442.8	$ 471.7
Non-current liabilities	679.1	180.1	859.2	822.3
Foreign exchange translation adjustment	164.7	5.1	169.8	75.2
	1,157.5	314.3	1,471.8	1,369.2
Shareholders' equity	814.2	217.9	1,032.1	938.4
Foreign exchange translation adjustment	219.4	—	219.4	120.0
	$2,191.1	$ 532.2	$2,723.3	$2,427.6

*KNP's principal investments accounted for by the equity method are:

(i) A 42% fully diluted interest in Leykam-Murztaler, a major Austrian fine paper company; and

(ii) A 46% fully diluted interest in VRG Group N.V., a major paper wholesaler based in the Netherlands.

Goodwill related to KNP's investments in affiliates remaining to be amortized at December 31, 1990 amounted to $210.2 million.

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

Results of operations:

	Year ended December 31				
	1990			1989	1988
	KNP	Other	Total	Total	Total
			($ millions)		
Net sales	$1,404.0	$ 906.0	$2,310.0	$2,394.4	$2,515.2
Gross profit	$ 182.5	$ 2.4	$ 184.9	$ 220.0	$ 267.9
Net earnings	$ 167.9	$ (13.9)	$ 154.0	$ 172.8	$ 176.1

4. Buildings and equipment:

Property, plant and equipment:

	Cost	Accumulated depreciation	Net	Construction in Progress
		($ millions)		
December 31, 1990				
Building materials	$ 831.8	$ 349.1	$ 482.7	$ 42.0
Pulp and paper	1,457.0	658.4	798.6	76.4
Containerboard and packaging	611.4	238.8	372.6	34.8
Corporate assets and other	118.0	63.8	54.2	—
	$3,018.2	$1,310.1	$1,708.1	$153.2
December 31, 1989				
Building materials	$ 721.1	$ 330.3	$ 390.8	$ 77.2
Pulp and paper	1,352.7	615.8	736.9	46.3
Containerboard and packaging	562.4	218.5	343.9	17.4
Corporate assets and other	108.2	38.2	70.0	—
	$2,744.4	$1,202.8	$1,541.6	$140.9

Assets having an aggregate historical cost of $184.6 million (1989 — $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, 1990:

> Pollution projects at Harmac and Powell River, paper machine modernizations at Port Alberni and Pine Hill and a parallel strand lumber manufacturing plant at Deerwood, Minnesota.

The estimated total cost of these projects, including capitalized interest, is $287.5 million. These projects are expected to be completed in 1991.

5. Short term bank indebtedness:

At December 31, 1990 MacMillan Bloedel had short term bank lines of credit aggregating $343.6 million (1989 — $287.8 million) of which $47.4 million (1989 — $37.0 million) had been drawn down.

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

	Bonds	Term bank loans	Other liabilities	Total
		($ millions)		
1991	$ .7	$25.0	$5.0	$ 30.7
1992	.7	3.2	4.0	7.9
1993	4.4	2.6	4.3	11.3
1994	.8	92.2	4.6	97.6
1995	.1	294.3	2.2	296.6

7. **Term loans** (unsecured):

	December 31 1990	December 31 1989
	($ millions)	
7.39% Dutch Guilders 32.1 million maturing 1991	$ 16.3	$ 27.1
6.8% Yen 500 million maturing 1993	4.2	1.7
8.31% to 8.54% U.S. $75.0 million maturing 1994	98.0	98.0
9.4% to 9.54% U.S. $250.0 million maturing 1995	290.3	—
5.87% Yen 1,625 million maturing 1995	14.2	11.8
8.1% Dutch Guilders 215.0 million maturing 1996	118.0	118.0
9.85% U.S. $50.0 million maturing 1997	58.3	—
$29.0 million maturing 1997*	29.0	—
$100.0 million maturing 1997*	**	—
9.2% U.S.$200.0 million maturing 1999	232.7	232.7
5.1% Yen 200 million	—	1.7
	861.0	491.0
Less: Payments due within one year	19.4	12.3
	$841.6	$478.7

At December 31, 1990 MacMillan Bloedel had undrawn 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.

* Interest rates related to bankers acceptance rates
**Drawn January, 1991

8. **Notes and bonds:**

	December 31 1990	December 31 1989
	($ millions)	
9% Notes (unsecured) maturing 1996 (U.S. $100.0 million)	$133.3	$133.3
7.75% to 10.5% industrial development revenue and pollution control bonds, maturing 1993 to 2009 (U.S. $31.4 million)*	37.8	37.8
Industrial bonds at interest rates ranging from 4.9% to 10.25% and maturing from 1993 to 1997 (U.S. $4.5 million)*	5.7	6.5
	176.8	177.6
Less: Payments due within one year	.8	.8
	$176.0	$176.8

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

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.

	December 31	
	1990	1989
	($ millions)	
Outstanding shares without par value		
Preferred —		
184,378 class B, series 4	$ 16.4	$ 18.1
1,892,800 class B, series 8	47.3	48.0
1,000 class B, series 9	—	—
2,272,900 class B, series 10	56.8	58.5
	120.5	124.6
Foreign exchange translation adjustment	(1.0)	(1.1)
	119.5	123.5
Common —		
102,649,825 shares	552.0	552.0
	$671.5	$675.5

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	U.S.$100.00
Company's redemption obligations — redeem 4,687 shares each quarter	September 1, 1987 through June 1, 1992	U.S.$100.00
redeem remaining shares on	September 1, 1992	U.S.$100.00
Series 8:		
Company's redemption options — redeemable after	September 1, 1990	$26.00(1)
Company's redemption obligations — make all reasonable efforts to purchase, during each calendar quarter 1% of the shares outstanding on August 31, 1990	September 1, 1990	$25.00 maximum
Series 10:		
Company's redemption options — redeemable on or after	March 1, 1991	$25.50(2)
Company's redemption obligations — make all reasonable efforts to purchase, during each calendar quarter, ½% of the shares outstanding on August 31, 1987	September 1, 1987 to February 28, 1991	$25.00 maximum

(1) This price declines $.50 annually to $25.00.
(2) This price reduces to $25.00 on or after March 1, 1993.

Dividends

Series 4 Cumulative preferential equal to the sum of 1½% and ½ of the defined average U.S. prime rate per annum, payable quarterly.

Series 8 Cumulative preferential of 9¼% 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 6.3 million had been taken up as at December 31, 1990.

Senior management
At December 31, 1990 loans to employees under the senior management share purchase plan amounted to $11.4 million (1989 — $9.1 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, 1988	240,625	$ 21.4
Redeemed during 1988	(18,748)	(1.7)
December 31, 1988	221,877	19.7
Redeemed during 1989	(18,748)	(1.6)
December 31, 1989	203,129	18.1
Redeemed during 1990	(18,751)	(1.7)
December 31, 1990	184,378	$ 16.4
Series 6		
January 1, 1988	1,993,200	$ 49.8
Purchased during 1988	(1,993,200)	(49.8)
December 31, 1988, 1989, 1990	—	$ —
Series 8		
January 1, 1988	1,988,900	$ 49.7
Purchased during 1988	(9,100)	(.2)
December 31, 1988	1,979,800	49.5
Purchased during 1989	(60,000)	(1.5)
December 31, 1989	1,919,800	48.0
Purchased during 1990	(27,000)	(.7)
December 31, 1990	1,892,800	$ 47.3
Series 9		
December 31, 1988, 1989, 1990	1,000	$ —
Series 10		
January 1, 1988	2,386,100	$ 59.7
Purchased during 1988	(10,100)	(.3)
December 31, 1988	2,376,000	59.4
Purchased during 1989	(34,800)	(.9)
December 31, 1989	2,341,200	58.5
Purchased during 1990	(68,300)	(1.7)
December 31, 1990	2,272,900	$ 56.8
Common shares		
December 31, 1988, 1989, 1990	102,649,825	$552.0

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, 1990 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	Total
		($ millions)	
1991	$24.3	$ 12.8	$ 37.1
1992	19.9	10.6	30.5
1993	6.6	9.0	15.6
1994	—	7.8	7.8
1995	—	5.9	5.9
1996 – 2000	—	26.0	26.0
2001 – 2005	—	24.7	24.7
2006 – 2010	—	22.2	22.2
2011 – 2013	—	13.0	13.0
	$50.8	$132.0	$182.8

(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 $5.5 million is required in each of the next five years.

12. Earnings statements supplementary information:

(a) *Costs and expenses*

	Year ended December 31		
	1990	1989	1988
		($ millions)	
Interest expense			
Long term debt interest	$ 64.5	$ 34.2	$ 35.0
Convertible debenture interest	7.5	7.6	7.5
Other interest	22.3	26.0	5.0
	94.3	67.8	47.5
Less: Interest capitalized	13.3	14.2	4.0
	$ 81.0	$ 53.6	$ 43.5
Effective average interest rate	8%	8%	8%
Other income (expense)			
Income from investments	$ 5.7	$ 4.3	$ 4.3
Other	(18.7)	7.2	(13.4)
	$(13.0)	$ 11.5	$ (9.1)
Depreciation	$138.6	$109.8	$ 106.4
Depletion	10.9	13.0	10.5
Amortization	7.0	7.6	7.7
	$156.5	$130.4	$ 124.6
Research and development expenses	$ 16.8	$ 16.1	$ 15.2
Less: Government grants and investment tax credits	3.4	3.6	3.9
	$ 13.4	$ 12.5	$ 11.3
Rental expense	$ 48.5	$ 49.7	$ 52.3
Remuneration of directors and executive officers	$ 4.1	$ 6.9	$ 6.2
Wages, salaries and benefits	$794.7	$773.3	$ 739.3
Pension expense (Note 14)	$ 64.5	$ 60.7	$ 55.5

12. Earnings statements supplementary information: (continued)

(b) *Income taxes*
Consolidated income tax expense:

Years ended December 31	Canadian federal	Canadian provincial	Foreign	Total
		($ millions) expense (recovery)		
1990				
Current	$ 26.0	$ (8.3)	$(19.4)	$ (1.7)
Deferred	(13.6)	(6.8)	10.2	(10.2)
	$ 12.4	$(15.1)	$ (9.2)	$(11.9)
1989				
Current	$ 30.4	$ 19.7	$ 40.3	$ 90.4
Deferred	17.6	12.0	3.5	33.1
	$ 48.0	$ 31.7	$ 43.8	$123.5
1988				
Current	$ 54.9	$ 38.1	$ 40.3	$133.3
Deferred	17.7	12.0	(1.6)	28.1
	$ 72.6	$ 50.1	$ 38.7	$161.4

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

Income tax rate reconciliation:

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 and the purchase of lumber from Noranda Forest Inc.

	Year ended December 31		
	1990	1989	1988
		($ millions)	
Sales to related parties	$123.3	$115.4	$109.1
Purchases from related parties	$ 65.3	$ 73.8	$ 81.7

	December 31	
	1990	1989
	($ millions)	
Accounts receivable from related parties	$ 19.8	$ 18.0

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. Salaried pension plan amendments to increase payments to pensioners and increase pensions for present employees were approved during 1988. The $23.5 million cost of these amendments is being amortized to earnings over appropriate periods. 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		
	1990	1989	1988
		($ millions)	
Obligations for pension benefits	$487.4	$454.6	$418.6
Pension fund assets at market related values	410.4	398.8	363.4
Excess of obligations over fund assets	77.0	55.8	55.2
Provisions	34.7	24.1	24.4
Excess of obligations over provision and fund assets	$ 42.3	$ 31.7	$ 30.8

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	
	1990	1989*
	($ millions)	
Total assets	$3,574.6	$3,273.5
Current assets	992.0	982.7
Current liabilities	469.8	502.2

*Certain 1989 amounts have been reclassified to conform with the presentation in 1990.

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	
	1990	1989
	($ millions)	
Common shares	$ 552.0	$ 552.0
Retained earnings — U.S. GAAP	976.1	1,023.3
	1,528.1	1,575.3
Foreign exchange translation adjustment	(50.7)	(66.2)
	$1,477.4	$1,509.1

16. Segment information:

	Sales from Canada to	Sales to unaffiliated customers from	Contributions to operating earnings (2)	Assets*
		($ millions)		
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	960.9
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	2,917.9
Eliminations and adjustments:				
Inter-segment			(17.5)	(14.6)
General corporate			(67.0)	679.5
Foreign exchange translation adjustment				(8.2)
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	905.7
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	2,763.7
Eliminations and adjustments:				
Inter-segment			(4.9)	(20.2)
General corporate			(59.2)	564.6
Foreign exchange translation adjustment				(34.6)
Interest expense			(53.6)	
Consolidated totals	$2,442.0	$3,273.7	$323.0	$3,273.5
Year ended December 31, 1988				
Canada	$ 566.7	$1,440.8	$422.7	$1,503.4
United States	932.0	1,595.7	128.2	778.5
Europe	336.5	51.5	(.3)	18.0
Japan and other	632.9	185.5	3.7	74.9
	2,468.1	3,273.5	554.3	2,374.8
Eliminations and adjustments:				
Inter-segment			9.3	(15.3)
General corporate			(84.7)	381.2
Foreign exchange translation adjustment				12.4
Interest expense			(43.5)	
Consolidated totals	$2,468.1	$3,273.5	$435.4	$2,753.1

*Prior years have been reclassified to conform with the presentation in 1990.

	Total revenue	Contributions to earnings (1)(2)	Depreciation, depletion and amortization	Capital expenditures	Assets*
			($ millions)		
Year ended December 31, 1990					
Building materials	$1,358.9	$ 43.1	$ 64.0	$130.6	$1,219.7
Pulp and paper	1,127.5	54.6	59.7	153.9	1,155.6
Containerboard and packaging	456.1	44.7	23.9	76.6	515.0
Other	60.7	2.9	1.5	1.3	13.0
Total operations	3,003.2	145.3	149.1	362.4	2,903.3
General corporate		(67.0)	7.4	4.1	679.5
Foreign exchange translation adjustment					(8.2)
Interest expense		(81.0)			
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	$1,161.3
Pulp and paper	1,310.2	180.8	42.1	194.5	1,081.1
Containerboard and packaging	504.1	113.6	21.7	59.4	473.1
Other	50.8	2.3	1.8	.1	28.0
Total operations	3,273.7	435.8	122.6	500.8	2,743.5
General corporate		(59.2)	7.3	17.6	564.6
Foreign exchange translation adjustment			.5		(34.6)
Interest expense		(53.6)			
Consolidated totals	$3,273.7	$323.0	$130.4	$518.4	$3,273.5
Year ended December 31, 1988					
Building materials	$1,404.7	$186.8	$ 58.8	$170.0	$ 960.9
Pulp and paper	1,282.5	254.9	36.6	146.5	922.7
Containerboard and packaging	530.1	118.0	23.9	32.8	443.8
Other	56.2	3.9	2.6	.3	32.1
Total operations	3,273.5	563.6	121.9	349.6	2,359.5
General corporate		(84.7)	1.0	14.4	381.2
Foreign exchange translation adjustment			1.7		12.4
Interest expense		(43.5)			
Consolidated totals	$3,273.5	$435.4	$124.6	$364.0	$2,753.1

*Prior years have been reclassified to conform with the presentation in 1990.

(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.

16. Segment information: (continued)

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.

17. 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 Limited
Forest Industries Flying Tankers Limited (57.5% interest)
Island Paper Mills Limited*
Kingcome Navigation Company Ltd.
MacMillan Bloedel Building Limited*
MacMillan Bloedel Building Materials Limited
MacMillan Bloedel Parallam Services Limited*
Port Royal Development Limited
Port Royal Village Development 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.

Washington
Fibres International, Inc. (51% interest)
Pacific Resource Management Inc.

*Inactive

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.

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.

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