

EDUCATION AND EXAMINATION COMMITTEE

OF THE

SOCIETY OF ACTUARIES

COURSE 8 FINANCE STUDY NOTE

COURSE 8 FINANCE CASE STUDY

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Introduction

Zest for Life (Zest) is a direct insurance writer located in a medium-sized city in the northeastern United States. This city contains five insurance companies, with Zest being the largest. Two medium-sized banks are also located in this city. The city's population is largely white-collar, and the majority of the workforce is employed in insurance, banking, and the city's one college.

Zest has 532 employees at its head office. Zest also has 15 agency offices in major cities across the United States, whose responsibility is to service the approximately 1,450 independent life insurance agents and 7 brokerage firms that submit both individual and group business to Zest.

Zest currently markets three product lines - Individual Life via independent agents, GIC's for pension plans via brokers, and Group Long Term Disability also through brokers.

Background and Corporate History

Zest is a stock insurance company, having been established in 1945. Zest's growth was modest up until 1993. At that time, in order to encourage greater growth, Zest established an incentive compensation plan for senior management that included stock options. Growth and profits increased rapidly over the next 5 years.

This growth began to attract the interest of institutional investors, and in 1995 several large mutual funds began accumulating shares of Zest.

In 1997, Alpine Bank of Switzerland, a large foreign bank, acquired 60% of the outstanding shares of Zest. The shareholders of Zest at the end of 1999 consisted of the following:

- institutional investors – 25%,
- Alpine Bank of Switzerland – 60%,
- senior officers of Zest – 5%,
- general public – 10%.

No institutional investor owns more than 3% of Zest's outstanding stock.

In 1998, Alpine Bank acquired 100% of the outstanding shares of a medium-sized US bank.

At the end of 1998, Zest acquired the Canadian reinsurance operations of Scottish Friends and Providers (SFP), a UK company. Zest used the services of M&M Actuarial Consulting, who specialize in appraisals of insurance companies. SFP's Canadian operations were structured as a subsidiary of a foreign company. SFP reinsures

individual life and disability business in Canada. SFP has also assumed a small block of individual annuities, all of which are in payout mode.

SFP's individual life business has historically been quite profitable. Mortality has shown continual improvements and current management expects this to continue into the future. The results for the individual disability business have been somewhat cyclical, but on a 4-year moving average basis, the results have been acceptable, although not stellar. The individual annuities represent a small block of inforce business that SFP acquired at the beginning of 1995. Because of general mortality improvements, and, perhaps, mispricing of the business, the annuity business has shown losses in every year. Reserves have had to be strengthened on two occasions, in 1997 and in 1999.

SFP files reports on two bases. Being a Canadian company, it must file with the Canadian regulators for its Canadian operations. Prior to the acquisition by Zest, it filed statements with the parent company on a UK reporting basis. Since the acquisition by Zest, it files statements on a Canadian basis as well as statements on a US basis. 1997 closing balance sheets were prepared on a US valuation basis.

Zest's current senior management has been in place since 1996, with the exception of the Chief Executive Officer (CEO) who was hired in 1998. Senior management has a good relationship with its employees and its sales force. In 1998, the most recent reporting year, management exceeded target production volumes by 20%, for which they were well compensated.

It is now January 16, 2001, and the finance department of Zest has just completed the draft financial statements for the year 2000 as attached. Risk based capital requirements (RBC) have been calculated based on a respected rating agency's formula.

Current Management

Dieter Zach is the current CEO of Zest. Mr. Zach joined Zest in 1998, after Alpine's 60% purchase of Zest's outstanding stock. Mr. Zach previously was director of new business for Alpine's US operations, headquartered in New York. Mr. Zach holds a business degree and is an accountant by training. He had spent considerable time in the area of mergers and acquisitions as well as investment banking, including some work in the property and casualty field, prior to joining Alpine's US operations. Mr. Zach is a strong advocate of centralized control, and since his arrival at Zest, he has increased the level of reporting required of Zest's business units. The business managers are held more accountable for the results their units produce. Mr. Zach has expressed a desire to expand Zest's business by acquisition rather than organic growth. Mr. Zach was largely responsible for the acquisition in 1998 of SFP-CB.

Mr. Zach does not think highly of rating agencies. He feels they are not in a position to comment on how he should be running his business, nor do they necessarily understand how his company is managing risk. Mr. Zach, however, is tolerant of rating agencies, and appreciates that they are in a position to influence new business production through their

ratings. Mr. Zach takes a direct interest in the accounting policies of Zest, and is considered by his Chief Financial Officer as somewhat aggressive in his views on the application of certain accounting policies.

Mr. Zach's senior management team include: Wilemena Werner (Senior Vice President and CFO), Ty Bolthaup (Senior Vice President, Underwriting and Marketing), and Marvin Cairns (Senior Vice President and Chief Actuary).

Wilemena Werner is Zest's CFO. Coincidentally she also worked at Alpine before joining Zest. However, she and Mr Zach did not have prior working relationships. Ms. Werner is a trained accountant. She does rely quite heavily on the advice of Zest's Chief Actuary. Ms. Werner was responsible for the installation of Zest's current management information system. Under her guidance, reports are produced more frequently and in a more timely fashion.

Ty Bolthaup is the Senior Vice President in charge of underwriting and marketing. Mr. Bolthaup is responsible for new business production and all agency and broker-related matters. His direct reports include the directory of agencies and the director of underwriting. Mr. Bolthaup has increased new business production for individual life insurance substantially since his appointment in 1996. Prior to his appointment he was director of agencies. Mr Bolthaup began working at Zest as an underwriting trainee in 1979.

Marvin Cairns is Senior Vice President and Chief Actuary who also holds an MBA. Mr. Cairns is a Fellow of the Society of Actuaries as well as a Fellow of the Canadian Institute of Actuaries. Mr. Cairns has been with Zest since 1994, and in his current position since 1996. In addition to his corporate responsibilities as Chief Actuary, Mr. Cairns also is heavily involved in acquisitions of blocks of business. Mr. Cairns is conservative relative to his senior executive peers at Zest. He has, at times, had rather animated discussions with his colleagues as to the aggressive position they occasionally take in their interpretation of accounting policies.

Andre-Pierre Boulangerie is Chief Operating Officer of SFP-CB. Mr. Boulangerie is an actuary and Fellow of the Candian Institute of Actuaries. He has been with SFP-CB since 1983, and in his current position since 1993. He was responsible for the acquisition of the annuity block of business.

Organizational Structure

Of Zest's 532 employees at head office, 525 are salaried employees while the remaining 7 are paid on an hourly basis. The hourly employees consist of the company's mail room staff and the company's receptionist.

All salaried employees have, in addition to their regular salary, an incentive component as part of their total compensation. The incentive component is a percentage of salary, and is made up of individual objectives and company performance. For the employees

below management level, the incentive compensation is a maximum of 15% of salary, and is weighted 75% individual performance and 25% company results. As an employee becomes more senior within the organization, the incentive compensation component increases relative to base salary, and the component ascribed to company performance increases.

Zest's 15 agencies are each staffed by a branch manager and two administrative assistants. The branch managers are salaried, while the administrative assistants are paid on an hourly basis. The branch managers have a base salary of \$30,000, but have an incentive component linked entirely to new business production from their branch. This percentage can reach 400% of salary if new business, as measured by first year premium, reaches 200% of assigned target.

Issues

The accounting firm of Young and Green (YaG) have been Zest's auditors since 1990. In the second half of 1998, YaG issued a letter to management expressing concern that the company's accounting practices were too aggressive. During the year end 1998 audit, YaG determined that if the accounting practices were not modified it would issue a qualified opinion for the next year end. The changes in accounting practices that were suggested by YaG would have reduced Zest's projected year end 1999 RBC ratio from approximately 285% to 245%. Further, the projected RBC ratio at the end of 2000 would be reduced to 235%.

On June 27, 1999, the audit firm of YaG was dismissed and replaced with the audit firm Tick and Associates (Tick).

North American Rating Agency plc (NARA), a respected insurance company rating agency, noticed the change in audit firms, and scheduled a meeting with local management in the early fall of 1999. After these discussions, NARA put the rating of Zest, currently at AA, under review with negative implications. Zest was advised that there was potential for the rating to be reduced in 2000.

The news of the rating action was seized upon by Zest's competitors and the media. As a result, Zest's 1999 fourth quarter sales dropped in all three lines and its stock price fell to three quarters of the 1998 level. Zest has now hired a public relations firm in order to work on managing the negative implications of its ratings review.

The attached draft financial statements for year end 2000 have been prepared based on accounting practices consistent with those in effect at 1997 year end. The preliminary 2000 RBC ratio, based on these draft financial statements, is estimated to be 280%.

Products and Descriptions

Individual Life Insurance

Zest offers two main products: a variable life with policyholder assets invested in separate funds, and a competitive term product sold through its brokers.

Products are sold mostly through independent agents. Zest has a network of brokerage managers who recruit and develop these independent agents. These agents are extremely loyal to their customers and have frequent contact with them.

The term product is a level benefit to age 75. Premiums increase every 10 years. The current scale of premiums is guaranteed for the first 5 years from date of issue only. Subsequent premiums are guaranteed at 150% of the current premium scale. Growth in the term product has been rapid, due largely to Zest's desire to have its term plans rated in the top 10 with respect to price among its peer group of companies. As a result, Zest has been continuously repricing its product line. Because of the loyalty of the brokers to their customers, there has been evidence of higher-than-expected replacement activity as the brokers try to obtain the lowest price for their customers. This was evidenced by the approximate 15% experience lapse rates in 1999, as compared to the historic 10% experienced through the 1990's up to and including 1997.

Zest's variable life product credits interest based on the earnings of the separate funds of assets dedicated to this line. Policyholders can allocate their investments in whatever proportions they choose to a money market fund, a bond fund or a stock fund. Investment income is credited at the fund earned rate less an investment management expense. The current management expense is 75 basis points for the money market fund, 150 basis points for the bond fund, and 225 basis points for the equity fund. This charge is based on the market value of the assets in the fund. Zest offers minimum interest guarantees on its money market and bond funds. The minimum credited interest rate, before management expenses, is 2.00% for the money market fund and 3.50% for the bond fund. For the stock fund, there is no minimum guarantee. However the policyholder is guaranteed to receive the sum of all deposits on surrender. Zest's variable life product allows policy loans up to 50% of the cash value. The rate charged on policy loans is variable, and is recomputed monthly based on 5-year treasury bonds plus 75 basis points.

Zest reinsures the mortality risk on its term and variable life product. Reinsurance is on an excess of retention basis; Zest's current retention is \$500,000 per life. This level of retention results in reinsurance of approximately 15% of Zest's business.

Mr. Bolthaup has inquired of Mr. Cairns as to the possibility of increasing Zest's retention on the Individual Life. Mr. Bolthaup feels that that \$500,000 is too low, since the historical experience has been very stable and has exhibited very little variability.

Guaranteed Investment Contracts (GIC's)

Zest issues GIC's to defined contribution pension plans. Most new sales are the result of marketing to brokers specializing in group benefits. These brokers are sensitive to the ratings of the insurance companies with whom they deal. The brokers have a responsibility to their clients, and prefer as a result to deal with companies that are rated AA or higher. They will deal with stable insurance companies that are rated A in order to obtain higher returns for their clients. However, only limited business is placed with insurance companies that are rated A, and no business is placed with insurance companies that are rated below A. It is not uncommon for brokers to recommend to their clients to move business away from insurance companies whose ratings are in decline, even if long-term relationships exist.

Zest's GIC contracts are priced to be competitive within a defined peer group of companies. Zest does not wish to offer the best price, but does desire to be in the top 25th percentile in terms of ranking.

The contracts are offered on a 5 year term basis, with automatic rollover at the end of 5 years unless otherwise prior notification is received. Policyholders can choose a 1 year or 5 year interest rate guarantee within the 5 year term period. For the 1-year interest guarantee option, Zest guarantees that future rates within the 5-year term period will not drop more than 50 basis points below the interest rate offered in the first year of the contract.

The average duration that the existing contracts have been in force is 3.8 years. 74% of the clients have elected the 5-year interest guarantee option, and 26% have elected the 1-year interest guarantee option.

Zest allows book value withdrawals in order to satisfy plan obligations to participants. These obligations vary by pension plan, but can include paying out participant accounts (on a book value basis) upon death, disability and termination of employment of the participant, except in the rare situation of large-scale terminations.

Surrenders by the contract-holder (rather than the participants) are market value adjusted based on changes in interest rates.

Group Long Term Disability

Zest sells group long term disability coverage to large (500+) employers. Its competitive advantage has been high levels of customer service both towards the employer and plan members.

The benefit provided to the employee for full disability is 60% of base salary beginning 90 days after date of disability. Disability is defined as disabled from one's regular occupation within the first two years of disability, and from any occupation thereafter. Benefits are payable to age 65. Benefits are increased for inflation as defined by the US Consumer Price Index (CPI), and have a minimum 2.0% per annum CPI adjustment.

For employees that are partially disabled but able to work for limited periods of time, the benefit is 60% of base salary, less 60% of earnings while partially disabled. Zest believes this option will encourage employees to return to work sooner than they might otherwise.

Zest's group long term disability is sold through brokers who specialize in group benefits. These brokers solicit offers from insurance companies for their clients. The brokers make recommendations to their clients that are based largely on price. Most brokers prefer to deal with companies that are rated AA or higher. Insurance companies that are rated below A are virtually excluded from this market.

Brokers are responsible for the negotiation of all premiums, but claims are paid directly to the customer by the insurance company. Brokers are compensated based on commission that is calculated as a percentage of the premium remitted. Brokers regularly solicit insurance companies to bid for their clients' long term disability insurance business.

Zest currently reinsures its group long term disability on an excess of \$5,000 monthly income. This results in reinsurance of approximately 8% of Zest's group long term disability business. This retention was changed in 1995. Prior to 1995, Zest reinsured amounts in excess of \$2,500 monthly income, or approximately 25% of its business. Zest's current reinsurer has expressed concern with the profitability of Zest's long term disability.

Zest's group long term disability profits have been much lower than anticipated in aggregate in the years 1996 and later. In addition, earnings have tended to fluctuate.

An analysis of experience was performed by Mr. Cairns. Findings indicated that actual to expected experience varied considerably by monthly income, with experience deteriorating as benefit amounts increased above \$2,000 per month.

SFP-CB

SFP-CB has been writing new business in modest amounts. The business has been relatively profitable, save the annuity block that was acquired. SFP-CB has plans to grow capital organically, and had been able to meet those objectives with the exception of the years that reserve strengthening was required for the annuity block.

The annuity block consists of approximately 1,000 policies. 900 policies have annual incomes of \$20,000 or less, 27 policies have annual incomes between \$20,000 and \$100,000, while the balance have annual incomes of \$100,000 or higher. The reserve on the high income policies is 65% of the total annuity reserves.

Business Strategy

Zest's current business plan sees its future profits coming from lines of business which focus on wealth management, such as GIC's and to a lesser extent, variable life business. Zest management is contemplating developing a deferred annuity line in order to complement the Group GIC line of business.

Zest feels they can accomplish the above by leveraging Alpine Bank of Switzerland's ownership of a US bank as a new distribution network.

Each Group Long Term Disability account will be reviewed. For each account that has not been profitable for 3 of the last 4 years, Mr. Bolthaup has been instructed to either negotiate improved terms for Zest or terminate those accounts. In addition, Mr. Cairns has been asked to review how reinsurance might be used to smooth the fluctuations in profits.

Zest recognizes that independent agents are more loyal to the policyholders than to the companies with whom they deal, and therefore feels a career agency force would create a greater bond between the company and its sales force.

Since the appointment of Mr. Zach, Alpine has indicated it will support Zest's future growth and development plans, subject to it meeting appropriate and suitable rates of return. Alpine as majority shareholder has committed to Zest that if additional funds are required to support the growth plans that Mr. Zach envisions, Alpine will increase its ownership in Zest by supplying additional capital through the purchase of treasury stock.

Investment Policy

In its general account, Zest can invest in public bonds (including CMO's), private placement bonds, commercial mortgages, equities and real estate.

Target and actual investment allocations and asset qualities are outlined in the Appendix.

Asset/Liability Management

Assets are segmented by line of business. Assets backing the company's GIC and Group LTD liabilities as well as the individual term liabilities are held in the general account. Assets backing the variable life business are held in two segregated funds – a bond fund and an equity fund.

Investments are managed externally using the investment management firm HRU Investors llp (HRU).

In 1998 Zest provided to HRU duration targets of 3 for the GIC line, 4 for the Group LTD line, and 7 for the individual life line (excluding the variable life line of business). Duration was calculated using Macaulay duration, and duration tolerances were expressed as +/- 0.25 years.

Rating

North American Rating Agency plc (NARA) is the pre-eminent rating agency for insurance companies. NARA has been rating insurance companies and other financial institutions since 1972. Investment analysts, who often do not thoroughly understand insurance companies, rely heavily on the ratings assigned by NARA to insurance companies. Consequently, insurance companies manage their business carefully in order to maintain a favourable rating. Further, the ratings assigned by ratings agencies affect the interest rate charged insurance companies on borrowed funds.

NARA has established its own requirements for target capital, as well as its own benchmarks for minimum target capital ratios. NARA uses a risk-based capital approach in determining minimum required capital levels. In addition, NARA interviews management in order to perform qualitative assessments of a company's operations.

NARA uses the following rating categories:

- AAA – Excellent
- AA – Superior
- A – Good
- BBB – Fair
- BB – under watch
- B – suspect
- C and lower – speculative

Zest has stated it will maintain a minimum target capital ratio of 275%, based on the RBC formula of (NARA).

Zest was rated AA at the end of 1998, but its rating is currently under review with negative implications. NARA included the following rationale for putting Zest's rating under review:

NARA discussed with Zest the reason for the departure of the Zest' previous auditors. Zest disclosed that those auditors have expressed concern over its accounting policies. After more investigation, NARA felt that implications on current capital and future capital projections were negative.

Zest's targeted required capital ratio of 275% is at the lower end of what is required by NARA to retain a AA rating.

Zest's target capital ratio may impair its ability to renew existing business and attract new business.

Mr. Zach, Ms. Werner, and Mr Cairns are discussing their options on how to protect their rating with NARA. Mr. Zach realizes that the rating of Zest impacts its ability to attract new business (especially in the highly sensitive brokerage market), and its ability to

borrow funds at preferred rates from lending institutions. Corporate policy prohibits Zest from borrowing money from Alpine Bank. Mr. Zach is anxious to have Zest's rating reconfirmed at AA or higher.

Mr. Zach and Ms. Werner have communicated to NARA, in advance of any meetings, of the review of the Group Long Term Disability business accounts. Mr. Zach has informed NARA that it has been agreed between himself and Mr. Bolthaupt that 50% of Group Long Term Disability premium will not be renewed in 2001 in an effort to increase the profitability of that line.

Case Study Exam 8 Finance – Fall 2000

Balance Sheet

	Actual						Projected			
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Assets										
<u>Private Bonds</u>										
Investment grade	1,001.4	1,200.5	1,495.7	1,687.5	1,889.8	2,023.7	2,104.3	2,288.6	2,489.5	2,723.1
Below investment grade	290.3	348.1	314.1	388.1	491.3	505.9	560.0	640.8	672.2	699.1
subtotal	1,291.7	1,548.6	1,809.8	2,075.6	2,381.1	2,529.6	2,664.3	2,929.4	3,161.7	3,422.2
<u>Public Bonds</u>										
Investment grade	2,251.7	2,432.4	2,724.0	2,958.1	3,083.3	3,510.4	3,860.3	4,094.3	4,521.9	5,091.2
Below investment grade	473.3	549.1	630.1	727.4	749.1	802.4	852.6	920.2	1,003.6	1,100.9
CMO (investment grade)	427.5	521.1	611.0	784.8	778.6	794.6	861.7	970.1	1,054.1	1,058.9
subtotal	3,152.5	3,502.6	3,965.1	4,470.3	4,611.0	5,107.4	5,574.6	5,984.6	6,579.7	7,250.9
<u>Commercial Mortgages</u>										
Investment grade	460.3	530.2	601.9	679.7	751.7	792.5	848.3	901.3	970.1	1,049.9
Non-investment grade	65.8	75.7	86.0	97.1	107.4	113.2	121.2	128.8	138.6	150.0
subtotal	526.1	605.9	687.9	776.8	859.1	905.7	969.5	1,030.1	1,108.7	1,199.9
<u>Equities</u>	470.5	494.6	501.3	535.9	636.9	580.6	539.8	550.6	565.4	580.6
<u>Real Estate</u>	254.3	260.5	270.1	295.1	310.8	340.3	360.8	407.5	441.0	470.3
<u>Cash and Short Term</u>	23.0	35.0	40.0	35.0	37.0	24.0	35.0	39.0	35.0	33.0
<u>Premiums Due and Unpaid</u>	11.0	9.0	8.0	9.0	10.0	11.0	12.0	13.0	12.0	15.0
<u>Deferred Acquisition costs</u>										
<u>Assets held in separate account</u>	338.1	340.1	342.9	347.1	346.4	355.7	375.6	405.9	442.0	485.0
<u>Other Assets</u>	32.1	31.7	32.5	34.5	29.4	22.4	24.2	25.6	26.5	27.1
Total Assets	6,099.2	6,828.0	7,657.6	8,579.3	9,221.7	9,876.7	10,555.8	11,385.7	12,371.9	13,484.0
Liabilities										
<u>Policy Liabilities - General Account</u>										
GICs	1,795.8	2,302.2	2,872.8	3,530.1	3,914.7	4,291.5	4,744.6	5,309.9	6,012.6	6,808.9
Individual Variable Life	265.4	299.7	331.5	359.2	380.5	401.4	430.7	470.7	515.9	560.4
Individual Term Insurance	146.1	150.8	158.9	166.1	175.7	184.0	192.3	202.1	213.5	222.7
Group LTD	1,480.9	1,480.9	1,551.3	1,597.6	1,657.5	1,699.6	1,670.0	1,645.0	1,628.0	1,627.0
subtotal	3,688.2	4,233.6	4,914.5	5,653.0	6,128.4	6,576.5	7,037.6	7,627.7	8,370.0	9,219.0
<u>Other Liabilities - General Account</u>	57.0	56.0	59.0	61.0	57.0	58.0	58.0	65.0	64.0	62.0
<u>Separate Account</u>	338.1	340.1	342.9	347.1	346.4	355.7	375.6	405.9	442.0	485.0
Total Liabilities	4,083.3	4,629.7	5,316.5	6,061.1	6,531.8	6,990.2	7,471.2	8,098.5	8,876.0	9,766.0
<u>Shareholder Equity</u>	2,015.9	2,198.3	2,341.1	2,518.3	2,689.9	2,886.5	3,084.6	3,287.1	3,495.9	3,718.0
Total Liabilities and Equity	6,099.2	6,828.0	7,657.6	8,579.3	9,221.7	9,876.7	10,555.8	11,385.7	12,371.9	13,484.0

North American Rating Agency's Capital Requirements

Required Capital = square root of $\{C-2^2 + [C-1 + C-3]^2\}$

C-1 Risk	Base	Investment grade	Non-investment grade
% of asset value			
Private Bonds		1.0%	7.5%
Public Bonds		0.2%	5.0%
CMO		0.2%	5.0%
Commercial Mortgages		3.0%	6.0%
Stock - equities - affiliates	30.0% % owned x affiliate's RBC		
Real Estate	10.0%		
Cash and Short Term	0.3%		
Other assets	0.0%		
C-2 Risk			
Life Insurance	0.8%	% of net amount at risk	
Long Term Disability	25.0%	% of premiums	
Long Term Disability	5.0%	% of reserves	
C-3 Risk			
Life Insurance	0.50%	% of reserves	
GICs - all maturities	1.25%	% of reserves	

	Actual						Projected			
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Required Capital - Liabilities										
C-1 Risk	78.9	90.4	104.7	120.2	130.2	139.6	149.2	161.5	177.0	194.8
C-2 Risk	403.0	433.3	518.4	681.7	850.4	945.0	1,010.8	1,058.2	1,089.8	1,114.1
C-3 Risk	24.5	31.0	38.4	46.8	51.7	56.6	62.4	69.7	78.8	89.0
Required Capital - Shareholder Equity										
C-1 Risk	178.2	190.7	189.8	208.2	243.8	228.4	220.9	233.5	240.4	243.7
C-2 Risk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C-3 Risk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total										
C-1 Risk	257.2	281.1	294.5	328.4	374.0	368.0	370.1	395.1	417.4	438.5
C-2 Risk	403.0	433.3	518.4	681.7	850.4	945.0	1,010.8	1,058.2	1,089.8	1,114.1
C-3 Risk	24.5	31.0	38.4	46.8	51.7	56.6	62.4	69.7	78.8	89.0
Required formula	491.7	534.0	616.1	778.1	951.0	1,036.0	1,099.5	1,155.8	1,197.5	1,232.7
Available	2,015.9	2,198.3	2,341.1	2,518.3	2,689.9	2,886.5	3,084.6	3,287.1	3,495.9	3,718.0
Ratio	410.0%	411.7%	380.0%	323.6%	282.8%	278.6%	280.6%	284.4%	291.9%	301.6%

Income Statement
Line of Business (LOB): ALL

	Actual						Projected			
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Income Statement										
Premiums	378.00	388.78	418.46	457.64	465.74	492.18	396.11	419.91	447.54	477.83
Investment Income	367.65	422.34	466.59	520.61	582.79	628.75	649.64	674.60	714.92	778.62
Total Revenue	745.65	811.12	885.05	978.25	1,048.53	1,120.93	1,045.75	1,094.51	1,162.45	1,256.45
Expenses										
Benefits	241.30	262.69	287.38	310.63	327.04	343.60	336.12	342.43	356.90	367.59
Surrenders	21.04	18.94	17.89	16.83	15.78	13.26	11.27	9.69	8.43	7.33
Increase in reserves	108.31	39.00	110.28	81.20	90.80	71.30	8.00	24.80	39.80	52.70
Interest Credited	94.41	125.91	159.92	199.45	245.50	272.68	292.89	312.25	336.51	381.05
Commissions	42.46	44.93	49.52	55.35	57.24	71.19	62.83	71.84	80.72	89.74
Change in DAC	-	-	-	-	-	-	-	-	-	-
Other Expenses	20.20	21.52	23.83	26.87	27.61	35.88	29.97	31.88	34.03	36.46
Total Expenses	527.72	512.99	648.82	690.34	763.98	807.91	741.08	792.90	856.19	934.87
Transfers to separate account	(22.70)	(17.50)	(16.50)	(15.40)	(20.50)	(10.50)	-	10.00	15.00	20.00
Income before tax	195.23	280.63	219.73	272.51	264.05	302.52	304.67	311.61	321.26	341.58
Income Tax	68.33	98.22	76.91	95.38	92.42	105.88	106.63	109.06	112.44	119.55
Net income after tax	126.90	182.41	142.82	177.13	171.64	196.64	198.04	202.55	208.82	222.03
Balance Sheet										
Closing Shareholder Balance	2,015.90	2,198.31	2,341.14	2,518.27	2,689.91	2,886.54	3,084.58	3,287.13	3,495.95	3,717.98
Closing Reserve Balance	3,688.23	4,233.64	4,914.54	5,653.00	6,128.40	6,576.48	7,037.60	7,627.66	8,369.98	9,219.05
Assets										
Private Bonds										
Investment grade	1,001.40	1,200.50	1,495.70	1,687.50	1,889.80	2,023.70	2,104.30	2,288.60	2,489.50	2,723.10
Below investment grade	290.30	348.15	314.10	388.13	491.35	505.93	560.00	640.81	672.17	699.10
subtotal	1,291.70	1,548.65	1,809.80	2,075.63	2,381.15	2,529.63	2,664.30	2,929.41	3,161.67	3,422.20
Public Bonds										
Investment grade	2,251.70	2,432.36	2,724.01	2,958.12	3,083.28	3,510.40	3,860.33	4,094.28	4,521.89	5,091.16
Below investment grade	473.30	549.11	630.06	727.39	749.10	802.41	852.60	920.23	1,003.65	1,100.88
CMO (investment grade)	427.48	521.10	611.03	784.83	778.59	794.58	861.66	970.11	1,054.14	1,058.90
subtotal	3,152.48	3,502.57	3,965.10	4,470.34	4,610.97	5,107.39	5,574.59	5,984.62	6,579.68	7,250.94
Commercial Mortgages										
Investment grade	460.30	530.20	601.90	679.70	751.70	792.50	848.30	901.30	970.10	1,049.90
Non-investment grade	65.76	75.74	85.99	97.10	107.39	113.21	121.19	128.76	138.59	149.99
subtotal	526.06	605.94	687.89	776.80	859.09	905.71	969.49	1,030.06	1,108.69	1,199.89
Equities	470.50	494.60	501.30	535.90	636.90	580.60	539.80	550.60	565.40	580.60
Real Estate	254.30	260.50	270.10	295.10	310.80	340.30	360.80	407.50	441.00	470.30
Cash and Short Term	23.00	35.00	40.00	35.00	37.00	24.00	35.00	39.00	35.00	33.00
Premiums Due and Unpaid	11.00	9.00	8.00	9.00	10.00	11.00	12.00	13.00	12.00	15.00
Deferred Acquisition costs	-	-	-	-	-	-	-	-	-	-
Assets held in separate account	338.10	340.05	342.93	347.07	346.37	355.67	375.59	405.87	441.97	484.96
Other Assets	32.10	31.70	32.50	34.50	29.40	22.40	24.20	25.60	26.50	27.10
Total Assets	6,099.23	6,828.01	7,657.81	8,579.34	9,221.68	9,876.69	10,555.77	11,385.65	12,371.90	13,483.98
Liabilities										
C-1 Risk	257.2	281.1	294.5	328.4	374.0	368.0	370.1	395.1	417.4	438.5
C-2 Risk	403.0	433.3	518.4	681.7	850.4	945.0	1010.8	1058.2	1089.8	1114.1
C-3 Risk	24.5	31.0	38.4	48.8	51.7	56.6	62.4	69.7	78.8	89.0

Income Statement
LOB: GIC

	Actual						Projected			
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Income Statement										
Premiums										
Investment Income	96.8	129.1	164.0	204.6	251.8	279.7	300.4	320.3	345.1	390.8
Total Revenue	96.8	129.1	164.0	204.6	251.8	279.7	300.4	320.3	345.1	390.8
Benefits										
Surrenders										
Increase in reserves										
Interest Credited	94.4	125.9	159.9	199.5	245.5	272.7	292.9	312.3	336.5	381.0
Commissions										
Change in DAC										
Other Expenses	0.73	0.97	1.23	1.53	1.89	2.10	2.25	2.40	2.59	2.93
Total Expenses	95.1	126.9	161.1	201.0	247.4	274.8	295.1	314.7	339.1	384.0
Transfers to separate account										
Income before tax	1.7	2.3	2.9	3.6	4.4	4.9	5.3	5.6	6.0	6.8
Income Tax	0.6	0.8	1.0	1.3	1.5	1.7	1.8	2.0	2.1	2.4
Net income after tax	1.1	1.5	1.9	2.3	2.9	3.2	3.4	3.6	3.9	4.4
Inforce volume										
Opening Reserve	1,350.4	1,795.8	2,302.2	2,872.8	3,530.1	3,914.7	4,291.5	4,744.6	5,309.9	6,012.6
Closing Reserve	1,795.8	2,302.2	2,872.8	3,530.1	3,914.7	4,291.5	4,744.6	5,309.9	6,012.6	6,808.9
Separate Account end of year										
Investment income rate	7.17%	7.19%	7.12%	7.12%	7.13%	7.14%	7.00%	6.75%	6.50%	6.50%
Tax rate	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%
New Business	401.0	430.5	460.7	499.8	350.1	360.0	380.0	400.0	430.0	460.0
Rollovers	300.0	320.0	340.0	360.0	211.0	255.9	329.7	441.0	574.1	402.1
Maturities	350.0	370.0	390.0	402.0	422.0	511.8	549.4	588.0	637.9	446.8
Assets										
Private Bonds										
Investment grade	215.5	276.3	344.7	423.6	469.8	515.0	569.4	637.2	721.5	817.1
Below investment grade	53.9	69.1	86.2	105.9	117.4	128.7	142.3	159.3	180.4	204.3
subtotal	269.4	345.3	430.9	529.5	587.2	643.7	711.7	796.5	901.9	1,021.3
Public Bonds										
Investment grade	879.9	1,128.1	1,407.7	1,729.7	1,918.2	2,102.8	2,324.9	2,601.8	2,946.2	3,336.4
Below investment grade	188.6	241.7	301.6	370.7	411.0	450.6	498.2	557.5	631.3	714.9
CMO (investment grade)	188.6	241.7	301.6	370.7	411.0	450.6	498.2	557.5	631.3	714.9
subtotal	1,257.1	1,611.6	2,011.0	2,471.1	2,740.3	3,004.0	3,321.2	3,716.9	4,208.8	4,766.3
Commercial Mortgages										
Investment grade	179.6	230.2	287.3	353.0	391.5	429.1	474.5	531.0	601.3	680.9
Non-investment grade	-	-	-	-	-	-	-	-	-	-
subtotal	179.6	230.2	287.3	353.0	391.5	429.1	474.5	531.0	601.3	680.9
Equities										
	-	-	-	-	-	-	-	-	-	-
Real Estate										
	89.8	115.1	143.6	176.5	195.7	214.6	237.2	265.5	300.6	340.4
Cash and Short Term										
Premiums Due and Unpaid										
Deferred Acquisition costs										
Assets held in separate account										
Other Assets										
Total Assets	1,795.8	2,302.2	2,872.8	3,530.1	3,914.7	4,291.5	4,744.6	5,309.9	6,012.6	6,808.9
C-1 Risk	37.4	48.0	59.8	73.5	81.5	89.4	98.8	110.6	125.2	141.8
C-2 Risk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C-3 Risk	22.4	28.8	35.9	44.1	48.9	53.6	59.3	66.4	75.2	85.1

**Income Statement
LOB: Variable Life**

	Actual						Projected			
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Income Statement										
Premiums	87.8	78.8	74.5	70.1	65.7	65.19	66.31	68.74	72.26	76.39
Investment Income	18.1	20.6	22.7	24.7	26.7	28.0	28.8	29.8	31.2	34.1
Total Revenue	105.7	99.4	97.2	94.8	92.4	93.2	95.2	98.5	103.5	110.5
Expenses										
Benefits	8.0	15.5	14.8	18.5	17.3	18.79	21.38	25.05	29.59	35.69
Surrenders	21.0	18.9	17.9	16.8	15.8	13.28	11.27	9.69	8.43	7.33
Increase in reserves	40.3	34.3	31.8	27.7	21.3	20.9	29.3	40.0	45.2	44.5
Interest Credited	-	-	-	-	-	-	-	-	-	-
Commissions	2.7	2.4	2.3	2.2	2.0	9.20	10.32	11.26	12.30	13.46
Change in DAC	-	-	-	-	-	-	-	-	-	-
Other Expenses	1.0	0.9	0.8	0.8	0.7	1.72	1.92	2.09	2.28	2.48
Total Expenses	73.0	72.0	67.6	66.0	57.1	63.9	74.2	88.1	97.8	103.5
Transfers to separate account	(22.7)	(17.5)	(16.5)	(15.4)	(20.5)	(10.5)	-	10.0	15.0	20.0
Income before tax	10.0	9.9	13.1	13.5	14.8	18.8	21.0	20.4	20.7	27.0
Income Tax	3.5	3.5	4.8	4.7	5.2	6.6	7.3	7.1	7.2	9.5
Net income after tax	6.5	6.4	8.5	8.8	9.6	12.2	13.6	13.3	13.5	17.6
Inforce volume	596.2	625.8	644.5	661.8	680.5	700.5	720.0	742.0	765.0	790.0
Opening Reserve	225.11	265.4	299.7	331.5	359.2	380.5	401.4	430.7	470.7	515.9
Closing Reserve	265.40	299.7	331.5	359.2	380.5	401.4	430.7	470.7	515.9	560.4
Separate Account end of year	338.1	340.1	342.9	347.1	346.4	355.7	375.6	405.9	442.0	485.0
Investment income rate	7.17%	7.19%	7.12%	7.12%	7.13%	7.14%	7.00%	6.75%	6.50%	6.50%
Tax rate	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%
Assets										
Private Bonds										
Investment grade	63.7	71.9	79.6	86.2	91.3	96.3	103.4	113.0	123.8	134.5
Below investment grade	15.9	18.0	19.9	21.8	22.8	24.1	25.6	28.2	31.0	33.6
subtotal	79.6	89.9	99.5	107.8	114.2	120.4	129.2	141.2	154.8	168.1
Public Bonds										
Investment grade	92.9	104.9	116.0	125.7	133.2	140.5	150.7	164.7	180.6	196.1
Below investment grade	19.9	22.5	24.9	26.9	28.5	30.1	32.3	35.3	38.7	42.0
CMO (investment grade)	19.9	22.5	24.9	26.9	28.5	30.1	32.3	35.3	38.7	42.0
subtotal	132.7	149.9	165.8	179.8	190.3	200.7	215.4	235.4	258.0	280.2
Commercial Mortgages										
Investment grade	39.8	45.0	49.7	53.9	57.1	60.2	64.6	70.6	77.4	84.1
Non-investment grade	-	-	-	-	-	-	-	-	-	-
subtotal	39.8	45.0	49.7	53.9	57.1	60.2	64.6	70.6	77.4	84.1
Equities										
Real Estate	13.3	15.0	16.8	18.0	19.0	20.1	21.5	23.5	25.8	28.0
Cash and Short Term										
Premiums Due and Unpaid										
Deferred Acquisition costs										
Assets held in separate account	338.1	340.1	342.9	347.1	346.4	355.7	375.6	405.9	442.0	485.0
Other Assets										
Total Assets	603.5	639.8	674.4	706.3	728.9	757.1	806.3	876.6	957.9	1,045.4
C-1 Risk	6.1	6.9	7.7	8.3	8.8	9.3	9.9	10.9	11.9	12.9
C-2 Risk	2.6	2.6	2.5	2.4	2.4	2.4	2.3	2.2	2.0	1.8
C-3 Risk	1.3	1.5	1.7	1.8	1.9	2.0	2.2	2.4	2.6	2.8

Income Statement
LOB: Term

	Actual					Projected				
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Income Statement										
Premiums	100.4	110.4	125.5	140.8	160.6	172.44	187.45	205.12	225.18	246.63
Investment income	12.1	11.9	11.8	11.5	11.2	11.2	12.2	11.5	11.9	12.3
Total Revenue	112.5	122.4	137.1	152.0	171.8	183.7	199.6	216.6	237.1	259.0
Expenses										
Benefits	57.0	62.1	69.8	77.4	87.6	84.11	104.74	119.38	137.31	158.90
Surrenders	-	-	-	-	-	-	-	-	-	-
Increase in reserves	7.1	4.7	8.1	7.2	9.6	8.3	8.3	9.8	11.4	9.2
Interest Credited	-	-	-	-	-	-	-	-	-	-
Commissions	15.1	16.6	18.8	21.1	24.1	28.90	34.00	41.60	48.90	56.15
Change in DAC	-	-	-	-	-	-	-	-	-	-
Other Expenses	4.9	5.4	6.1	6.9	7.9	10.81	10.92	11.03	11.32	11.71
Total Expenses	84.1	88.8	102.9	112.6	129.2	142.1	158.0	181.8	208.9	234.0
Transfers to separate account										
Income before tax	28.4	33.6	34.2	39.4	42.7	41.5	41.7	34.8	28.1	25.0
Income Tax	9.9	11.8	12.0	13.8	14.9	14.5	14.6	12.2	9.8	8.8
Net income after tax	18.4	21.9	22.2	25.6	27.7	27.0	27.1	22.6	18.3	16.3
Inforce volume	35,000.0	38,500.0	48,125.0	67,375.0	88,340.0	89,430.0	111,368.0	117,365.0	121,324.0	124,254.0
Reserves										
Opening Reserve	139.0	146.1	150.8	158.9	166.1	175.7	184.0	192.3	202.1	213.5
Closing Reserve	146.1	150.8	158.9	166.1	175.7	184.0	192.3	202.1	213.5	222.7
DAC										
Opening DAC	-	-	-	-	-	-	-	-	-	-
Closing DAC	-	-	-	-	-	-	-	-	-	-
Investment income rate	8.00%	7.50%	7.00%	6.50%	6.00%	5.75%	6.00%	5.50%	5.50%	5.50%
Tax rate	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%
Assets										
<u>Private Bonds</u>										
Investment grade	35.1	36.2	38.1	39.9	42.2	44.2	46.2	48.5	51.2	53.4
Below investment grade	8.8	9.0	9.5	10.0	10.5	11.0	11.5	12.1	12.8	13.4
subtotal	43.8	45.2	47.7	49.8	52.7	55.2	57.7	60.6	64.1	66.8
<u>Public Bonds</u>										
Investment grade	61.4	63.3	66.7	69.8	73.8	77.3	80.8	84.9	89.7	93.5
Below investment grade	13.1	13.6	14.3	14.9	15.8	16.6	17.3	18.2	19.2	20.0
CMO (investment grade)	13.1	13.6	14.3	14.9	15.8	16.6	17.3	18.2	19.2	20.0
subtotal	87.7	90.5	95.3	99.7	105.4	110.4	115.4	121.3	128.1	133.6
<u>Commercial Mortgages</u>										
Investment grade	14.6	15.1	15.9	16.6	17.6	18.4	19.2	20.2	21.4	22.3
Non-investment grade	-	-	-	-	-	-	-	-	-	-
subtotal	14.6	15.1	15.9	16.6	17.6	18.4	19.2	20.2	21.4	22.3
<u>Equities</u>										
	-	-	-	-	-	-	-	-	-	-
<u>Real Estate</u>										
	-	-	-	-	-	-	-	-	-	-
<u>Cash and Short Term</u>										
<u>Premiums Due and Unpaid</u>										
<u>Deferred Acquisition costs</u>										
<u>Assets held in separate account</u>										
<u>Other Assets</u>										
Total Assets	146.1	150.8	158.9	166.1	175.7	184.0	192.3	202.1	213.5	222.7
C-1 Risk	2.6	2.7	2.9	3.0	3.2	3.3	3.4	3.6	3.8	4.0
C-2 Risk	278.8	306.8	383.7	537.7	705.3	794.0	889.4	937.3	968.9	992.3
C-3 Risk	0.7	0.8	0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.1

Targetland Investment Guidelines, and Actual Investment Allocation - 2000 Year End

	Individual Life		GICs		Investment Guidelines		Target Guidelines		Investment Guidelines		Target Guidelines		Group Health		Actual		Total Company	
	Investment Guidelines		Investment Guidelines		Investment Guidelines		Investment Guidelines		Investment Guidelines		Investment Guidelines		Investment Guidelines		excl surplus			
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum		
Bonds - Public	20%	60%	40%	80%	65%	75%	30%	60%	50%	60%	78%	54%	78%	54%				
Bonds - Private Placements	0%	30%	0%	20%	10%	15%	0%	30%	15%	20%	3%	27%	3%	27%				
Commercial Mortgages	0%	15%	0%	20%	5%	10%	0%	15%	10%	15%	14%	10%	14%	10%				
Equities	0%	5%	0%	20%	5%	10%	0%	5%	0%	5%	0%	6%	0%	6%				
Real estate	0%	10%	0%	0%	0%	0%	0%	10%	0%	5%	5%	4%	5%	4%				
Total																		100%

Investment Guidelines: The minimum and maximum permissible holdings established in the company's investment guidelines

Target Guidelines: The range of holdings that are revised annually; they are set based on cash flow testing, the company's business plan, and perceived liquidity needs

Target Investment Quality Maximum % of assets below investment grade

Bonds - Public	20.0%
Bonds - Private Placements	25.0%
Commercial Mortgages	20.0%