

Title: A Study of the Effects of Asset/Liability
Mismatch on Property/Casualty Insurance Companies

By The Financial Analysis Committee*

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Abstract: It has long been recognized that property/casualty insurance companies assume risk through the underwriting process and that in the course of this subject surplus to variations in financial results. This aspect of property/casualty company insurance operations has been intensively investigated over a long period. Less attention has been paid to the risks proceeding from the management of company assets. Changes in the levels and volatility of interest rates in the recent past have increased the need to understand and quantify these risks. The Financial Analysis Committee ("Committee") has been working on this problem almost since its inception in early 1986. A computer model has been used to quantify the effects of various levels of asset/liability mismatch under different conditions in the financial markets. This paper presents the Committee's initial findings.

I. INTRODUCTION AND OVERVIEW

Investment philosophy has evolved a great deal over the past fifty years in the property/casualty insurance business. The positioning of assets has been driven primarily by two influences. The first is the general change in the level of interest rates, and the second is the change in the relative mix of industry exposure from property coverage to casualty coverage.

During the depression and the decade of the Forties, insurers placed a high premium on liquidity. Shorter term portfolios were chosen to support the demands of a property dominated industry. In addition, yields on securities became extremely low sources of income relative to underwriting performance, since interest rates virtually collapsed during the depression. Since yields were low, it was not advantageous for insurers to purchase credit instruments of very long maturity--especially in operations that were built to service the urgent cash needs associated with fires and hurricanes.

After World War II, however, bonds and credit instruments entered a long term bear market where interest rates generally went up. Specifically impacting the property/casualty insurance industry in addition to the rising interest rates, liability claim inflation rose at a rate faster than the general rate of inflation. Consequently, the industry's invested assets grew far faster than general economic growth as those assets supported burgeoning third party liability reserves. The incentive to invest so as to obtain high levels of investment income became stronger.

High claim cost inflation continues. Interest rates have retreated from the high levels seen in late 1981; but interest rates remain far higher and more volatile than they were in the mid-1970's. The Committee makes no prognostications as to whether current credit market conditions will continue, but the Committee recognizes the risks associated with volatile interest rates and the temptation to purchase the longest maturity instruments to obtain the highest yields.

The actions of insurance company managements to obtain high investment income are rational. Those actions are ultimately driven by market forces to provide insureds with the most insurance for a price that on average delivers a competitive return on insurance industry surplus. However, the members of the Committee believe that the drive to achieve high yield in an environment of high and fluctuating interest rates has created risks for insurance carriers and their insureds which has never been properly quantified nor understood.

In light of the insurance industry's credit market exposure, the Committee worked with a computer model to quantify the effects that changing credit market conditions along with different investment strategies have on the surplus of insurance companies.

The assumptions used in different scenarios at this point in the Committee's proceedings have been fairly severe. In many scenarios, the modeled company had only 20 year bonds in its portfolio. Also, interest rates in most scenarios were usually assumed to rise over a five year period. It has not been the Committee's intent at this point to construct realistic scenarios for what will happen over the next few years to the insurance industry. The Committee wanted to reveal with quantitative precision the exposure a property/casualty insurance company has to the credit market when an investment strategy is not synchronized with an insurance company's loss payout patterns.

Two key output components are of critical interest in the main body of the paper and the attached exhibits. The first is the statutory surplus of a company. The second is what the Committee calls market surplus. The latter is defined as the surplus that is obtained when both assets and liabilities are stated at some market value. In many of the rising interest rate scenarios, a company can steadily lose surplus despite operating gain. In fact, loss of market and statutory surplus is possible when a company is running a traditional underwriting profit.

The Committee recognizes that a company with assets and liabilities that are approximately matched is less vulnerable to sharply rising interest rates. However, the Committee does recognize that there is opportunity lost for a company that is matched. If there is a sharp drop in interest rates, such opportunity lost is apparent as bonds appreciate dramatically. It is the Committee's opinion that an insurance company should not necessarily pursue a matched asset and liability policy. However, a company's actuarial and investment staffs should work together analyzing implicit credit market exposure and informing upper management of that exposure.

Entrepreneurial spirit dictates assumption of risk for possible gain, and credit market exposure is such a risk. However, the Committee believes that implicit credit risk should be quantified and understood. Management should have expectations of doing better with a mismatched strategy than a matched strategy in order to rationalize the additional risk associated with mismatch.

The specific findings of the Committee follow. These findings are only a beginning, and other combinations of interest rate, underwriting, operating and investment scenarios will be pursued. The Committee will report on the future findings.

II. DISCUSSION OF MODEL RESULTS

A detailed description of the model utilized by the Financial Analysis Committee appears in the Appendix along with specifications for the various model scenarios. The reader may find it instructive to review the Appendix before studying the discussion of the results. This discussion below will highlight some of the significant understandings illustrated by our various scenarios.

1. Mismatch Can Cause Problems

The problems that can result from a severe mismatch of assets and liabilities¹ are illustrated by Scenario 1 and Scenario 2. In each case, the company has ceased writing premium after the initial year, and has all assets invested in 20 year bonds, resulting in a severe mismatch of assets and liabilities. An examination of statutory surplus reveals a slow erosion of surplus in Scenario 1, and a more rapid depletion of surplus in Scenario 2. On a market surplus basis, the results are more dramatic. The company experiences a sharp decline in surplus owing to the extreme sensitivity of long term instruments to changes in interest rates. The company actually becomes insolvent on a market value basis within three years. Note that in Scenario 2, the statutory surplus deteriorates nearly as rapidly as market surplus, since the company is forced to sell bonds in order to meet its liabilities, and therefore the erosion of market values is realized in the statutory surplus.

Although market surplus has generally not been of great concern to the management of most insurers, it is a significant factor in acquisition valuations and in analysis performed by the financial community. Perhaps more important, we have illustrated that mismatch can cause a decline in the statutory surplus of a company under certain conditions.

¹Assets and liabilities are perfectly matched when anticipated cash flows from existing assets exactly offset anticipated cash flows from existing liabilities in each future period. When this is not true, "mismatch" is said to occur.

2. Writing New Business Can Hide Problems Temporarily

The potential financial difficulties caused by a mismatched asset portfolio are not always as readily apparent as in the examples discussed above. In particular, writing new business can sometimes mitigate the cash flow difficulties faced by a mismatched company for several years. Although hidden in such a situation, the costs of mismatching are just as real and severe as in the case of a run-off company discussed above.

Recall that in Scenario 1 our model company stopped writing business at the end of 1984. Due to its need to borrow during times of rising interest rates, this company suffered an erosion of statutory surplus beginning in 1990, and statutory surplus was completely depleted by the end of 1994. On a market-adjusted basis, the company was insolvent even sooner, as market surplus (labeled "adj. surplus" in the Appendix) turned negative beginning in 1986.

In Scenario 3, our model company continues to write new business, with written premium growing by 10% per year. Premiums in each year are assumed to be adequate to produce a reasonable operating profit on a total return basis, if underwriting cash flows are invested at current market interest rates. As shown in the detailed financial results in Appendix III, this pricing assumption yields underwriting losses ranging from 4.4% of earned premium in 1985 to 13.4% of earned premium in 1990 and later years.

Although the source of problems may not be as readily apparent, the costs of mismatching in Scenario 3 are just as severe as in Scenario 1. In Scenario 3, the company starts to lose statutory surplus beginning in 1988. However, the surplus drain is more gradual than in Scenario 1, and the company remains solvent on a statutory basis through 1994, due to the positive contributions of the new business written. While the costs of mismatching are similar to Scenario 1, some of these costs are

absorbed by operating profits that would otherwise result from the new business written in 1985 and later years. Although solvent, the company in Scenario 3 is in a severely impaired financial condition. For example, the company's ratio of written premium to statutory surplus exceeds 19:1 by 1994. If, as is likely in practice, this company were restricted to write premiums at no more than three or four times statutory surplus, the company's financial condition would deteriorate even more rapidly.

On a market-value basis, the company in Scenario 3 becomes worthless by 1989, but recovers to a positive \$3.5 million market value in 1994.

3. In Some Instances Mismatch Can Improve Results

As previously mentioned, there is a possible opportunity lost by a company that is matched. First, investing long permits a company to take advantage of a positively sloped yield curve and achieve greater income. Secondly, and perhaps more significantly, in an environment of falling interest rates the company that has invested long has locked in relatively high rates for a longer time and thus enjoys an advantage over the matched company, which must now realize lower current market rates. Scenario 4 illustrates this situation. In this scenario, all assets are invested in 20 year bonds, resulting in severe mismatch with liabilities. But as interest rates fall, a healthy rise in statutory surplus results. The market surplus provides a more dramatic result as falling interest rates cause the volatile 20 year bonds to rise dramatically in value.

We have thus illustrated a situation whereby results are improved by a mismatch of assets and liabilities. It must be emphasized that such a strategy greatly increases the risk that the company must bear. Scenario 1 illustrates an identical strategy to Scenario 4; however, in this case rising interest rates lead to rapid insolvency on a market basis, and long term erosion of statutory surplus. Clearly, the range of possible outcomes is very wide when such a strategy is employed.

4. Matching (Even Approximate) Can Help

A perfectly matched insurance company will have no financial exposure to changing interest rates. However, this ideal seems unachievable in practice, since the timing and amounts of future cash outflows for a property/casualty insurer cannot generally be predicted exactly, or even within error margins of, say, 1%. Fortunately exact matching is not required to achieve most of the benefit of a matched portfolio: the closer a company comes to being matched, the lower will be its exposure to interest rate fluctuations. As an example, Scenario 7 illustrates the financial benefits accruing to a company that is substantially better matched than the company in Scenario 1.

Except for the start-up asset portfolio, the assumptions in Scenario 7 are identical to Scenario 1. Rather than assuming a start-up year-end 1984 bond portfolio with a twenty year term-to-maturity as in Scenario 1, Scenario 7 assumes an initial bond portfolio with a five year term-to-maturity. Although the average time of cash flows from the Scenario 7 bond portfolio still exceeds the average time (from 12/31/84) of a loss payment (about 2 1/2 years), the company in Scenario 7 is much more closely matched than the company in Scenario 1.

The company in Scenario 7 records fairly steady growth in statutory surplus through 1994. Although the company must borrow to offset an otherwise negative cash flow, the borrowing costs are smaller than investment income in every year except 1988. Statutory surplus and market value surplus remain positive throughout.

By 1994, the company in Scenario 7 accumulates \$38.2 million of statutory surplus compared to negative \$5.7 million for the company in Scenario 1 -- a difference of nearly \$45 million, or roughly four times the 1985 surplus for each of these companies. This difference highlights the advantage of maintaining a bond portfolio that is nearly matched. The single change in our hypothetical company's operation averts the severe insolvency which occurs in Scenario 1.

5. Summary and Conclusion

When insurance companies invest in bonds and other credit instruments they assume a risk that can produce gain or losses. In some instances, as discussed above, the rewards or penalties can be substantial. The scenarios constructed and presented in this study demonstrate that the greater the mismatch between assets and liabilities, the greater the potential risks and rewards. These risks can be minimized by more closely matching assets and liabilities. In order to minimize the risk the company will have to sacrifice some amount of investment income and pass up the opportunity for gain in the event of a general decline in interest rate levels. It is clear from these very basic studies that the risks exist and that this is an area to which management should thoroughly understand in order to maintain stability in the company's financial results.

APPENDIX I
DESCRIPTION OF ASSUMPTIONS AND PARAMETERS IN THE MODEL

The model is based upon several assumptions and parameters. Many of them, as well as the resulting calculations, are the same in each of the scenarios. These are discussed comprehensively in the Appendix II.

There were four parameters in the model which were utilized as variables. One or more of these were varied in each scenario and it is the combination of these parameters which makes a specific scenario unique. The matrix below indicates the combination of variables used for each case. A description of each variable follows:

<u>Scenario Number</u>	<u>Type of Business</u>	<u>Source of Cash</u>	<u>Beginning Maturities</u>	<u>Interest Rate Trend</u>
1	Runoff	Borrow	20 Years	Rising
2	Runoff	Sell	20 Years	Rising
3	Ongoing	Borrow	20 Years	Rising
4	Runoff	Borrow	20 Years	Declining
5	Runoff	Borrow	20 Years	Flat
6	Runoff	Borrow	5 Years	Flat
7	Runoff	Borrow	5 Years	Rising
8	Ongoing	Borrow	5 Years	Rising

Type of Business. There are two categories for the type of business assumption. These are Runoff and Ongoing. The Runoff assumption indicates that the company ceases to write business. The model results indicate what happens to the company based only on the runoff of its current book of business and assets. The Ongoing scenario assumes that, in addition to the Runoff business, the company will continue writing new business based upon a 10% growth assumption described in the written premium section in Appendix II. Scenarios 3 and 8 utilize this assumption to illustrate the results for a company with a current book of business that continues to write new business on an ongoing basis.

Source of Cash During Negative Cash Flow Years. If during a specific scenario the company experiences negative cash flow from operations, the

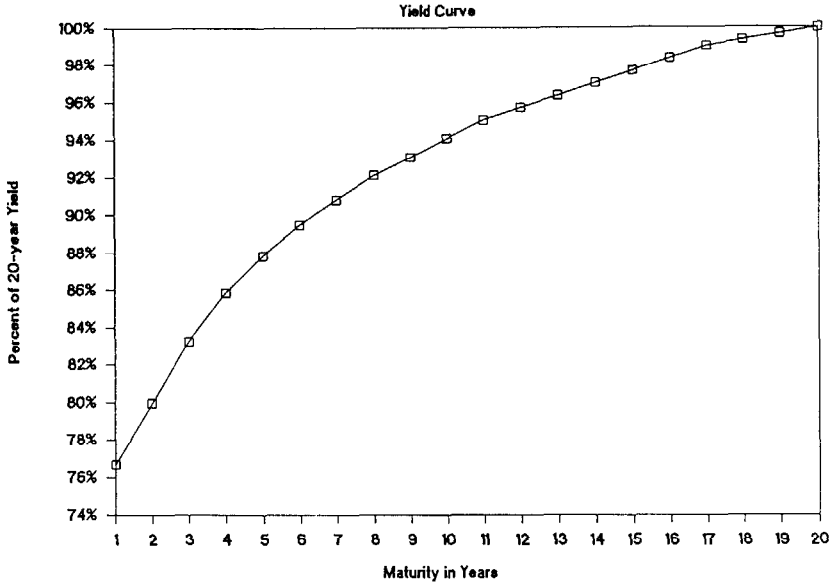
model assumes that it will obtain cash in one of two ways. Borrow indicates that the company will borrow the cash it needs each year to cover any negative cash flow. All borrowing is assumed to be for a five year period at the appropriate five year rate determined by the interest rate assumptions for that scenario. Sell, the other method of covering negative cash flow, is from the sale of bonds in the current portfolio at the appropriate market rate.

Beginning Bond Portfolio Maturities. The model assumes that the incoming bond portfolio (i.e., the bonds owned at the beginning of 1985) consists entirely of bonds that mature in 20 years (2004) which are assumed to yield 6%, or of bonds that mature in 5 years (1989) which are assumed to yield 5.2705% (the corresponding rate taken from the yield curve described below). This assumption reflects the fact that long term bonds have generally paid a higher yield than short term bonds, and that a company which invests in long bonds will, other things being equal, have a higher average portfolio yield than will a company which invests in short bonds.

Trend in Interest Rates. Interest rates are assumed to follow one of three trends depending on the scenario. These are Rising, Declining or Flat. The shape of the yield curve is discussed in the paragraph below. The 20 year interest rate is assumed to be 6% in 1984 under all scenarios. For the Flat scenario, this 20 year interest rate remains constant in all years. Under the Rising interest rate assumption, the 20 year interest rate increases by 1.5% per year beginning in 1985 until it levels off at 13.5% from 1989 to 1994. Under the Declining interest rate assumption, the 20 year interest rate decreases by 0.5% per year beginning in 1985 until it levels off at 3.5% from 1989 to 1994.

Changes to the interest rates at other "maturities in years" are assumed to occur multiplicatively, rather than additively, relative to the 20 year interest rates. In other words, if the 20 year interest rate increases from 6% to 7.5% in the first year, then interest rates for all maturities will change by a factor of 1.25 (7.5%/6%), rather than by the difference of 1.5% (7.5%-6%). A graph of the general shape of the yield curve is shown on the following page.

Asset/Liability Matching Study



APPENDIX II

DOCUMENTATION OF FINANCIAL MODEL USED IN ASSET/LIABILITY MATCHING STUDY

WRITTEN PREMIUM

Written Premium figures are generated using a base number and premium growth factors. The base number is the Written Premium in the calendar year just prior to the first year of the forecast period. For example, in Scenario 3 the Written Premium for 1984 is 100,000. Growth in each of the following years is 10% per year. Thus, the Written Premium is 110,000 in 1985 and is 121,000 in 1986. The base premium figure and the growth factors are inputs into the model.

EARNED PREMIUM

Earned Premium is generated from the Written Premium figures and premium earning factors. In this model, it is assumed that only policies of one year or less are written. As a consequence, premiums written in a given calendar year are fully earned by the end of the next calendar year. If EPR is used to denote the percent of premiums earned in the year of writing, then $EP(t) = (1 - EPR) WP(t - 1) + (EPR) WP(t)$. The premium earning rates in this model are assumed to be the same for all years. The parameter has been selected as 60%. As a result, the Earned Premium for 1985 was calculated as $(1 - .60) (100,000) + (.60) (110,000) = 40,000 + 66,000 = 106,000$.

INCURRED LOSSES

Incurred Losses are generated as the product of Earned Premiums and a loss ratio. The loss ratio is an input item and is input for each year in the forecast horizon. In Scenario 3 the loss ratio has been varied in a way that produces approximately the same profit on a total return basis each year on the assumption that cash from the premiums can be invested at the

prevailing rates. As an example, the chosen loss ratios for 1985 and 1986 were 74.4% and 76.2% producing Incurred Losses of 78,864.0 and 88,849.2, respectively.

EXPENSES

In this model, Underwriting Expenses have been broken down into Commissions and Expenses, the latter consisting of Fixed Expenses and Premium Tax. Fixed Expense amounts are generated using a base number from the year just prior to the first year of the forecast horizon and expense growth factors. In Scenario 3, the base figure is 12,000. The growth factors that have been input into the model are 10% in all scenarios. Hence, the Fixed Expenses for 1985 are calculated to be $(1.1) (12,000) = 13,200$.

Premium Taxes are generated as the product of a Premium Tax rate and Written Premium. The Premium Tax rate has been selected as 3% for all years but can be varied by year. The product of 3% and the Written Premium for 1985 is 3,300. The sum of this and the Fixed Expenses is 16,500, as shown in Scenario 3.

COMMISSIONS

Commissions are a function of a Commission rate and Written Premium. The Commission rate that has been input into the model is 15% for all years. The Commission expense generated in 1985 in Scenario 3 is $(.15) (110,000.) = 16,500$.

UNDERWRITING INCOME

This item is calculated as Earned Premiums minus Losses Incurred minus Expenses minus Commissions.

POLICYHOLDER DIVIDENDS

The model has the capability of calculating an amount for Policyholder Dividends. This is generated by a Policyholder dividends factor times the prior year's Written Premium. The factor has been set equal to zero for the initial study but the model will retain the capability of introducing policyholder dividends if this is deemed to be appropriate in future studies.

INVESTMENT INCOME

Investment Income is generated as the sum of the yield on beginning Invested Assets plus Investment Income produced by investing cash flow at a given rate for six months. The incoming portfolio of Invested Assets in Scenario 3 is 154,073 yielding 6% and therefore generating 9,244.4 in Investment Income. The cash flow in 1985 is 16,798.7. This is invested for six months at 6.5881% annually, producing 553.4 in Investment Income. The total Investment Income is therefore $553.4 + 9,244.4 = 9,797.8$.

Investment income in the following years is generated in a similar manner. The yield on the 12/31/85 portfolio is $9,244.4 + 1,106.8 = 10,351.2$. That is, the net cash flow in a given year is added to the Invested Assets at the beginning of the year to produce the Invested Assets at the end of the year. In this case, the Invested Assets as of 12/31/85 would then be $154,073 + 16,798.7 = 170,871.7$, with the indicated yield of 10,351.2.

In 1986, the available investment rate is 7.9057%, so that the yield on cash flow invested for six months is $(.079057) (1/2) (17,125.8) = 676.9$. This is added to the yield on the incoming asset portfolio and results in 11,028.2 of investment income for 1986.

Bond Realized Gains/Losses

The incoming bond portfolio has a term of 19 1/2 years, and it is assumed that the bonds were purchased at par. In the event that bonds are sold it

is assumed that the bonds are sold in the middle of the year. The difference between the carrying value of the bond (the par value) and the market value of the bond at the time of sale is the gain or loss.

The market value of the bond is the discounted value of the coupons plus the discounted value of the principal. The loss generated by the sale of bonds in Scenario 2 serves as an example. Coupons from the bonds sold in the first year of the forecast period and which would have been received in the second year, third year, fourth year and so forth are discounted by the factors $1/(1.0375)$, $1/(1.0375)^2$, $1/(1.0375)^3$, etc. The bond principal is discounted by $1/(1.075)^{18}$.

The cash needs in the first year of the forecast are 36,585.9. The book value of the bonds sold is 42,870.1 and the market value of the bonds sold is the required 36,585.9, resulting in a bond sale loss of 6,284.2.

FEDERAL TAX LIABILITY

The committee has elected to leave Federal Taxes out of the initial study in order to simplify matters. Federal Taxes and the analysis of the implications regarding asset/liability matching may be added in the future.

PAID IN CAPITAL; SHAREHOLDERS DIVIDENDS

These items are available for use in the model but are not currently being used. They will be left in the model for potential future use. These items are individual inputs by year.

ENDING SURPLUS

This item is equal to Beginning Surplus plus Paid in Capital minus Shareholders' Dividends plus Net Income. All the scenarios assume a beginning surplus of 40,000 except for Scenarios 3 and 8 which assume ongoing business. In these scenarios the beginning surplus is 40,000.

PAID PREMIUM

This item is a function of Written Premiums (current and first prior year), Commission rates, and Premium payment lag. The Premium payment lag can be varied by year but has been set equal to 12.5% for each year in this application of the model. The Paid Premium in year t is developed through the formula $PP(t) = PPLAG(t) \times WP(t - 1) \times [1 - C(t - 1)] + [1 - PPLAG(t)] \times WP(t) \times [1 - C(t)]$, where PPLAG is the Premium payment lag and C(t) is the Commission rate. For example, the Paid Premiums for 1985 in Scenario 4 are calculated as $(.125) (100,000) (1 - .15) + (1 - .125) (110,000) (1 - .15) = 10,625 + 81,812.5 = 92,437.5$.

PAID LOSS

Paid Losses in a given year are generated by application of payout factors to Incurred Losses from current and prior years.

The incurred losses from prior years used in the model are as follows:

<u>YEAR</u>	<u>INCURRED LOSS</u>
1984	69,382
1983	63,074
1982	57,340
1981	52,128
1980	47,389
1979	43,081
1978	39,164
1977	35,604

In Scenario 3 the Incurred Loss for 1985 is 78,864. This, combined with the Incurred Losses from prior years and a vector of payout rates, produces the Paid Loss for the year as shown below.

<u>YEAR</u>	<u>INCURRED LOSS</u>	<u>RATE</u>	<u>LOSS</u>
1985	78,864	42.7%	33,674.9
1984	69,382	27.8%	19,288.2
1983	63,074	9.3%	5,865.9
1982	57,340	6.6%	3,784.4
1981	52,128	5.2%	2,710.7
1980	47,389	3.3%	1,563.8
1979	43,081	2.4%	1,033.9
1978	39,164	1.5%	587.5
1977	35,604	<u>1.2%</u>	<u>427.2</u>
		100.0%	68,936.5

Discount

A. Investment

The discount in the investments (bonds) is the difference between the nominal value and the discounted value as of the end of the year. For example, the 1985 Investment Discount in Scenario 1 is 16,721.6. The bonds that are held at that point have a par value of 114,073 and a yield of 6%. The semi-annual coupons of 3,422.2 are discounted using the long term market yield of 7.5%. Thus the market value of the bonds is $3,422.2/(1.0375) + 3,422.2/(1.0375)^2 + 3,422.2/(1.0375)^3 + \dots + 3,422.2/(1.0375)^{37} + 114,073/(1.0375)^{37}$. The discounted value of the debt is calculated in a similar way. The semi-annual payment on the debt is $(.066/2)(36,502.2) = 1,204.6$ so that the present value of the debt is calculated as $1,204.6/(1.033) + 1,204.6/(1.033)^2 + 1,204.6/(1.033)^3 + \dots + 1,204.6/(1.033)^9 + 36,502.2/(1.033)^9$. The difference between the discount in the bonds and the discount in the debt nets to 16,721.6

B. Loss Reserves

The difference between the nominal value of the loss reserves and the discounted value of the loss reserves is labeled Discount -- Loss Reserves. The discounted loss reserves are discounted using values on the yield curve. For example, the loss reserves as of 12/31/85 in Scenario 1 are discounted using the vector of figures in the 1985 column from the "Rising Interest Rate Scenario". Thus the payments expected in 1986 are discounted using $1/1.02875$, those expected in 1987 using $1/(1.0299825)^3$ and so forth with the last payment on the year-end 1985 loss reserve being discounted using $1/(1.034049)^{15}$.

Interest Paid

The interest paid in each year is a function of the borrowing history of the company. For example, the interest paid in the first year of the

Weighted Average Term/Duration

A. Loss Reserves

The calculations underlying Weighted Average Term and Duration are most easily explained by way of the following example:

Loss Reserves as of 12/31/85 = 66,488.1

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Future Loss	Avg.	Col (2)	Market	Value of	Col (3)
<u>Year</u>	<u>Payments</u>	<u>Term</u>	<u>X Col.(3)</u>	<u>Yield</u>	<u>Payments</u>	<u>X Col. 6</u>
1986	25,844.1	.50	12,922.1	5.75%	25,131.7	12,565.8
1987	14,997.8	1.50	22,496.8	6.00%	13,743.3	20,615.0
1988	10,380.2	2.50	25,950.5	6.24%	8,921.9	22,304.7
1989	6,836.5	3.50	23,927.9	6.44%	5,495.0	19,232.4
1990	4,281.4	4.50	19,266.5	6.59%	3,212.9	14,458.2
1991	2,511.9	5.50	13,815.2	6.71%	1,757.3	9,665.0
1992	1,279.0	6.50	8,313.4	6.81%	833.5	5,417.6
1993	<u>357.1</u>	7.50	<u>2,678.4</u>	6.91%	<u>216.4</u>	<u>1,622.9</u>
	66,488.1		129,370.7		59,311.91	105,881.6

Weighted Average Term = Total Col. 4 ÷ Total Col. 2 = 1.95 years

Duration = Total Col. 7 ÷ Total Col. 6 = 1.79 years

¹ Note: The present value factors are calculated here as $1/(1.0575)^{.5}$, $1/(1.06)^{1.5}$, etc.

B. Bonds

As with Loss Reserves, the calculations underlying Weighted Average Term and Duration are most easily explained by an example.

(1) Valuation Date: 12/31/85

Investment Year	Book Value	Avg. Term	Investment Yield	Market Value	Present Value	Duration
1985	114,073.0	18.50	6.00%	7.48%	97,351.4	10.795
1986	-36,502.2	4.50	6.59%	6.59%	-36,502.2	3.967

$$\begin{aligned} \text{Weighted Average Term} &= [(114,073.0 \times 18.5) + (-36,502.2 \times 4.5)] \\ &\quad + (114,073.0 - 36,502.2) \\ &= 25.09 \text{ years} \end{aligned}$$

$$\begin{aligned} \text{Duration} &= [(97,351.4 \times 10.795) + (-36,502.2 \times 3.967)] \\ &\quad + (97,351.3 - 36,502.2) \\ &= 14.89 \text{ years} \end{aligned}$$

(2) Valuation Date: 12/31/86

Investment Year	Book Value	Avg. Term	Investment Yield	Market Value	Present Value	Duration
1985	114,073.0	17.5	6.00%	8.94%	84,670.5	9.956
1986	-36,502.2	3.5	6.59%	7.73%	-35,247.0	3.176
1987	-22,285.4	4.5	7.91%	7.91%	-22,285.4	3.873

$$\begin{aligned} \text{Weighted Avg. Term} &= [(114,073.0 \times 17.5) + (-36,502.2 \times 3.5) + \\ &\quad (-22,285.4 \times 4.5)] \div (114,073 - 36,502.2 - \\ &\quad 22,285.4) = 31.98 \text{ years} \end{aligned}$$

$$\begin{aligned} \text{Duration} &= [(84,670.5 \times 9.956) + (-35,247.0 \times 3.176) + \\ &\quad (-22,285.4 \times 3.873)] \div (84,670.5 - 35,247.0 - \\ &\quad 22,285.4) = 23.76 \text{ years} \end{aligned}$$

APPENDIX III

Model Output and Summary

The first part of this appendix contains the output for each of the scenarios. Also included in this part are the numerical values underlying the yield curve for each of the hypothesized interest rate trends.

The second part of the appendix is a summary of the salient financial results of the various scenarios. This will enable the reader to more easily compare the effects of asset/liability mismatch under varying interest rate trend assumptions.

APPENDIX III

PART I

Scenario 1.

INCOME STATEMENT

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
W. PREMIUM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SURPLUS	11082.0	14640.7	16722.9	17714.6	17811.9	16198.2	12462.0	7366.9	1279.7	-5663.1
WP/SURPLUS	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
E. PREMIUM	40000.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
LOSS INCUR.	29760.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
EXPENSES	4800.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
COMMISSION	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

UN. INCOME	5440.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
POLICY.DIV.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

UN. INC. AFTER	5440.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
POLICY.DIV.	6844.4	6844.4	6844.4	6844.4	6844.4	6844.4	6844.4	6844.4	6844.4	6844.4
INV. INCOME	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
BOND R. GAIN	1202.4	3285.7	4762.2	5852.7	6747.1	8458.1	10580.5	11939.5	12931.6	13787.2
INTEREST PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
FED. TAX LIAB.										

NET INCOME	11082.0	3558.7	2082.2	991.7	97.3	-1613.7	-3736.1	-5095.1	-6087.2	-6942.8

SURPLUS RECONCILIATION :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
PAID IN CPTL.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SHR. DIVIDEND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

SURP. CHANGE	11082.0	3558.7	2082.2	991.7	97.3	-1613.7	-3736.1	-5095.1	-6087.2	-6942.8
BEGIN. SURP.	.0	11082.0	14640.7	16722.9	17714.6	17811.9	16198.2	12462.1	7367.0	1279.8
ENDING SURP.	11082.0	14640.7	16722.9	17714.6	17811.9	16198.2	12462.1	7367.0	1279.8	-5663.0
N.I. AS % OF										
AVG. SURPLUS	200.00%	27.67%	13.28%	5.76%	.55%	-9.49%	-26.07%	-51.39%	-140.80%	316.78%

CASHFLOW STATEMENT :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
PAID PREMIUM	10625.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
INV. INCOME	6844.4	6844.4	6844.4	6844.4	6844.4	6844.4	6844.4	6844.4	6844.4	6844.4
PAID IN CPTL	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CASH INFLOW	17469.4	6844.4	6844.4	6844.4	6844.4	6844.4	6844.4	6844.4	6844.4	6844.4
PAID LOSS	47969.2	25844.1	14997.8	10380.2	6836.5	4281.4	2511.9	1279.0	357.1	.0
POLICY.DIV.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
EXPENSES	4800.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SHARE.DIV.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
INTEREST PAID	1202.4	3285.7	4762.2	5852.7	6747.1	8458.1	10580.5	11939.5	12931.6	13787.2
FED. TAX PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CASH OUTFLOW	53971.6	29129.8	19760.0	16232.9	13583.6	12739.5	13092.4	13218.5	13288.7	13787.2
NET CASHFLOW	-36502.2	-22285.4	-12915.6	-9388.5	-6739.2	-5895.1	-6248.0	-6374.1	-6444.3	-6942.8
MATURING BOND	.0	.0	.0	.0	.0	-36502.2	-22285.4	-12915.6	-9388.5	-6739.2
NEW INVEST.	-36502.2	-22285.4	-12915.6	-9388.5	-6739.2	-42397.3	-28533.4	-19289.7	-15832.8	-13682.0

Scenario 1.

PREMIUM :

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
W. PREMIUM	100000.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
WF. GROWTH		-100.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
E. PREMIUM		40000.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

INVESTMENT :

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOND VALUE	114073.0	77570.8	55285.4	42369.8	32981.3	26242.1	20347.0	14098.9	7724.8	1280.5	-5662.3
TERM TO MATR.	20.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
YIELD (%)	6.00	6.59	7.91	9.22	10.54	11.86	11.86	11.86	11.86	11.86	11.86

ASSET/LIABILITY :

BOOK VALUE

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
INVESTMENT	114073.0	77570.8	55285.4	42369.8	32981.3	26242.1	20347.0	14098.9	7724.8	1280.5	-5662.3
LOSS RESERVES		66488.1	40644.0	25646.2	15265.9	8429.4	4148.0	1636.1	357.1	.0	.0

DISCOUNT

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
INVESTMENT	16721.6	28147.3	36719.5	43694.7	50068.7	50058.1	49061.3	47513.1	45470.7	42591.6
LOSS RESERVES	7176.2	4946.0	3195.3	1877.3	976.5	386.4	112.4	17.2	.0	.0

NET DISCOUNT	-9545.4	-23201.3	-33524.2	-41817.4	-49092.2	-49671.6	-48949.0	-47495.9	-45470.7	-42591.6
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	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
SURPLUS	.0	11082.0	14640.7	16722.9	17714.6	17811.9	16198.2	12462.0	7366.9	1279.7	-5663.1
ADJ. SURPLUS		1536.6	-8560.6	-16801.3	-24102.8	-31280.3	-33473.4	-36487.0	-40129.0	-44191.0	-48254.7

Scenario 1.

BALANCESHEET

ASSET :	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
INVESTMENT	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0
AGENTS' BAL.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOTAL ASSET	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0
LIABILITY & SURPLUS :										
LOSS RESERVES	66488.1	40644.0	25646.2	15265.9	8429.4	4148.0	1636.1	357.1	.0	.0
U.PREM.RES.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
NET	36502.2	56787.6	71703.2	81091.7	87830.9	93726.0	99974.1	106348.2	112792.5	119735.3
SURPLUS	11082.0	14640.7	16722.9	17714.6	17811.9	16198.2	12462.0	7366.9	1279.7	-5663.1
LIAB. & SURP.	114072.3	114072.3	114072.3	114072.2	114072.2	114072.2	114072.2	114072.2	114072.2	114072.2

ASSET/LIABILITY ANALYSIS

LOSS RESERVES :	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOOK VALUE	66488.1	40644.0	25646.2	15265.9	8429.4	4148.0	1636.1	357.1	.0	.0
PRESENT VALUE	59311.9	35698.0	22450.9	13388.6	7452.9	3761.5	1523.8	340.0	.0	.0
PV/BV RATIO	.8921	.8783	.8754	.8770	.8842	.9068	.9313	.9519	1.0000	1.0000
WT. AVG. TERM	1.95	1.87	1.66	1.45	1.23	.98	.72	.50	1.00	1.00
DURATION	1.79	1.71	1.53	1.35	1.15	.94	.70	.50	1.00	1.00

INVESTMENT PORTFOLIO :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOOK VALUE	77570.8	55285.4	42369.8	32981.3	26242.1	20347.0	14098.9	7724.8	1280.5	-5662.3
PRESENT VALUE	60849.2	27138.1	5650.3	-10713.4	-23826.6	-29711.1	-34962.4	-39788.3	-44190.2	-48253.9
PV/BV RATIO	.7844	.4909	.1334	-.3248	-.9080	-1.4602	-2.4798	-5.1507	-34.5101	8.5220
WT. AVG. TERM	25.09	31.98	39.06	47.61	57.42	62.50	78.85	130.02	719.02	-150.91
DURATION	14.89	23.76	87.26	-37.92	-15.37	-9.27	-6.74	-5.88	-5.69	-5.92

LOSS RESERVES / INVESTMENT ASSETS :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOOK VALUE	.857	.735	.605	.463	.321	.204	.116	.046	.000	.000
PRESENT VALUE	.975	1.315	3.973	-1.250	-.313	-.127	-.044	-.009	.000	.000

SURPLUS :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
SURPLUS	11082.0	14640.7	16722.9	17714.6	17811.9	16198.2	12462.0	7366.9	1279.7	-5663.1
ADJ. SURPLUS	1536.6	-8560.6	-16801.3	-24102.8	-31280.3	-33473.4	-36487.0	-40129.0	-44191.0	-48254.7

Scenario 2.

INCOME STATEMENT

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
W. PREMIUM SURPLUS	4714.1	271.2	-4750.0	-10624.1	-12882.3	-13713.4	-15077.4	-16852.3	-18954.1	-21343.3
WF/SURPLUS	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
E. PREMIUM LOSS INCUR.	29760.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
EXPENSES	4800.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
COMMISSION	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
UN. INCOME POLICY. DIV.	5440.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
UN. INC. AFTER POLICY. DIV.	5440.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
INV. INCOME	5558.3	3363.6	1854.4	766.2	139.3	.0	.0	.0	.0	.0
BOND R. GAIN	-6284.2	-7806.5	-6875.6	-6640.2	-2133.5	.0	.0	.0	.0	.0
INTEREST PAID	.0	.0	.0	.0	264.0	831.1	1364.0	1774.9	2101.8	2390.2
FED. TAX LIAB.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
NET INCOME	4714.1	-4442.9	-5021.2	-5874.1	-2258.2	-831.1	-1364.0	-1774.9	-2101.8	-2390.2

SURPLUS RECONCILIATION :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
PAID IN CPTL.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SHR. DIVIDEND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SURP. CHANGE	4714.1	-4442.9	-5021.2	-5874.1	-2258.2	-831.1	-1364.0	-1774.9	-2101.8	-2390.2
BEGIN. SURP.	.0	4714.1	271.2	-4750.0	-10624.1	-12882.3	-13713.4	-15077.4	-16852.3	-18954.1
ENDING SURP.	4714.1	271.2	-4750.0	-10624.1	-12882.3	-13713.4	-15077.4	-16852.3	-18954.1	-21344.3

N. I. AS % OF

AVG. SURPLUS	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	200.00%	-178.24%	224.22%	76.41%	19.21%	6.25%	9.48%	11.12%	11.74%	11.86%

CASHFLOW STATEMENT :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
PAID PREMIUM	10625.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
INV. INCOME	5558.3	3363.6	1854.4	766.2	139.3	.0	.0	.0	.0	.0
PAID IN CPTL	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CASH INFLOW	16183.3	3363.6	1854.4	766.2	139.3	.0	.0	.0	.0	.0
PAID LOSS POLICY. DIV.	47969.2	25844.1	14997.8	10380.2	6836.5	4281.4	2511.9	1279.0	357.1	.0
EXPENSES	4800.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SHARE. DIV.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
INTEREST PAID	.0	.0	.0	.0	264.0	831.1	1364.0	1774.9	2101.8	2390.2
FED. TAX PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CASH OUTFLOW	52769.2	25844.1	14997.8	10380.2	7100.5	5112.5	3875.9	3053.9	2458.9	2390.2
NET CASHFLOW	-36585.9	-22480.5	-13143.4	-9614.0	-6961.2	-5112.5	-3875.9	-3053.9	-2458.9	-2390.2
MATURING BOND	.0	.0	.0	.0	.0	.0	.0	.0	.0	-4452.1
NEW INVEST.	-36585.9	-22480.5	-13143.4	-9614.0	-6961.2	-5112.5	-3875.9	-3053.9	-2458.9	-6842.3

Scenario 2.

PREMIUM :

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
W. PREMIUM	100000.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
WP GROWTH		-100.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
E. PREMIUM		40000.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

INVESTMENT :

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOND VALUE	114073.0	71202.9	40915.9	20896.9	4642.6	-4452.1	-9564.6	-13440.5	-16494.4	-18953.3	-21342.5
TERM TO MATR.	20.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
YIELD (%)	6.00	6.59	7.91	9.22	10.54	11.86	11.86	11.86	11.86	11.86	11.86

ASSET/LIABILITY :

BOOK VALUE

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
INVESTMENT	114073.0	71202.9	40915.9	20896.9	4642.6	-4452.1	-9564.6	-13440.5	-16494.4	-18953.3	-21342.5
LOSS RESERVES		66488.1	40644.0	25646.2	15265.9	8429.4	4148.0	1636.1	357.1	.0	.0

DISCOUNT

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
INVESTMENT	10437.4	10546.1	7177.1	1896.6	.0	33.3	97.1	160.7	179.6	151.2
LOSS RESERVES	7176.2	4946.0	3195.3	1877.3	976.5	386.4	112.4	17.2	.0	.0
NET DISCOUNT	-3261.2	-5600.2	-3981.9	-19.3	976.5	353.1	15.2	-143.5	-179.6	-151.2

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
SURPLUS	.0	4714.1	271.2	-4750.0	-10624.1	-12882.3	-13713.4	-15077.4	-16852.3	-18954.1	-21343.3
ADJ. SURPLUS		1452.9	-5329.0	-8731.9	-10643.4	-11905.8	-13360.3	-15062.2	-16995.8	-19133.7	-21494.5

Scenario 2.

BALANCE SHEET

ASSET :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
INVESTMENT	71202.9	40915.9	20696.9	4642.6	.0	.0	.0	.0	.0	.0
AGENTS' BAL.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOTAL ASSET	71202.9	40915.9	20696.9	4642.6	.0	.0	.0	.0	.0	.0

LIABILITY & SURPLUS :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
LOSS RESERVES	66488.1	40644.0	25646.2	15265.9	8429.4	4148.0	1636.1	357.1	.0	.0
U. PREM. RES.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DEBT	.0	.0	.0	.0	4452.1	9564.6	13440.5	16494.4	18953.3	21342.5
SURPLUS	4714.1	271.2	-4750.0	-10624.1	-12882.3	-13713.4	-15077.4	-16852.3	-18954.1	-21343.3
LIAB. & SURP.	71202.2	40915.2	20696.2	4641.8	-.8	-.8	-.8	-.8	-.8	-.8

ASSET/LIABILITY ANALYSIS

LOSS RESERVES :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOOK VALUE	66488.1	40644.0	25646.2	15265.9	8429.4	4148.0	1636.1	357.1	.0	.0
PRESENT VALUE	59311.9	35698.0	22450.9	13388.6	7452.9	3761.5	1523.8	340.0	.0	.0
PV/BV RATIO	.8921	.8783	.8754	.8770	.8842	.9068	.9313	.9519	1.0000	1.0000
WT. AVG. TERM	1.95	1.87	1.66	1.45	1.23	.98	.72	.50	1.00	1.00
DURATION	1.79	1.71	1.53	1.35	1.15	.94	.70	.50	1.00	1.00

INVESTMENT PORTFOLIO :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOOK VALUE	71202.9	40915.9	20696.9	4642.6	-4452.1	-9564.6	-13440.5	-16494.4	-18953.3	-21342.5
PRESENT VALUE	60765.5	30369.7	13719.7	2746.0	-4452.1	-9597.9	-13537.6	-16655.1	-19132.9	-21493.7
PV/BV RATIO	.8534	.7422	.6565	.5915	1.0000	1.0035	1.0072	1.0097	1.0095	1.0071
WT. AVG. TERM	18.50	17.50	16.50	15.50	4.50	4.03	3.46	2.84	2.18	2.60
DURATION	10.79	9.96	9.22	8.59	3.61	3.31	2.91	2.44	1.90	2.19

LOSS RESERVES / INVESTMENT ASSETS :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOOK VALUE	.934	.993	1.227	3.288	-1.893	-.434	-.122	-.022	.000	.000
PRESENT VALUE	.976	1.175	1.636	4.876	-1.674	-.392	-.113	-.020	.000	.000

SURPLUS :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
SURPLUS	4714.1	271.2	-4750.0	-10624.1	-12882.3	-13713.4	-15077.4	-16852.3	-18954.1	-21343.3
ADJ. SURPLUS	1452.9	-5329.0	-8731.9	-10643.4	-11905.8	-13360.3	-15062.2	-16995.8	-19133.7	-21494.5

Scenario J.

INCOME STATEMENT

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
W. PREMIUM SURPLUS	110000.0	121000.0	133100.0	146410.0	161051.0	177156.1	194871.7	214358.9	235794.8	259374.2
WP/SURPLUS	43933.8	46412.7	47207.8	46019.2	42453.2	36347.2	30680.1	25173.3	19554.4	13528.8
	2.5	2.6	2.8	3.2	3.8	4.9	6.4	8.5	12.1	19.2
E. PREMIUM LOSS INCUR.	106000.0	116600.0	128260.0	141086.0	155194.6	170714.1	187785.5	206564.0	227220.4	249942.4
EXPENSES	78864.0	88849.2	100042.8	112586.6	126638.8	142375.6	156613.1	172274.4	189501.8	208452.0
COMMISSION	16500.0	18150.0	19965.0	21961.5	24157.6	26573.4	29230.8	32153.9	35369.2	38906.1
	16500.0	18150.0	19965.0	21961.5	24157.7	26573.4	29230.8	32153.8	35369.2	38906.1
UW. INCOME POLICY. DIV.	-5864.0	-8549.2	-11712.8	-15423.6	-19759.5	-24808.3	-27289.2	-30018.1	-33019.8	-36321.8
	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
UW. INC. AFTER POLICY. DIV.	-5864.0	-8549.2	-11712.8	-15423.6	-19759.5	-24808.3	-27289.2	-30018.1	-33019.8	-36321.8
INV. INCOME	9797.8	11028.1	12507.9	14235.0	16193.5	18702.3	21622.1	24511.3	27400.9	30296.2
BOND R. GAIN	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
INTEREST PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
FED. TAX LIAB.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
NET INCOME	3933.8	2478.9	795.1	-1188.6	-3566.0	-6106.0	-5667.1	-5506.8	-5618.9	-6025.6

SURPLUS RECONCILIATION :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
PAID IN CPTL.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SHR. DIVIDEND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SURP. CHANGE	3933.8	2478.9	795.1	-1188.6	-3566.0	-6106.0	-5667.1	-5506.8	-5618.9	-6025.6
BEGIN. SURP.	40000.0	43933.8	46412.7	47207.8	46019.2	42453.2	36347.2	30680.1	25173.3	19554.4
ENDING SURP.	43933.8	46412.7	47207.8	46019.2	42453.2	36347.2	30680.1	25173.3	19554.4	13528.8
N.I. AS % OF AVG. SURPLUS	9.37%	5.49%	1.70%	-2.55%	-8.06%	-15.50%	-16.91%	-19.72%	-25.12%	-36.43%

CASHFLOW STATEMENT :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
PAID PREMIUM	92437.5	101681.3	111849.4	123034.3	135337.8	148871.5	163758.6	180134.5	198148.0	217962.8
INV. INCOME	9797.8	11028.1	12507.9	14235.0	16193.5	18702.3	21622.1	24511.3	27400.9	30296.2
PAID IN CPTL	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CASH INFLOW	102235.3	112709.4	124357.3	137269.3	151531.3	167573.8	185380.7	204645.8	225548.9	248259.0
PAID LOSS POLICY. DIV.	68936.6	77433.6	86982.9	97770.4	109931.8	123595.4	137486.9	152002.5	167752.1	184900.0
EXPENSES	16500.0	18150.0	19965.0	21961.5	24157.6	26573.4	29230.8	32153.9	35369.2	38906.1
SHARE. DIV.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
INTEREST PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
FED. TAX PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CASH OUTFLOW	85436.6	95583.6	106947.9	119731.9	134089.4	150168.8	166717.7	184156.4	203121.3	223806.1
NET CASHFLOW	16798.7	17125.8	17409.4	17537.4	17441.9	17405.0	18663.0	20489.4	22427.6	24452.9
MATURING BOND	.0	.0	.0	.0	.0	16798.7	17125.8	17409.4	17537.4	17441.9
NEW INVEST.	16798.7	17125.8	17409.4	17537.4	17441.9	34203.7	35788.8	37898.8	39965.0	41894.8

Scenario 3.

PREMIUM :

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
W.PREMIUM	100000.0	110000.0	121000.0	133100.0	146410.0	161051.0	177156.1	194871.7	214358.9	235794.8	259374.2
WP GROWTH		10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
E.PREMIUM	106000.0	116600.0	128260.0	141086.0	155194.6	170714.1	187785.5	206564.0	227220.4	249942.4	

INVESTMENT :

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOND VALUE	154073.0	170871.7	187997.5	205406.9	222944.3	240386.2	257791.2	276454.2	296943.6	319371.2	343824.1
TERM TO MATR.	20.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
YIELD (X)	6.00	6.59	7.91	9.22	10.54	11.86	11.86	11.86	11.86	11.86	11.86

OPERATING RATIOS :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
LOSS RATIO	74.40	76.20	78.00	79.80	81.60	83.40	83.40	83.40	83.40	83.40
EXPENSE RATIO	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
COMM. RATIO	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
COMB. RATIO	-4.40	-6.20	-8.00	-9.80	-11.60	-13.40	-13.40	-13.40	-13.40	-13.40
P.DIV. RATIO	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
INV. INC./EP	-4.40	-6.20	-8.00	-9.80	-11.60	-13.40	-13.40	-13.40	-13.40	-13.40
	9.24	9.46	9.75	10.09	10.43	10.96	11.51	11.87	12.06	12.12
OPER. RATIO	4.84	3.26	1.75	.29	-1.17	-2.44	-1.89	-1.53	-1.34	-1.28

ASSET/LIABILITY :

BOOK VALUE

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
INVESTMENT	154073.0	170871.7	187997.5	205406.9	222944.3	240386.2	257791.2	276454.2	296943.6	319371.2	343824.1
LOSS RESERVES		94624.7	106040.3	119100.2	133916.4	150623.4	169403.6	188529.7	208801.6	230551.3	254103.3

DISCOUNT

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
INVESTMENT	22585.1	40290.2	54273.8	64946.3	73038.1	69148.8	65519.2	61988.7	58447.1	54496.2
LOSS RESERVES	10138.1	13302.1	17015.6	21351.2	26390.0	29683.6	33043.4	36577.3	40360.4	44458.9
NET DISCOUNT	-12447.0	-26988.1	-37258.2	-43595.1	-46648.1	-39465.2	-32475.9	-25421.4	-18086.7	-10037.3

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
SURPLUS	40000.0	43933.8	46412.7	47207.8	46019.2	42453.2	36347.2	30680.1	25173.3	19554.4	13528.8
ADJ. SURPLUS		31486.8	19424.6	9949.6	2424.1	-4194.9	-3118.0	-1795.8	-248.1	1467.7	3491.5

Scenario 3.

BALANCE SHEET

ASSET :	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
INVESTMENT	170871.7	187997.5	205406.9	222944.3	240386.2	257791.2	276454.2	296943.6	319371.2	343824.1
AGENTS' BAL.	11687.5	12856.3	14141.9	15556.1	17111.7	18822.8	20705.1	22775.6	25053.2	27558.5
TOTAL ASSET	182559.2	200853.8	219548.8	238500.4	257497.9	276614.0	297159.3	319719.2	344424.4	371382.6

LIABILITY & SURPLUS :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
LOSS RESERVES	94624.7	106040.3	119100.2	133916.4	150623.4	169403.6	188529.7	208801.6	230551.3	254103.3
U. PREM. RES.	44000.0	48400.0	53240.0	58564.0	64420.4	70862.4	77948.7	85743.6	94317.9	103749.7
DEBT	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SURPLUS	43933.8	46412.7	47207.8	46019.2	42453.2	36347.2	30680.1	25173.3	19554.4	13528.8
LIAB. & SURP.	182558.5	200853.0	219548.0	238499.6	257497.0	276613.2	297158.5	319718.5	344423.6	371381.8

ASSET/LIABILITY ANALYSIS

LOSS RESERVES :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOOK VALUE	94624.7	106040.3	119100.2	133916.4	150623.4	169403.6	188529.7	208801.6	230551.3	254103.3
PRESENT VALUE	84486.6	92738.1	102084.6	112565.2	124233.4	139720.0	155486.4	172224.3	190190.9	209644.4
PV/BV RATIO	.8929	.8746	.8571	.8406	.8248	.8248	.8247	.8248	.8249	.8250
WT. AVG. TERM	1.93	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94
DURATION	1.76	1.73	1.70	1.68	1.65	1.65	1.65	1.65	1.65	1.65

INVESTMENT PORTFOLIO :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOOK VALUE	170871.7	187997.5	205406.9	222944.3	240386.2	257791.2	276454.2	296943.6	319371.2	343824.1
PRESENT VALUE	148286.6	147707.3	151133.1	157998.0	167348.1	183642.4	210935.0	234944.9	260924.1	289327.9
PV/BV RATIO	.8678	.7857	.7358	.7087	.6962	.7318	.7630	.7912	.8170	.8415
WT. AVG. TERM	17.12	15.06	13.25	11.64	10.20	9.21	8.27	7.37	6.51	5.69
DURATION	10.02	8.51	7.20	6.08	5.10	4.88	4.65	4.38	4.08	3.75

LOSS RESERVES / INVESTMENT ASSETS :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOOK VALUE	.554	.564	.580	.601	.627	.657	.682	.703	.722	.739
PRESENT VALUE	.570	.628	.675	.712	.742	.741	.737	.733	.729	.725

SURPLUS :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
SURPLUS	43933.8	46412.7	47207.8	46019.2	42453.2	36347.2	30680.1	25173.3	19554.4	13528.8
ADJ. SURPLUS	31486.8	19424.6	9949.6	2424.1	-4194.9	-3118.0	-1795.8	-248.1	1467.7	3491.5

Scenario 4.

INCOME STATEMENT

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
W. PREMIUM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SURPLUS	11329.0	15744.9	19394.0	22653.1	25705.0	29074.5	33083.1	37487.6	42136.4	46968.9
WP/SURPLUS	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
E. PREMIUM	40000.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
LOSS INCUR.	29760.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
EXPENSES	4800.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
COMMISSION	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
UM. INCOME	5440.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
POLICY. DIV.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
UM. INC. AFTER	5440.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
POLICY. DIV.	6844.4	6844.4	6844.4	6844.4	6844.4	6844.4	6864.1	6885.6	6900.9	6908.1
INV. INCOME	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
BOND R. GAIN	955.4	2428.4	3195.3	3585.2	3792.5	3474.9	2855.5	2481.1	2252.1	2075.5
INTEREST PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
FED. TAX LIAB.	11329.0	4416.0	3649.1	3259.2	3051.9	3369.5	4008.6	4404.5	4648.8	4832.6
NET INCOME										

SURPLUS RECONCILIATION :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
PAID IN CPTL.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SHR. DIVIDEND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SURP. CHANGE	11329.0	4416.0	3649.1	3259.2	3051.9	3369.5	4008.6	4404.5	4648.8	4832.6
BEGIN. SURP.	.0	11329.0	15745.0	19394.1	22653.3	25705.2	29074.7	33083.3	37487.8	42136.6
ENDING SURP.	11329.0	15745.0	19394.1	22653.3	25705.2	29074.7	33083.3	37487.8	42136.6	46969.2

N. I. AS % OF

AVG. SURPLUS	200.00%	32.62%	20.77%	15.50%	12.62%	12.30%	12.90%	12.48%	11.68%	10.85%
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CASHFLOW STATEMENT :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
PAID PREMIUM	10625.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
INV. INCOME	6844.4	6844.4	6844.4	6844.4	6844.4	6844.4	6864.1	6885.6	6900.9	6908.1
PAID IN CPTL	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CASH INFLOW	17469.4	6844.4	6844.4	6844.4	6844.4	6844.4	6864.1	6885.6	6900.9	6908.1
PAID LOSS	47969.2	25844.1	14997.8	10380.2	6836.5	4281.4	2511.9	1279.0	357.1	.0
POLICY. DIV.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
EXPENSES	4800.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SHARE. DIV.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
INTEREST PAID	955.4	2428.4	3195.3	3585.2	3792.5	3474.9	2855.5	2481.1	2252.1	2075.5
FED. TAX PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CASH OUTFLOW	53724.6	28272.5	18193.1	13965.4	10629.0	7756.3	5367.4	3760.1	2609.2	2075.5
NET CASHFLOW	-36255.2	-21428.1	-11348.7	-7121.0	-3784.6	-911.9	1496.7	3125.5	4291.7	4832.6
MATURING BOND	.0	.0	.0	.0	.0	-36255.2	-21428.2	-11348.7	-7121.1	-3784.6
NEW INVEST.	-36255.2	-21428.1	-11348.7	-7121.0	-3784.6	-37167.1	-19931.5	-8223.2	-2829.4	1048.0

Scenario 4.

PREMIUM :

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
W. PREMIUM	100000.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
WP GROWTH		-100.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
E. PREMIUM		40000.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

INVESTMENT :

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOND VALUE	114073.0	77817.8	56389.6	45040.9	37919.8	34135.2	33223.3	34720.0	37845.5	42137.2	46969.7
TERM TO MATR.	20.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
YIELD (%)	6.00	5.27	4.83	4.39	3.95	3.51	3.07	2.64	2.64	2.64	2.64

ASSET/LIABILITY :

BOOK VALUE

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
INVESTMENT	114073.0	77817.8	56389.6	45040.9	37919.8	34135.2	33223.3	34720.0	37845.5	42137.2	46969.7
LOSS RESERVES		66488.1	40644.0	25646.2	15265.9	8429.4	4148.0	1636.1	357.1	.0	.0

DISCOUNT

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
INVESTMENT	-250.7	-6202.6	-12073.2	-18362.9	-24917.3	-31215.6	-35988.4	-34062.9	-31911.9	-29775.7
LOSS RESERVES	5888.7	3192.3	1643.8	772.8	320.4	109.6	26.9	4.0	.0	.0
NET DISCOUNT	6139.4	9394.9	13716.9	19135.7	25237.7	31325.3	36015.4	34066.9	31911.9	29775.7

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
SURPLUS	.0	11329.0	15744.9	19394.0	22653.1	25705.0	29074.5	33083.1	37487.6	42136.4	46968.9
ADJ. SURPLUS		17468.4	25139.8	33110.9	41788.8	50942.7	60399.8	69098.5	71554.5	74048.3	76744.6

Scenario 4.

BALANCESHEET

ASSET :	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
INVESTMENT	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0	115120.9
AGENTS' BAL.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOTAL ASSET	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0	115120.9
LIABILITY & SURPLUS :										
LOSS RESERVES	66488.1	40644.0	25646.2	15265.9	8429.4	4148.0	1636.1	357.1	.0	.0
U. PREM. RES.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DEBT	36255.2	57683.4	69032.1	76153.2	79937.8	80849.7	79353.0	76227.5	71935.8	68151.2
SURPLUS	11329.0	15744.9	19394.0	22653.1	25705.0	29074.5	33083.1	37487.6	42136.4	46968.9
LIAB. & SURP.	114072.3	114072.3	114072.3	114072.2	114072.2	114072.2	114072.2	114072.2	114072.2	115120.1

ASSET/LIABILITY ANALYSIS

LOSS RESERVES :	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOOK VALUE	66488.1	40644.0	25646.2	15265.9	8429.4	4148.0	1636.1	357.1	.0	.0
PRESENT VALUE	60599.4	37451.7	24002.4	14493.1	8109.0	4038.3	1609.2	353.1	.0	.0
PV/BV RATIO	.9114	.9215	.9359	.9494	.9620	.9736	.9835	.9887	1.0000	1.0000
WT. AVG. TERM	1.95	1.87	1.66	1.45	1.23	.98	.72	.50	1.00	1.00
DURATION	1.81	1.77	1.60	1.41	1.20	.97	.71	.50	1.00	1.00
INVESTMENT PORTFOLIO :										
BOOK VALUE	77817.8	56389.6	45040.9	37919.8	34135.2	33223.3	34720.0	37845.5	42137.2	46969.7
PRESENT VALUE	78068.5	62592.2	57114.1	56282.7	59052.5	64438.9	70708.4	71908.4	74049.1	76745.4
PV/BV RATIO	1.0032	1.1100	1.2680	1.4843	1.7300	1.9396	2.0365	1.9001	1.7573	1.6339
WT. AVG. TERM	25.02	31.44	36.98	41.89	44.92	39.55	34.00	29.14	24.89	21.49
DURATION	14.84	18.45	21.01	22.49	22.67	19.24	16.91	15.59	14.41	13.40
LOSS RESERVES / INVESTMENT ASSETS :										
BOOK VALUE	.854	.721	.569	.403	.247	.125	.047	.009	.000	.000
PRESENT VALUE	.776	.598	.420	.258	.137	.063	.023	.005	.000	.000
SURPLUS :										
SURPLUS	11329.0	15744.9	19394.0	22653.1	25705.0	29074.5	33083.1	37487.6	42136.4	46968.9
ADJ. SURPLUS	17468.4	25139.8	33110.9	41788.8	50942.7	60399.8	69098.5	71534.5	74048.3	76744.6

Scenario 5.

INCOME STATEMENT

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
W. PREMIUM SURPLUS	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
HP/SURPLUS	11329.0	15696.5	19195.1	22196.2	24893.7	27436.4	29932.8	32461.8	35083.4	37837.2
E. PREMIUM LOSS INCUR.	40000.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
EXPENSES	29760.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
COMMISSION	4800.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
UM. INCOME POLICY, DIV.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
UM. INC. AFTER POLICY, DIV.	5440.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
INV. INCOME	6844.4	6844.4	6844.4	6844.4	6844.4	6844.4	6844.4	6877.3	6904.1	6917.0
BOND R. GAIN	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
INTEREST PAID	955.4	2476.8	3345.8	3843.3	4146.8	4301.7	4348.0	4348.3	4282.5	4163.1
FED. TAX LIAB.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
NET INCOME	11329.0	4367.6	3498.6	3001.1	2697.6	2542.7	2496.4	2529.0	2621.6	2753.9

SURPLUS RECONCILIATION :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
PAID IN CPTL. SHR. DIVIDEND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SURP. CHANGE BEGIN. SURP.	11329.0	4367.6	3498.6	3001.1	2697.6	2542.7	2496.4	2529.0	2621.6	2753.9
ENDING SURP.	.0	11329.0	15696.6	19195.2	22196.3	24893.9	27436.6	29933.0	32462.0	35083.6
	11329.0	15696.6	19195.2	22196.3	24893.9	27436.6	29933.0	32462.0	35083.6	37837.5

N.I. AS % OF

AVG. SURPLUS	200.00%	32.32%	20.05%	14.50%	11.46%	9.72%	8.70%	8.11%	7.76%	7.55%
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CASHFLOW STATEMENT :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
PAID PREMIUM	10625.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
INV. INCOME	6844.4	6844.4	6844.4	6844.4	6844.4	6844.4	6844.4	6877.3	6904.1	6917.0
PAID IN CPTL	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CASH INFLOW	17469.4	6844.4	6844.4	6844.4	6844.4	6844.4	6844.4	6877.3	6904.1	6917.0
PAID LOSS POLICY, DIV.	47969.2	25044.1	14997.8	10360.2	6836.5	4281.4	2511.9	1279.0	357.1	.0
EXPENSES	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SHARE, DIV.	4800.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
INTEREST PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
FED. TAX PAID	955.4	2476.8	3345.8	3843.3	4146.8	4301.7	4348.0	4348.3	4282.5	4163.1
CASH OUTFLOW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CASH OUTFLOW	53724.6	28320.9	18343.6	14223.5	10983.3	8583.1	6859.9	5627.3	4639.6	4163.1
NET CASHFLOW	-36255.2	-21476.5	-11499.2	-7379.1	-4138.9	-1738.7	-15.5	1250.0	2264.5	2753.9
MATURING BOND	.0	.0	.0	.0	.0	-36255.2	-21476.6	-11499.2	-7379.1	-4139.0
NEW INVEST.	-36255.2	-21476.5	-11499.2	-7379.1	-4138.9	-37993.9	-21492.1	-10249.2	-5114.6	-1385.1

Scenario 5.

PREMIUM :

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
W. PREMIUM	100000.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
NP GROWTH		-100.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
E. PREMIUM		40000.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

INVESTMENT :

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOND VALUE	114073.0	77817.8	56341.2	44842.0	37462.9	33323.9	31585.2	31569.7	32819.7	35084.2	37838.0
TERM TO MATR.	20.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
YIELD (%)	6.00	5.27	5.27	5.27	5.27	5.27	5.27	5.27	5.27	5.27	5.27

ASSET/LIABILITY :

BOOK VALUE

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
INVESTMENT	114073.0	77817.8	56341.2	44842.0	37462.9	33323.9	31585.2	31569.7	32819.7	35084.2	37838.0
LOSS RESERVES		66488.1	40644.0	25646.2	15265.9	8429.4	4148.0	1636.1	357.1	.0	.0

DISCOUNT

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
INVESTMENT	-250.7	-348.5	-391.1	-705.8	-1159.0	-1664.0	-1925.0	-2060.7	-2191.1	-2591.4
LOSS RESERVES	5888.7	3454.8	1944.2	1010.7	470.0	183.6	52.7	7.9	.0	.0

NET DISCOUNT

	6139.4	3803.3	2335.3	1716.5	1629.0	1847.7	1977.7	2068.7	2191.1	2591.4	
SURPLUS	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	.0	11329.0	15696.5	19195.1	22196.2	24893.7	27436.4	29932.8	32461.8	35083.4	37837.2
ADJ. SURPLUS		17468.4	19499.8	21530.4	23912.7	26522.7	29284.1	31910.5	34530.5	37274.5	40428.6

Scenario 5.

BALANCESHEET

ASSET :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
INVESTMENT	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0
AGENTS' BAL.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOTAL ASSET	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0	114073.0

LIABILITY & SURPLUS :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
LOSS RESERVES	66488.1	40644.0	25646.2	15265.9	8429.4	4148.0	1636.1	357.1	.0	.0
U. PREM. RES.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DEBT	36255.2	57731.8	69231.0	76610.1	80749.1	82487.8	82503.3	81253.3	78988.8	76235.0
SURPLUS	11329.0	15696.5	19195.1	22196.2	24893.7	27436.4	29932.8	32461.8	35083.4	37837.2
LIAB. & SURP.	114072.3	114072.3	114072.3	114072.2	114072.2	114072.2	114072.2	114072.2	114072.2	114072.2

ASSET/LIABILITY ANALYSIS

LOSS RESERVES :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOOK VALUE	66488.1	40644.0	25646.2	15265.9	8429.4	4148.0	1636.1	357.1	.0	.0
PRESENT VALUE	60599.4	37189.2	23702.0	14255.3	7959.4	3964.3	1583.4	349.2	.0	.0
PV/BV RATIO	.9114	.9150	.9242	.9338	.9442	.9557	.9678	.9778	1.0000	1.0000
WT. AVG. TERM	1.95	1.87	1.66	1.45	1.23	.98	.72	.50	1.00	1.00
DURATION	1.81	1.76	1.58	1.40	1.19	.96	.71	.50	1.00	1.00

INVESTMENT PORTFOLIO :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOOK VALUE	77817.8	56341.2	44842.0	37462.9	33323.9	31585.2	31569.7	32819.7	35084.2	37838.0
PRESENT VALUE	78068.5	56689.7	45233.1	38168.7	34482.9	33249.2	33494.7	34880.4	37275.3	40429.4
PV/BV RATIO	1.0032	1.0062	1.0087	1.0188	1.0348	1.0527	1.0610	1.0628	1.0625	1.0685
WT. AVG. TERM	25.02	31.46	37.12	42.35	45.93	41.41	37.03	33.08	29.25	25.97
DURATION	14.84	18.77	22.69	26.67	29.82	26.63	24.17	22.32	20.58	19.03

LOSS RESERVES / INVESTMENT ASSETS :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOOK VALUE	.854	.721	.572	.407	.253	.131	.052	.011	.000	.000
PRESENT VALUE	.776	.656	.524	.373	.231	.119	.047	.010	.000	.000

SURPLUS :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
SURPLUS	11329.0	15696.5	19195.1	22196.2	24893.7	27436.4	29932.8	32461.8	35083.4	37837.2
ADJ. SURPLUS	17468.4	19499.8	21530.4	23912.7	26522.7	29284.1	31910.5	34530.5	37274.5	40428.6

Scenario 6.

INCOME STATEMENT

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
W. PREMIUM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SURPLUS	10474.3	13940.9	16489.7	18489.7	20131.9	21562.2	22886.0	24178.8	25497.3	26877.6
WF/SURPLUS	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
E. PREMIUM	40000.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
LOSS INCUR.	29760.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
EXPENSES	4800.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
COMMISSION	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

UN. INCOME	5440.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
POLICY. DIV.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

UN. INC. AFTER	5440.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
POLICY. DIV.	6012.2	6012.2	6012.2	6012.2	6012.2	5738.5	5738.5	5738.9	5763.8	5774.8
INV. INCOME	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
BOND R. GAIN	977.9	2545.6	3463.4	4012.2	4370.0	4308.1	4414.7	4446.0	4445.2	4394.6
INTEREST PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
FED. TAX LIAB.										

NET INCOME	10474.3	3466.6	2548.8	2000.0	1642.2	1430.4	1323.8	1292.9	1318.6	1380.2

SURPLUS RECONCILIATION :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
PAID IN CPTL.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SHR. DIVIDEND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

SURP. CHANGE	10474.3	3466.6	2548.8	2000.0	1642.2	1430.4	1323.8	1292.9	1318.6	1380.2
BEGIN. SURP.	.0	10474.3	13940.9	16489.7	18489.7	20131.9	21562.3	22886.1	24179.0	25497.6
ENDING SURP.	10474.3	13940.9	16489.7	18489.7	20131.9	21562.3	22886.1	24179.0	25497.6	26877.8

N. I. AS % OF
AVG. SURPLUS

200.00%	28.40%	16.75%	11.44%	8.50%	6.86%	5.96%	5.49%	5.31%	5.27%
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CASHFLOW STATEMENT :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
PAID PREMIUM	10625.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
INV. INCOME	6012.2	6012.2	6012.2	6012.2	6012.2	5738.5	5738.5	5738.9	5763.8	5774.8
PAID IN CPTL	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CASH INFLOW	16637.2	6012.2	6012.2	6012.2	6012.2	5738.5	5738.5	5738.9	5763.8	5774.8
PAID LOSS	47969.2	25844.1	14997.8	10380.2	6836.5	4281.4	2511.9	1279.0	357.1	.0
POLICY. DIV.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
EXPENSES	4800.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SHARE. DIV.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
INTEREST PAID	977.9	2545.6	3463.4	4012.2	4370.0	4308.1	4414.7	4446.0	4445.2	4394.6
FED. TAX PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CASH OUTFLOW	53747.1	28389.7	18461.2	14392.4	11206.5	8589.5	6926.6	5725.0	4802.3	4394.6
NET CASHFLOW	-37109.9	-22377.5	-12449.0	-8380.2	-5194.3	-2851.0	-1188.1	13.9	961.5	1380.2
MATURING BOND	.0	.0	.0	.0	114073.0	-37109.9	-22377.5	-12449.0	-8380.2	108878.7

NEW INVEST.	-37109.9	-22377.5	-12449.0	-8380.2	108878.7	-39960.9	-23565.6	-12435.1	-7418.7	110258.9

Scenario 6.

PREMIUM :

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
W.PREMIUM	100000.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
WP GROWTH	-100.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
E.PREMIUM		40000.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

INVESTMENT :

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOND VALUE	114073.0	76963.1	54585.6	42136.6	33756.4	28562.1	25711.0	24522.9	24536.7	25498.1	26878.4
TERM TO MATR.	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
YIELD (%)	5.27	5.27	5.27	5.27	5.27	5.27	5.27	5.27	5.27	5.27	5.27

ASSET/LIABILITY :

BOOK VALUE

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
INVESTMENT	114073.0	76963.1	54585.6	42136.6	33756.4	28562.1	25711.0	24522.9	24536.7	25498.1	26878.4
LOSS RESERVES		66488.1	40644.0	25646.2	15265.9	8429.4	4148.0	1636.1	357.1	.0	.0

DISCOUNT

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
INVESTMENT	-427.2	-592.7	-450.7	67.6	384.4	-196.3	-451.2	-365.3	111.5	398.1
LOSS RESERVES	5898.7	3454.8	1944.2	1010.7	470.0	183.6	52.7	7.9	.0	.0
NET DISCOUNT	6315.9	4047.5	2394.9	943.0	85.6	380.0	503.8	373.2	-111.5	-398.1

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
SURPLUS	.0	10474.3	13940.9	16489.7	18489.7	20131.9	21562.2	22886.0	24178.8	25497.3	26877.6
ADJ. SURPLUS		16790.2	17988.4	18884.6	19432.7	20217.5	21942.2	23389.8	24552.0	25385.8	26479.5

Scenario 6.

BALANCESHEET

ASSET :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
INVESTMENT	114073.0	114073.0	114073.0	114073.0	108878.7	108878.7	108878.7	108878.7	108878.7	110259.0
AGENTS' BAL.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOTAL ASSET	114073.0	114073.0	114073.0	114073.0	108878.7	108878.7	108878.7	108878.7	108878.7	110259.0

LIABILITY & SURPLUS :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
LOSS RESERVES	66488.1	40644.0	25646.2	15265.9	8429.4	4148.0	1636.1	357.1	.0	.0
U. PREM. RES.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DEBT	37109.9	59487.4	71936.4	80316.6	80316.6	83167.7	84355.8	84342.0	83380.6	83380.6
SURPLUS	10474.3	13940.9	16489.7	18489.7	20131.9	21562.2	22886.0	24178.8	25497.3	26877.6
LIAB. & SURP.	114072.3	114072.3	114072.3	114072.2	108877.9	108877.9	108877.9	108877.9	108877.9	110258.2

ASSET/LIABILITY ANALYSIS

LOSS RESERVES :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOOK VALUE	66488.1	40644.0	25646.2	15265.9	8429.4	4148.0	1636.1	357.1	.0	.0
PRESENT VALUE	60599.4	37189.2	23702.0	14255.3	7959.4	3964.3	1583.4	349.2	.0	.0
PV/BV RATIO	.9114	.9150	.9242	.9338	.9442	.9557	.9678	.9778	1.0000	1.0000
WT. AVG. TERM DURATION	1.95	1.87	1.66	1.45	1.23	.98	.72	.50	1.00	1.00
	1.81	1.76	1.58	1.40	1.19	.96	.71	.50	1.00	1.00

INVESTMENT PORTFOLIO :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOOK VALUE	76963.1	54585.6	42136.6	33756.4	28562.1	25711.0	24522.9	24536.7	25498.1	26878.4
PRESENT VALUE	77390.3	55178.3	42587.3	33688.8	28177.7	25907.3	24974.1	24902.0	25386.6	26480.3
PV/BV RATIO	1.0056	1.0109	1.0107	.9980	.9865	1.0076	1.0184	1.0149	.9956	.9852
WT. AVG. TERM DURATION	3.02	1.00	-1.33	-4.02	13.21	5.85	.31	-3.23	-5.54	14.28
	2.85	1.11	-1.04	-3.72	11.85	5.49	.64	-2.68	-5.17	12.82

LOSS RESERVES / INVESTMENT ASSETS :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOOK VALUE	.864	.745	.609	.452	.295	.161	.067	.015	.000	.000
PRESENT VALUE	.783	.674	.557	.423	.282	.153	.063	.014	.000	.000

SURPLUS :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
SURPLUS	10474.3	13940.9	16489.7	18489.7	20131.9	21562.2	22886.0	24178.8	25497.3	26877.6
ADJ. SURPLUS	16790.2	17988.4	18884.6	19432.7	20217.5	21942.2	23369.8	24552.0	25385.8	26479.5

Scenario 7.

INCOME STATEMENT

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
W. PREMIUM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SURPLUS	10221.5	12854.7	13928.3	13806.3	16651.7	22102.8	26278.6	30059.1	33944.5	38223.6
WP/SURPLUS	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
E. PREMIUM	40000.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
LOSS INCUR.	29760.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
EXPENSES	4800.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
COMMISSION	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
UM. INCOME	5440.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
POLICY. DIV.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
UM. INC. AFTER										
POLICY. DIV.	5440.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
INV. INCOME	6012.2	6012.2	6012.2	6012.2	9769.8	13123.5	13152.8	13202.4	13263.3	13307.7
BOND R. GAIN	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
INTEREST PAID	1230.7	3379.0	4938.6	6134.2	6924.4	7672.3	8976.9	9421.9	9377.9	9028.7
FED. TAX LIAB.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
NET INCOME	10221.5	2633.2	1073.6	-122.0	2845.4	5451.2	4175.9	3780.5	3885.4	4279.0

SURPLUS RECONCILIATION :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
PAID IN CPTL.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SHR. DIVIDEND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SURF. CHANGE	10221.5	2633.2	1073.6	-122.0	2845.4	5451.2	4175.9	3780.5	3885.4	4279.0
BEGIN. SURP.	.0	10221.5	12854.7	13928.3	13806.3	16651.7	22102.9	26278.8	30059.3	33944.7
ENDING SURP.	10221.5	12854.7	13928.3	13806.3	16651.7	22102.9	26278.8	30059.3	33944.7	38223.7
N.I. AS % OF										
AVG. SURPLUS	200.00%	22.82%	8.02%	-.88%	18.68%	28.13%	17.26%	13.42%	12.14%	11.86%

CASHFLOW STAT

EMENT :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
PAID PREMIUM	10625.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
INV. INCOME	6012.2	6012.2	6012.2	6012.2	9769.8	13123.5	13152.8	13202.4	13263.3	13307.7
PAID IN CPTL	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CASH INFLOW	16637.2	6012.2	6012.2	6012.2	9769.8	13123.5	13152.8	13202.4	13263.3	13307.7
PAID LOSS	47969.2	25844.1	14997.8	10380.2	6836.5	4281.4	2511.9	1279.0	357.1	.0
POLICY. DIV.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
EXPENSES	4800.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SHARE. DIV.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
INTEREST PAID	1230.7	3379.0	4938.6	6134.2	6924.4	7672.3	8976.9	9421.9	9377.9	9028.7
FED. TAX PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CASH OUTFLOW	53999.9	29223.1	19936.4	16514.4	13760.9	11953.7	11488.8	10700.9	9735.0	9028.7
NET CASHFLOW	-37362.7	-23210.9	-13924.2	-10502.2	-3991.1	1169.8	1664.0	2501.5	3528.3	4279.0
MATURING BOND	.0	.0	.0	.0	114073.0	-37362.7	-23210.9	-13924.2	-10502.2	110081.9
NEW INVEST.	-37362.7	-23210.9	-13924.2	-10502.2	110081.9	-36192.9	-21546.9	-11422.7	-6973.9	114360.9

Scenario 7.

PREMIUM :

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
W. PREMIUM	100000.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
WP GROWTH		-100.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
E. PREMIUM		40000.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

INVESTMENT :

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOND VALUE	114073.0	76710.3	53499.4	39575.2	29073.0	25081.9	26251.6	27915.5	30417.0	33945.3	38224.4
TERM TO MATR.	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
YIELD (%)	5.27	6.59	7.91	9.22	10.54	11.86	11.86	11.86	11.86	11.86	11.86

ASSET/LIABILITY :

BOOK VALUE

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
INVESTMENT	114073.0	76710.3	53499.4	39575.2	29073.0	25081.9	26251.6	27915.5	30417.0	33945.3	38224.4
LOSS RESERVES		66488.1	40644.0	25646.2	15265.9	8429.4	4148.0	1636.1	357.1	.0	.0

DISCOUNT

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
INVESTMENT	4122.3	4395.4	2396.6	-872.4	-2481.5	-1544.8	-1294.9	-935.0	101.8	772.9
LOSS RESERVES	7176.2	4946.0	3195.3	1877.3	976.5	386.4	112.4	17.2	.0	.0

NET DISCOUNT	3053.9	550.5	798.7	2749.7	3458.0	1931.2	1407.3	952.1	-101.8	-772.9
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	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
SURPLUS	.0	10221.5	12854.7	13928.3	13806.3	16651.7	22102.8	26278.6	30059.1	33944.5	38223.6
ADJ. SURPLUS		13275.4	13405.2	14727.0	16556.0	20109.7	24034.0	27685.9	31011.2	33842.7	37450.7

Scenario 7.

BALANCESHEET

ASSET :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
INVESTMENT	114073.0	114073.0	114073.0	114073.0	110081.9	110081.9	110081.9	110081.9	110081.9	114361.0
AGENTS' BAL.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOTAL ASSET	114073.0	114073.0	114073.0	114073.0	110081.9	110081.9	110081.9	110081.9	110081.9	114361.0

LIABILITY & SURPLUS :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
LOSS RESERVES	66488.1	40644.0	25646.2	15265.9	8429.4	4148.0	1636.1	357.1	.0	.0
U. PREM. RES.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DEBT	37362.7	60573.6	74497.8	85000.0	85000.0	83830.3	82166.4	79664.9	76136.6	76136.6
SURPLUS	10221.5	12854.7	13928.3	13806.3	16651.7	22102.8	26278.6	30059.1	33944.5	38223.6
LIAB. & SURP.	114072.3	114072.3	114072.3	114072.2	110081.1	110081.1	110081.1	110081.1	110081.1	114360.2

ASSET/LIABILITY ANALYSIS

LOSS RESERVES :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOOK VALUE	66488.1	40644.0	25646.2	15265.9	8429.4	4148.0	1636.1	357.1	.0	.0
PRESENT VALUE	59311.9	35698.0	22450.9	13388.6	7452.9	3761.5	1523.8	340.0	.0	.0
PV/BV RATIO	.8921	.8783	.8754	.8770	.8842	.9068	.9313	.9519	1.0000	1.0000
WT. AVG. TERM	1.95	1.87	1.66	1.45	1.23	.98	.72	.50	1.00	1.00
DURATION	1.79	1.71	1.53	1.35	1.15	.94	.70	.50	1.00	1.00

INVESTMENT PORTFOLIO :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOOK VALUE	76710.3	53499.4	39575.2	29073.0	25081.9	26251.6	27915.5	30417.0	33945.3	38224.4
PRESENT VALUE	72588.0	49104.0	37178.6	29945.4	27563.4	27796.4	29210.4	31352.0	33843.5	37451.5
PV/BV RATIO	.9463	.9178	.9394	1.0300	1.0989	1.0588	1.0464	1.0307	.9970	.9798
WT. AVG. TERM	3.01	.93	-1.67	-5.26	14.76	6.23	1.03	-1.89	-3.67	10.76
DURATION	2.86	1.07	-1.25	-4.25	10.38	5.17	1.43	-1.10	-3.10	8.47

LOSS RESERVES / INVESTMENT ASSETS :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOOK VALUE	.867	.760	.648	.525	.336	.158	.059	.012	.000	.000
PRESENT VALUE	.817	.727	.604	.447	.270	.135	.052	.011	.000	.000

SURPLUS :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
SURPLUS	10221.5	12854.7	13928.3	13806.3	16651.7	22102.8	26278.6	30059.1	33944.5	38223.6
ADJ. SURPLUS	13275.4	13405.2	14727.0	16556.0	20109.7	24034.0	27685.9	31011.2	33842.7	37450.7

Scenario 3.

INCOME STATEMENT

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
W. PREMIUM SURPLUS	110000.0	121000.0	133100.0	146410.0	161051.0	177156.1	194871.7	214358.9	235794.8	259374.2
WP/SURPLUS	2.6	2.7	3.1	3.6	3.9	4.0	3.9	3.8	3.7	3.6
E. PREMIUM LOSS INCUR.	106000.0	116600.0	128260.0	141086.0	155194.6	170714.1	187785.5	206564.0	227220.4	249942.4
EXPENSES	16500.0	18150.0	19965.0	21961.5	24157.6	26573.4	29230.8	32153.9	35369.2	38906.1
COMMISSION	16500.0	18150.0	19965.0	21961.5	24157.7	26573.4	29230.8	32153.8	35369.2	38906.1
UN. INCOME POLICY DIV.	-5864.0	-8549.2	-11712.8	-15423.6	-19759.5	-24808.3	-27289.2	-30018.1	-33019.8	-36321.8
	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
UN. INC. AFTER POLICY DIV.	-5864.0	-8549.2	-11712.8	-15423.6	-19759.5	-24808.3	-27289.2	-30018.1	-33019.8	-36321.8
INV. INCOME	8635.5	9778.1	11145.7	12730.7	19905.3	28244.4	32308.2	36499.3	40870.3	45453.0
BOND R. GAIN	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
INTEREST PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
FED. TAX LIAB.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
NET INCOME	2771.5	1228.9	-567.1	-2692.9	145.8	3436.1	5019.0	6481.2	7850.5	9131.2

SURPLUS RECONCILIATION :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
PAID IN CPTL.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SHR. DIVIDEND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SURP. CHANGE	2771.5	1228.9	-567.1	-2692.9	145.8	3436.1	5019.0	6481.2	7850.5	9131.2
BEGIN. SURP.	40000.0	42771.5	44000.4	43433.3	40740.4	40886.2	44322.3	49341.3	55822.5	63673.0
ENDING SURP.	42771.5	44000.4	43433.3	40740.4	40886.2	44322.3	49341.3	55822.5	63673.0	72804.2
N.I. AS % OF AVG. SURPLUS	6.70%	2.83%	-1.30%	-6.40%	.36%	8.07%	10.72%	12.33%	13.14%	13.38%

CASHFLOW STATEMENT :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
PAID PREMIUM	92437.5	101681.3	111849.4	123034.3	135337.8	148871.5	163758.6	180134.5	198148.0	217962.8
INV. INCOME	8635.5	9778.1	11145.7	12730.7	19905.3	28244.4	32308.2	36499.3	40870.3	45453.0
PAID IN CPTL	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CASH INFLOW	101973.0	111459.4	122995.1	135765.0	155243.1	177115.9	196066.8	216633.8	239018.3	263415.8
PAID LOSS POLICY DIV.	68936.6	77433.6	86982.9	97770.4	109931.8	123595.4	137486.9	152002.5	167752.1	184900.0
EXPENSES	16500.0	18150.0	19965.0	21961.5	24157.6	26573.4	29230.8	32153.9	35369.2	38906.1
SHARE DIV.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
INTEREST PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
FED. TAX PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CASH OUTFLOW	85436.6	95583.6	106947.9	119731.9	134089.4	150168.8	166717.7	184156.4	203121.3	223806.1
NET CASHFLOW	15636.4	15875.8	16047.2	16033.1	21153.7	26947.1	29349.1	32477.4	35897.0	39609.7
MATURING BOND	.0	.0	.0	.0	154073.0	15636.4	15875.8	16047.2	16033.1	175226.7
NEW INVEST.	15636.4	15875.8	16047.2	16033.1	175226.7	42583.5	45224.9	48524.6	51930.1	214836.4

Scenario 8.

PREMIUM :

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
W. PREMIUM	100000.0	110000.0	121000.0	133100.0	146410.0	161051.0	177156.1	194871.7	214358.9	235794.8	259374.2
NP. GROWTH		10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
E. PREMIUM		106000.0	116600.0	128260.0	141086.0	155194.6	170714.1	187785.5	206564.0	227220.4	249942.4

INVESTMENT :

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOND VALUE	154073.0	169709.4	185585.2	201632.4	217665.5	238819.2	265766.3	295115.4	327592.8	363489.8	403099.5
TERM TO MATR.	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
YIELD (%)	5.27	6.59	7.91	9.22	10.54	11.86	11.86	11.86	11.86	11.86	11.86

OPERATING RATIOS :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
LOSS RATIO	74.40	76.20	78.00	79.80	81.60	83.40	83.40	83.40	83.40	83.40
EXPENSE RATIO	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
COMM. RATIO	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
COMB. RATIO	-4.40	-6.20	-8.00	-9.80	-11.60	-13.40	-13.40	-13.40	-13.40	-13.40
P. DIV. RATIO	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
INV. INC. /EP	8.15	8.39	8.69	9.02	12.83	16.54	17.20	17.67	17.99	18.19
OPER. RATIO	3.75	2.19	.69	-.78	1.23	3.14	3.80	4.27	4.59	4.79

ASSET/LIABILITY :

BOOK VALUE

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
INVESTMENT	154073.0	169709.4	185585.2	201632.4	217665.5	238819.2	265766.3	295115.4	327592.8	363489.8	403099.5
LOSS RESERVES		94624.7	106040.3	119100.2	133916.4	150623.4	169403.6	188529.7	208801.6	230551.3	254103.3

DISCOUNT

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
INVESTMENT	5567.8	8209.7	7915.5	4751.6	2061.1	-548.7	-2494.5	-3437.8	-2830.5	-1986.4
LOSS RESERVES	10138.1	13302.1	17015.6	21351.2	26390.0	29683.6	33043.4	36577.3	40360.4	44458.9
NET DISCOUNT	4570.3	5092.4	9100.1	16599.6	24328.9	30232.4	35537.9	40015.0	43190.9	46445.3

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
SURPLUS	40000.0	42771.5	44000.4	43433.3	40740.4	40886.2	44322.3	49341.3	55822.5	63673.0	72804.2
ADJ. SURPLUS		47341.8	49092.8	52533.4	57340.0	65215.1	74554.7	84879.2	95837.5	106863.9	119249.5

Scenario 8.

BALANCESHEET

ASSET :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
INVESTMENT	169709.4	185565.2	201632.4	217665.5	238819.2	265766.3	295115.4	327592.8	363489.8	403099.5
AGENTS' BAL.	11687.5	12856.3	14141.9	15556.1	17111.7	18822.8	20705.1	22775.6	25053.2	27558.5
TOTAL ASSET	181396.9	198441.5	215774.3	233221.6	255930.9	284589.1	315820.5	350368.4	388543.0	430658.0

LIABILITY & SURPLUS :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
LOSS RESERVES	94624.7	106040.3	119100.2	133916.4	150623.4	169403.6	188529.7	208801.6	230551.3	254103.3
U. PREM. RES.	44000.0	48400.0	53240.0	58564.0	64420.4	70862.4	77948.7	85743.6	94317.9	103749.7
DEBT	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
SURPLUS	42771.5	44000.4	43433.3	40740.4	40886.2	44322.3	49341.3	55822.5	63673.0	72804.2
LIAB. & SURP.	181396.2	198440.7	215773.5	233220.8	255930.0	284588.3	315819.7	350367.7	388542.2	430657.2

ASSET/LIABILITY ANALYSIS

LOSS RESERVES :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOOK VALUE	94624.7	106040.3	119100.2	133916.4	150623.4	169403.6	188529.7	208801.6	230551.3	254103.3
PRESENT VALUE	84486.6	92738.1	102084.6	112565.2	124233.4	139720.0	155486.4	172224.3	190190.9	209644.4
PV/BV RATIO	.8929	.8746	.8571	.8406	.8248	.8248	.8247	.8248	.8249	.8250
WT. AVG. TERM	1.93	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94
DURATION	1.76	1.73	1.70	1.68	1.65	1.65	1.65	1.65	1.65	1.65

INVESTMENT PORTFOLIO :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOOK VALUE	169709.4	185565.2	201632.4	217665.5	238819.2	265766.3	295115.4	327592.8	363489.8	403099.5
PRESENT VALUE	164141.6	177375.5	193716.9	212913.9	236758.1	266315.0	297609.9	331030.6	366320.3	405085.9
PV/BV RATIO	.9672	.9558	.9607	.9782	.9914	1.0021	1.0085	1.0105	1.0078	1.0049
WT. AVG. TERM	3.59	2.76	1.97	1.23	3.84	3.30	2.79	2.30	1.84	3.37
DURATION	3.31	2.57	1.85	1.12	3.15	2.79	2.41	2.02	1.60	2.78

LOSS RESERVES / INVESTMENT ASSETS :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
BOOK VALUE	.558	.571	.591	.615	.631	.637	.639	.637	.634	.630
PRESENT VALUE	.515	.523	.527	.529	.525	.525	.522	.520	.519	.518

SURPLUS :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
SURPLUS	42771.5	44000.4	43433.3	40740.4	40886.2	44322.3	49341.3	55822.5	63673.0	72804.2
ADJ. SURPLUS	47341.8	49092.6	52533.4	57340.0	65215.1	74554.7	84879.2	95837.5	106863.9	119249.5

Flating Interest Rate Scenario 1

Term	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
1	5.7500%	6.9000%	8.0500%	9.2000%	10.3500%	10.3500%	10.3500%	10.3500%	10.3500%	10.3500%
2	5.9365%	7.1858%	8.3951%	9.5944%	10.7937%	11.7937%	10.7937%	10.7937%	10.7937%	10.7937%
3	6.2430%	7.4916%	8.7402%	9.9887%	11.2373%	11.2373%	11.2373%	11.2373%	11.2373%	11.2373%
4	6.4401%	7.7235%	9.0162%	10.3043%	11.5923%	11.5923%	11.5923%	11.5923%	11.5923%	11.5923%
5	6.5851%	7.9057%	9.2333%	10.5409%	11.8585%	11.8585%	11.8585%	11.8585%	11.8585%	11.8585%
6	6.7112%	8.0535%	9.3958%	10.7380%	12.0802%	12.0802%	12.0802%	12.0802%	12.0802%	12.0802%
7	6.8098%	8.1718%	9.5388%	10.8957%	12.2577%	12.2577%	12.2577%	12.2577%	12.2577%	12.2577%
8	6.9084%	8.2901%	9.6718%	11.0535%	12.4352%	12.4352%	12.4352%	12.4352%	12.4352%	12.4352%
9	6.9623%	8.3788%	9.7753%	11.1717%	12.5682%	12.5682%	12.5682%	12.5682%	12.5682%	12.5682%
10	7.0565%	8.4676%	9.8789%	11.2900%	12.7013%	12.7013%	12.7013%	12.7013%	12.7013%	12.7013%
11	7.1302%	8.5563%	9.9824%	11.4083%	12.8343%	12.8343%	12.8343%	12.8343%	12.8343%	12.8343%
12	7.1795%	8.6154%	10.0513%	11.4872%	12.9231%	12.9231%	12.9231%	12.9231%	12.9231%	12.9231%
13	7.2238%	8.6746%	10.1204%	11.5660%	13.0118%	13.0118%	13.0118%	13.0118%	13.0118%	13.0118%
14	7.2731%	8.7337%	10.1893%	11.6448%	13.1006%	13.1006%	13.1006%	13.1006%	13.1006%	13.1006%
15	7.3274%	8.7929%	10.2584%	11.7236%	13.1893%	13.1893%	13.1893%	13.1893%	13.1893%	13.1893%
16	7.3767%	8.8521%	10.3275%	11.8023%	13.2780%	13.2780%	13.2780%	13.2780%	13.2780%	13.2780%
17	7.4260%	8.9112%	10.3964%	11.8811%	13.3668%	13.3668%	13.3668%	13.3668%	13.3668%	13.3668%
18	7.4507%	8.9409%	10.4311%	11.9211%	13.4112%	13.4112%	13.4112%	13.4112%	13.4112%	13.4112%
19	7.4753%	8.9704%	10.4655%	11.9647%	13.4555%	13.4555%	13.4555%	13.4555%	13.4555%	13.4555%
20	7.5000%	9.0000%	10.5000%	12.0000%	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%
21	7.5000%	9.0000%	10.5000%	12.0000%	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%
22	7.5000%	9.0000%	10.5000%	12.0000%	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%
23	7.5000%	9.0000%	10.5000%	12.0000%	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%
24	7.5000%	9.0000%	10.5000%	12.0000%	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%
25	7.5000%	9.0000%	10.5000%	12.0000%	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%
26	7.5000%	9.0000%	10.5000%	12.0000%	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%
27	7.5000%	9.0000%	10.5000%	12.0000%	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%
28	7.5000%	9.0000%	10.5000%	12.0000%	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%
29	7.5000%	9.0000%	10.5000%	12.0000%	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%
30	7.5000%	9.0000%	10.5000%	12.0000%	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%	13.5000%

Flat Interest Rate Scenario :

Term	1965	1966	1967	1968	1969	1990	1991	1992	1993	1994
1	4.6000%	4.6000%	4.6000%	4.6000%	4.6000%	4.6000%	4.6000%	4.6000%	4.6000%	4.6000%
2	4.7972%	4.7972%	4.7972%	4.7972%	4.7972%	4.7972%	4.7972%	4.7972%	4.7972%	4.7972%
3	4.9944%	4.9944%	4.9944%	4.9944%	4.9944%	4.9944%	4.9944%	4.9944%	4.9944%	4.9944%
4	5.1522%	5.1522%	5.1522%	5.1522%	5.1522%	5.1522%	5.1522%	5.1522%	5.1522%	5.1522%
5	5.2705%	5.2705%	5.2705%	5.2705%	5.2705%	5.2705%	5.2705%	5.2705%	5.2705%	5.2705%
6	5.3690%	5.3690%	5.3690%	5.3690%	5.3690%	5.3690%	5.3690%	5.3690%	5.3690%	5.3690%
7	5.4478%	5.4478%	5.4478%	5.4478%	5.4478%	5.4478%	5.4478%	5.4478%	5.4478%	5.4478%
8	5.5267%	5.5267%	5.5267%	5.5267%	5.5267%	5.5267%	5.5267%	5.5267%	5.5267%	5.5267%
9	5.5858%	5.5858%	5.5858%	5.5858%	5.5858%	5.5858%	5.5858%	5.5858%	5.5858%	5.5858%
10	5.6450%	5.6450%	5.6450%	5.6450%	5.6450%	5.6450%	5.6450%	5.6450%	5.6450%	5.6450%
11	5.7042%	5.7042%	5.7042%	5.7042%	5.7042%	5.7042%	5.7042%	5.7042%	5.7042%	5.7042%
12	5.7436%	5.7436%	5.7436%	5.7436%	5.7436%	5.7436%	5.7436%	5.7436%	5.7436%	5.7436%
13	5.7830%	5.7830%	5.7830%	5.7830%	5.7830%	5.7830%	5.7830%	5.7830%	5.7830%	5.7830%
14	5.8225%	5.8225%	5.8225%	5.8225%	5.8225%	5.8225%	5.8225%	5.8225%	5.8225%	5.8225%
15	5.8619%	5.8619%	5.8619%	5.8619%	5.8619%	5.8619%	5.8619%	5.8619%	5.8619%	5.8619%
16	5.9014%	5.9014%	5.9014%	5.9014%	5.9014%	5.9014%	5.9014%	5.9014%	5.9014%	5.9014%
17	5.9408%	5.9408%	5.9408%	5.9408%	5.9408%	5.9408%	5.9408%	5.9408%	5.9408%	5.9408%
18	5.9606%	5.9606%	5.9606%	5.9606%	5.9606%	5.9606%	5.9606%	5.9606%	5.9606%	5.9606%
19	5.9802%	5.9802%	5.9802%	5.9802%	5.9802%	5.9802%	5.9802%	5.9802%	5.9802%	5.9802%
20	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%
21	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%
22	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%
23	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%
24	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%
25	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%
26	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%
27	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%
28	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%
29	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%
30	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%	6.0000%

Declining Interest Rate Scenario :

Term	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
1	4.6000%	4.2167%	3.8333%	3.4500%	3.0667%	2.6833%	2.3000%	2.3000%	2.3000%	2.3000%
2	4.7972%	4.3974%	3.9977%	3.5979%	3.1981%	2.7984%	2.3986%	2.3986%	2.3986%	2.3986%
3	4.9944%	4.5782%	4.1620%	3.7458%	3.3296%	2.9134%	2.4972%	2.4972%	2.4972%	2.4972%
4	5.1922%	4.7228%	4.2935%	3.8641%	3.4348%	3.0054%	2.5761%	2.5761%	2.5761%	2.5761%
5	5.2705%	4.8313%	4.3921%	3.9529%	3.5137%	3.0744%	2.6352%	2.6352%	2.6352%	2.6352%
6	5.3690%	4.9215%	4.4741%	4.0267%	3.5793%	3.1319%	2.6845%	2.6845%	2.6845%	2.6845%
7	5.4478%	4.9939%	4.5399%	4.0859%	3.6319%	3.1779%	2.7239%	2.7239%	2.7239%	2.7239%
8	5.5267%	5.0662%	4.6056%	4.1450%	3.6845%	3.2239%	2.7634%	2.7634%	2.7634%	2.7634%
9	5.5858%	5.1204%	4.6549%	4.1894%	3.7239%	3.2584%	2.7929%	2.7929%	2.7929%	2.7929%
10	5.6451%	5.1746%	4.7042%	4.2338%	3.7634%	3.2929%	2.8225%	2.8225%	2.8225%	2.8225%
11	5.7042%	5.2288%	4.7535%	4.2781%	3.8028%	3.3274%	2.8521%	2.8521%	2.8521%	2.8521%
12	5.7436%	5.2650%	4.7863%	4.3077%	3.8291%	3.3504%	2.8718%	2.8718%	2.8718%	2.8718%
13	5.7831%	5.3011%	4.8192%	4.3373%	3.8554%	3.3734%	2.8915%	2.8915%	2.8915%	2.8915%
14	5.8225%	5.3373%	4.8521%	4.3669%	3.8817%	3.3964%	2.9112%	2.9112%	2.9112%	2.9112%
15	5.8619%	5.3734%	4.8849%	4.3964%	3.9079%	3.4195%	2.9310%	2.9310%	2.9310%	2.9310%
16	5.9014%	5.4096%	4.9178%	4.4260%	3.9342%	3.4425%	2.9507%	2.9507%	2.9507%	2.9507%
17	5.9408%	5.4457%	4.9507%	4.4556%	3.9605%	3.4655%	2.9704%	2.9704%	2.9704%	2.9704%
18	5.9606%	5.4638%	4.9671%	4.4704%	3.9737%	3.4770%	2.9803%	2.9803%	2.9803%	2.9803%
19	5.9802%	5.4819%	4.9835%	4.4852%	3.9868%	3.4885%	2.9901%	2.9901%	2.9901%	2.9901%
20	6.0000%	5.5000%	5.0000%	4.5000%	4.0000%	3.5000%	3.0000%	3.0000%	3.0000%	3.0000%
21	6.0000%	5.5000%	5.0000%	4.5000%	4.0000%	3.5000%	3.0000%	3.0000%	3.0000%	3.0000%
22	6.0000%	5.5000%	5.0000%	4.5000%	4.0000%	3.5000%	3.0000%	3.0000%	3.0000%	3.0000%
23	6.0000%	5.5000%	5.0000%	4.5000%	4.0000%	3.5000%	3.0000%	3.0000%	3.0000%	3.0000%
24	6.0000%	5.5000%	5.0000%	4.5000%	4.0000%	3.5000%	3.0000%	3.0000%	3.0000%	3.0000%
25	6.0000%	5.5000%	5.0000%	4.5000%	4.0000%	3.5000%	3.0000%	3.0000%	3.0000%	3.0000%
26	6.0000%	5.5000%	5.0000%	4.5000%	4.0000%	3.5000%	3.0000%	3.0000%	3.0000%	3.0000%
27	6.0000%	5.5000%	5.0000%	4.5000%	4.0000%	3.5000%	3.0000%	3.0000%	3.0000%	3.0000%
28	6.0000%	5.5000%	5.0000%	4.5000%	4.0000%	3.5000%	3.0000%	3.0000%	3.0000%	3.0000%
29	6.0000%	5.5000%	5.0000%	4.5000%	4.0000%	3.5000%	3.0000%	3.0000%	3.0000%	3.0000%
30	6.0000%	5.5000%	5.0000%	4.5000%	4.0000%	3.5000%	3.0000%	3.0000%	3.0000%	3.0000%

APPENDIX III

PART 2

Statutory Surplus :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Senario 1	11082.0	14640.7	16722.9	17714.6	17811.9	16198.2	12462.1	7367.0	1279.8	-5663.0
Senario 2	4714.1	271.2	-4750.0	-10624.1	-12882.3	-13713.4	-15077.4	-16852.3	-18954.1	-21344.3
Senario 3	43933.8	46412.7	47207.8	46019.2	42453.2	36347.2	30680.1	25173.3	19554.4	13528.8
Senario 4	11329.0	15745.0	19394.1	22653.3	25705.2	29074.7	33083.3	37487.8	42136.6	46569.2
Senario 5	11329.0	15696.6	19195.2	22196.3	24893.9	27436.6	29933.0	32462.0	35083.6	37637.5
Senario 6	10474.3	13940.9	16489.7	18489.7	20131.9	21562.3	22886.1	24179.0	25497.6	26377.8
Senario 7	10221.5	12854.7	13928.3	13806.3	16651.7	22102.9	26278.8	30059.3	33944.7	36223.7
Senario 8	42771.5	44000.4	43433.3	40740.4	40886.2	44322.3	49341.3	55822.5	63673.0	72834.2

Market Surplus :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Senario 1	1536.6	-8560.6	-16801.3	-24102.8	-31280.3	-33473.4	-36487.0	-40129.0	-44191.0	-48254.7
Senario 2	1452.9	-5329.0	-8731.9	-10643.4	-11905.6	-13360.3	-15062.2	-16995.8	-19133.7	-21434.5
Senario 3	31488.8	19424.6	9949.6	2424.1	-4194.9	-3116.0	-1795.8	-248.1	1467.7	3431.5
Senario 4	17468.4	25139.8	33110.9	41788.8	50942.7	60399.8	69098.5	71554.5	74048.3	76744.6
Senario 5	17468.4	19499.8	21530.4	23912.7	26522.7	29284.1	31910.5	34530.5	37274.5	40426.6
Senario 6	16790.2	17988.4	18884.6	19432.7	20217.5	21942.2	23389.8	24552.0	25385.8	26479.5
Senario 7	13275.4	13405.2	14727.0	16556.0	20109.7	24034.0	27685.9	31011.2	33842.7	37490.7
Senario 8	47341.8	49092.8	52533.4	57340.0	65215.1	74554.7	84879.2	95837.5	106863.9	119245.5

Net Cash Flow :

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Senario 1	-36502.2	-22285.4	-12915.6	-9388.5	-6739.2	-5895.1	-6248.0	-6374.1	-6444.3	-6942.8
Senario 2	-36585.9	-22460.5	-13143.4	-9614.0	-6961.2	-5112.5	-3875.9	-3053.9	-2458.9	-2130.2
Senario 3	16798.7	17125.8	17409.4	17537.4	17441.9	17405.0	18663.0	20489.4	22427.6	24450.3
Senario 4	-36255.2	-21428.1	-11348.7	-7121.0	-3784.6	-911.9	1496.7	3125.5	4291.7	4932.6
Senario 5	-36255.2	-21476.5	-11499.2	-7379.1	-4136.9	-1738.7	-15.5	1250.0	2264.5	2753.9
Senario 6	-37109.9	-22377.5	-12449.0	-8380.2	-5194.3	-2851.0	-1188.1	13.9	961.5	1390.2
Senario 7	-37362.7	-23210.9	-13924.2	-10502.2	-3991.1	1169.8	1664.0	2501.5	3529.3	4279.0
Senario 8	15636.4	15875.8	16047.2	16033.1	21153.7	26947.1	29349.1	32477.4	35897.0	39119.7