

Rate Recommendation
for
Texas Credit Life and Disability
Presumptive Rates

American Health and Life Insurance Co.
July 16, 2004

Introduction

The purpose of this report is to respond to the request from the Texas Department of Insurance for assistance in the development of a rule proposal for setting credit life and disability presumptive rates based on the submitted experience for the period from 2000 to 2002.

Some components of our recommendation have been set using industry experience provided in a Microsoft Excel spreadsheet by the TDI and some have been set to reflect the experience of our company alone. The company data used for this purpose is the same data reported to the TDI as of the most recent data call in 2002.

Where possible, we used the recommendations set forth in the Official Order of the Commissioner of Insurance date October 29, 1999 ("Order").

Derivation of Credit Premium Rate Formula

The general formula used in this recommendation is shown below. In some previous documents, the term "ROE" has been used for the percentage of premium margin that is necessary to produce an adequate return for risk and use of surplus. The measure that is used in this recommendation for single premium plans is based on Internal Rate of Return. Therefore, "ROE" has been replaced by the more descriptive term, "Profit and Contingency Margin."

$$\frac{\text{Claim Costs} + \text{General Insurer Expenses}}{1 + \text{Invest. Income} - \text{Premium Taxes} - \text{Compensation} - \text{Profit and Contingency Margin}}$$

However, since the rate calculation in Texas provides an interest discount in its derivation of single premium rates, and the interest element of Outstanding Balance coverage is negligible, the Investment Income component is removed, and the formula is reduced to:

$$\frac{\text{Claim Costs} + \text{General Insurer Expenses}}{1 - \text{Premium Taxes} - \text{Compensation} - \text{Profit and Contingency Margin}}$$

This formula will be used for setting our recommendations for both Credit Life and Disability.

Credit Life Insurance Calculation

Claim Costs

Claim Costs were calculated by multiplying the three-year Loss Ratio at the presumptive rate by the prima facie rate in effect during the experience period. After adjusting the Actual Earned Premium back to the presumptive rate as outlined in Appendix A of the 2002 Credit Data Call, the loss ratio for single lives was 42.43%. The prima facie rate at

the end of each year was \$.30 per \$100 per year. The resulting claim cost was 12.73 cents per \$100 per year.

Expenses, Taxes and Compensation

We have not seen sufficient evidence that any deviations are necessary for these components from those recommended in the Order. Therefore, we will use an expense component of 8.02 cents per \$100 per year, a tax component of 2.75 cents per \$100 per year, and a compensation component of 25%.

Profit and Contingency Margin

A different method was used to develop the Profit and Contingency Margin than was illustrated in the Order.

For single premium plans the method used in the Order is insufficient to recognize the surplus strain associated with payment of commissions and reserve establishment, as well as Risk-Based Capital requirements. In addition, the simplified method used in the Order is insufficient for multi-year contracts where recovery of this strain is spread out over several years, and it does not recognize timing differences between statutory and taxable income.

The method used in determining the appropriate value for this component was to perform an analysis based on an 11.5% statutory after tax internal rate of return. The value generated is the gross, pre-tax premium margin that is necessary to produce the target internal rate of return without investment income. The reason no investment income was used is that the single premium rates are discounted at interest and thus, investment income on the single premium is passed along to the purchaser. The necessary gross premium margin for single premium credit life is 14.65%.

For single premium life on single lives, the rate is derived below.

$$\begin{array}{r} .1273 + .0802 \\ \hline 1 - .0275 - .25 - .1465 \\ \hline = \$0.36 \end{array}$$

Based on this derivation we recommend that the single premium life rate on single lives be raised from \$.30 per \$100 per year to \$.36 per \$100 per year.

The corresponding joint life and monthly outstanding balance rates can be derived using the rate expressed above. Based on the recommendation of an independent actuary, we have concluded that the joint rate multiple of 150% is no longer sufficient based on claim

cost experience and overall trends. We would like to back his recommendation that this multiplier be increased to 165% for credit life to better reflect the underlying experience.

Credit Disability Insurance Calculation

Claim Costs

Claim Costs were calculated by multiplying the three-year Loss Ratio at the presumptive rate by the prima facie rate in effect during the experience period. After adjusting the Actual Earned Premium back to the presumptive rate as outlined in Appendix A of the 2002 Credit Data Call, the loss ratio for single lives was 61.12%. The prima facie rate for 14-day retro with at 36 month term at the end of each year was \$2.79 per \$100 per year. The resulting claim cost was \$1.705 per \$100 per year.

Expenses, Taxes and Compensation

We have not seen sufficient evidence that any deviations are necessary for these components from those recommended in the Order. Therefore, we will use an expense component of 54.57 cents per \$100 per year, a tax component of 2.75 cents per \$100 per year, and a compensation component of 25%.

Profit and Contingency Margin

The method used in determining the appropriate value for this component was to perform an analysis based on an 11.5% statutory after tax internal rate of return. The value generated is the gross, pre-tax premium margin that is necessary to produce the target internal rate of return without investment income. The reason no investment income was used is that the single premium rates are discounted at interest and thus, investment income on the single premium is passed along to the purchaser. The necessary gross premium margin for single premium credit life is 9.85%.

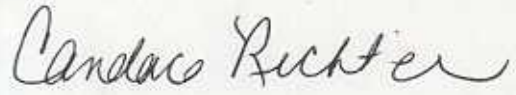
For 36-month, 14 day retroactive disability insurance, the single premium rate on single lives is derived below.

$$\frac{1.705 + .5457}{1 - .0275 - .25 - .0985} = \$3.61$$

Based on this derivation we recommend that the current prima facie rate for single coverage table be adjusted upwards by 129%.

The corresponding joint and monthly outstanding balance rates can be derived using the rate expressed above. Based on the recommendation of an independent actuary, we have

concluded that the joint rate multiple of 150% is no longer sufficient based on claim cost experience and overall trends. We would like to back his recommendation that this multiplier be increased to 175% for credit disability to better reflect the underlying experience.

A handwritten signature in cursive script that reads "Candace Richter".

Candace Richter, ASA, MAAA
Director & Actuary
American Health & Life Insurance Company

16-Jul-04

AMERICAN HEALTH & LIFE INSURANCE COMPANY

BACK UP TO TEXAS PRESUMPTIVE RATE RESPONSE

Source: Submitted Data Call for Experience years 2000 - 2002

TEXAS CREDIT CALL EXPERIENCE - SINGLE PREMIUM

| | | | WRITTEN | BP @ PF | ACTUAL | RATE | CLAIMS | LR | CLAIMS COST |
|------|----|-------|--------------|--------------|--------------|--------|--------------|--------|-------------|
| LIFE | 1 | 2000 | \$1,188,293 | \$248,310 | \$260,343 | \$0.30 | \$120,415 | 48.49% | \$0.1455 |
| | | 2001 | \$2,202,088 | \$1,082,486 | \$1,027,158 | \$0.30 | \$528,290 | 48.80% | \$0.1464 |
| | | 2002 | \$2,026,865 | \$1,786,040 | \$1,663,741 | \$0.30 | \$673,699 | 37.72% | \$0.1132 |
| | | TOTAL | \$5,417,246 | \$3,116,836 | \$2,951,242 | \$0.30 | \$1,322,404 | 42.43% | \$0.1273 |
| A&H | 10 | 2000 | \$5,439,049 | \$4,933,828 | \$5,479,451 | \$2.79 | \$3,134,186 | 63.52% | \$1.7723 |
| | | 2001 | \$5,536,621 | \$5,321,761 | \$5,391,891 | \$2.79 | \$3,349,871 | 62.95% | \$1.7562 |
| | | 2002 | \$7,851,997 | \$6,141,021 | \$5,859,970 | \$2.79 | \$3,537,556 | 57.61% | \$1.6072 |
| | | TOTAL | \$18,827,667 | \$16,396,610 | \$16,731,312 | \$2.79 | \$10,021,613 | 61.12% | \$1.7052 |

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