AMERICAN ACADEMY *of* ACTUARIES

**<u>REPORT OF THE JOINT AMERICAN ACADEMY OF ACTUARIES/SOCIETY OF ACTUARIES PREFERRED MORTALITY VALUATION TABLE TEAM</u>**

**Presented to the National Association of Insurance Commissioners' Life & Health Actuarial Task Force**

**May 2008**

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## BACKGROUND

In 2005, the National Association of Insurance Commissioners (NAIC) Life and Health Actuarial Task Force (LHATF) requested that the actuarial professional bodies develop mortality tables that could be used to better reflect the actual mortality of companies for reserving.

Specifically, LHATF requested that:

1. The Society of Actuaries develops studies of preferred risks.
2. The American Academy of Actuaries and the Society of Actuaries develop preferred levels of valuation mortality.
3. The American Academy of Actuaries recommends requirements to be met in order to use such preferred valuation mortality.

At this time, the work on the experience studies, underwriting criteria, and Valuation Basic Tables have been substantially completed. The reports on this work can be found on the Society of Actuaries website, www.soa.org.

The major work remaining at this time is to determine what margins should be used in developing the Valuation Tables. The Preferred Mortality team made a presentation at the March 2008 LHATF meeting. There were questions from various regulators regarding some considerations on margins. This paper is intended to provide the requested information to LHATF on margins, as well as to solicit input on the margins that should be established.

This report is divided into a discussion of the mortality margins, the outstanding questions on margins, and a sample calculation spreadsheet to assist in determining the effect of various margins. This last item is accompanied by a slide presentation to show the effect of the margins.

## MORTALITY MARGINS IN VALUATION TABLES – BACKGROUND OF 2001 CSO LOADING AND DISCUSSION OF PURPOSE OF MARGINS

### From a March, 2001 presentation to LHATF

The following points were made about the loadings in the **1980** CSO:

- The prime constraint on margins (loadings) was that reserves on the loaded table not be materially less than reserves developed using underlying select and ultimate mortality.
- Terminal reserves on the loaded table should not be significantly distorted when compared with terminal reserves on the graduated basic table.
- The methodology should be consistent in providing margins for both male and female tables.
- Loaded mortality rates should not result in unreasonable statutory premium deficiencies on term insurance plans.
- Loaded mortality rates should encompass the standard mortality experience in 1970-75 (the period from which the basic table was derived) of most companies writing ordinary insurance with normal underwriting standards.

For the **2001** CSO:

- The first four considerations were retained.
- Consistency was expanded to include smokers vs. nonsmokers, and select vs. ultimate periods.
- The fifth consideration was replaced by saying that the margin should provide reasonable margin for possible future adverse mortality experience (a broader consideration than simply comparing to the companies contributing to the experience study).
- A sixth consideration was added: Reserves and net premiums on the loaded table should not be excessive. [No definition of "excessive."]

Two loading formulas were shown, both using a similar structure to the formula for the 1980 CSO, and one being exactly half as large as the other.

- The larger formula had a 20% margin overall. The loaded mortality was as large as the experience for 17 of 21 companies (81%). Note that this comparison ignored the mortality improvement baked into the 2001 VBT from 1990-95 to 2001, so that the coverage was actually somewhat larger than "advertised."
- The smaller formula was based on some sample calculations of economic reserves for a 20-year term plan. Economic reserves as used here were not gross premium reserves, but net premium reserves with more realistic assumptions for lapse and interest. The conclusion was that using a 10% mortality load on formula reserves was roughly equivalent to using a 20% mortality load on economic reserves, because the lack of a lapse assumption on the formula reserves was an additional margin that is worth about 10%.
- There were sample reserve calculations comparing 1980 CSO to the 2001 VBT with both 10% and 20% loads, and using both level term and whole life, but these calculations primarily just illustrated that the 2001 CSO reserves were going to be substantially lower than the 1980 CSO reserves, regardless of margin.
- There were some additional arguments for a smaller margin:
  - Placing more reliance on cash flow testing and RBC and "X-factor" testing.

The end result was that LHATF recommended a 15% load and keeping the same formula format as the 1980 CSO.

**<u>From the June, 2002 final report on the 2001 CSO</u>**:

Margin Formula:

- The 1980 CSO formula is $(0.0350 - 0.00025x + 0.000009x^2)/e_x$
- The 2001 CSO formula is $(0.0056 - 0.00016x + 0.000008x^2)/e_{x.}$

Comments in the report about the 2001 CSO margin formula format:

- The constant term produced a 15% margin for males at age zero (but it later became 8% when the age zero rate was increased in the 2001 VBT table).
- The negative term keeps the loading appropriate at younger ages.
- The $x^2$ term maintains the margins at higher attained ages (this element overwhelms the other two factors above age 50).
- Using $e_x$ in the denominator helps to provide a load that monotonically increases by age and a percentage that generally decreases by age.

The overall margin was intended to be 15%, but the report does not specify how the task force concluded that the formula equated to an overall 15%. There are a lot of calculations showing percentage loads for various issue ages and cumulative durations. "Eyeballing" these, it does appear that the overall margin is about 15%.

There is a lengthy section in the report describing how well the loaded table covers variation by company.

- For policy years 1-15, 15 of 21 companies (71%) were covered.
- For policy years 1-25, of 14 companies who contributed data for entire period, 100% of companies were covered, though this percentage was smaller when females and smokers were considered separately.
- For ultimate experience, 11 of 14 companies (79%) were covered.
- As a result of these analyses, the task force concluded that the loaded mortality covered the 1990-1995 experience of the individual companies "most of the time during both the select and ultimate periods."

**<u>Purposes of the Margin</u>**

While comparing the consistency of margins for smokers and nonsmokers, the 2001 CSO task force decided to explore the purpose of mortality margins in more detail, and this was done in Appendix H. In this appendix, they identified four purposes of margins. They then attached values to each of these components and compared the aggregate to the proposed loads in the 2001 CSO. Their conclusion was that the loads were comparable (and, most importantly, consistent between smokers and nonsmokers). The magnitudes of some of their values appear arbitrary. However, that does not detract from the validity of the concepts. Following is an initial discussion of these concepts by the Valuation Table Team:

**Confidence:**

- Mortality should be sufficient to cover the "true" mortality level underlying the experience study. In other words, the experience study should have enough data to be fully credible. The 2001 CSO table was assumed not to need any margin for this purpose.
- For the 2008 valuation tables, since the Primary Table is derived from a subset of the experience data (i.e., larger policy sizes), is there enough data to be deemed fully credible? We believe the answer is "yes."
- The Primary Table has a number of relative risk versions for business issued in a preferred risk structure, to be assigned on the basis of UCS scores. There was a limited amount of SOA data available for analyzing the mortality associated with different UCS scores.
    - It should be noted that the relative risk table assignment is a **split** of the Primary Table. This reduces the amount of aggregate error in mortality, as assigning too low mortality for a preferred class will be offset by too high mortality for the residual class.
    - The assumption for the proportion of business in each class could have a bias effect. For example, assume that preferred mortality is 70% of aggregate and residual standard is 130% of standard, and the proportion is equal volume of business in each class. So, the weighted average is 100%. But, what if the actual underlying mortality in our aggregate table was composed of 55% preferred business and 45% residual standard? Then the 70% and 130% relative assumptions produce an aggregate 97% mortality, and the assumption, in aggregate, is 3% understated.
    - Note that the relative value tables grade together in later durations, so that any error introduced by proportion assumptions also would wear off in later durations.
    - Note that the current PBR mortality assumption setting process envisions picking a relative risk table by "rounding up" the calculated percentage to the nearest available table. For example, if the UCS calculation produces relative mortality levels of 74% and 118%, the assumption will use the 80% and 120% relative risk tables. This "rounding up" is an additional margin, but the magnitude will vary by company.

**Company Variation:**

- Assuming that companies without credible experience will use the valuation table without adjustment, the table should have margin sufficient to cover a large proportion of companies. What is "large"? The 2001 CSO covered only 71% of companies for durations 1-15.

The Valuation Table Team performed some analysis of individual company A/E ratios in the 2002-04 experience study. The results are summarized in the table below.

| | Select | | Durations 26+ | |
|---|---|---|---|---|
| | Duration 1-10 | Duration 11-25 | Ages 25-79 | Ages 80+ |
| Size Band | 100-2,499K | 50-2,499K | 25-2,499K | 25-2,499K |
| Total Deaths | 18,796 | 44,428 | 6,912 | 5,714 |
| Aggregate A/E | 68% | 69% | 75% | 87% |
| # Companies > 100 Deaths | 27 | 25 | 9 | 5 |
| | | | | |
| Std.Dev. Of A/E | 21% | 17% | 23% | 12% |
| # Cos With A/E > 110% Aggr. | 11 | 6 | 5 | 2 |
| # Cos With A/E > 115% Aggr. | 9 | 4 | 4 | 1 |
| # Cos With A/E > 120% Aggr. | 6 | 3 | 2 | 0 |

We limited the analysis to those companies that, in each of the four groups in the summary, had at least 100 deaths. There were relatively few companies contributing ultimate data (and, of the 25 companies who had at least 100 deaths in durations 11-25, the majority only had data in durations 11-15). We used the same face amount bands that were used to develop the Primary Table.

We calculated the standard deviation of the individual company A/E ratios, as a percentage of the overall A/E ratio (recognizing that this is not a reliable statistic for the ultimate durations, where there are so few companies). Then, we counted the number of companies that exceeded certain percentages of the aggregate A/E ratio, namely, 110%, 115% and 120%.

Some observations and comments:

- If the goal is to have valuation mortality that covers mortality of roughly 75-85% of contributing companies, then it appears that the margin would be about 20% of mortality in early durations, graded to 10% at higher ages. Interestingly, the 2001 CSO margin in the first 10 durations averages roughly 30% (though this varies by age), and the margin in higher age/ultimate durations is roughly 10%.
- Testing is needed, but we expect margins of this magnitude will have a large impact on reserves.
- If companies with credible experience can omit this margin, they will have lower reserves than companies without credible experience
- Some of the variation among companies could be attributable to randomness.
- Some of the variation in durations 11-25 might be attributable to differing amounts of term insurance (10-year level and ART) among the contributing companies, where the term would have higher mortality (and where PBR specifies that an adjustment should be made to the anticipated experience).
- Canada's valuation standards indicate that margins in general should be 5-20% of expected. They are more specific for mortality, specifying a margin range of 3.75-15 deaths per thousand, divided by ex. This produces fairly large margins at early durations/young ages, but quickly grades down to far less than 10% at higher attained ages.
- The variation that we see in the experience study results is only valid for margin setting for companies using the 2008 VBT table as their assumption without any adjustment for experience.
- Some company variation may be caused by differing proportions of preferred business, and having different assumptions for preferred and residual standard business will offset this variation. However, we will not be able to demonstrate this.

**Random Fluctuation:**

- The 2001 CSO task force addressed this by looking at the variation for one year's experience of a defined block of business. Obviously, this is greatly affected by the size of the block. They calculated a one-standard deviation fluctuation for one year's experience.
- We believe the provision in the reserve, if any, should be based on a present value of all years' mortality, rather than a single year. This should reduce the percentage margin vs. a single year. Single years' fluctuations are better covered by capital.
- We performed a stochastic calculation on sets of 10,000 and 100,000 lives, where all lives were male issue age 45, duration 1, equal face amounts, using 100% of the 2008 VBT Primary Table as expected mortality. We tested annual lapse rates of 2% and 6%. We projected 1000 stochastic scenarios, where both mortality and lapse were stochastic. We then calculated the present value of deaths over each scenario. The standard deviation of the 1000 present values, divided by the average of the present values, is a measure of the effect on present value of mortality from randomness. The results are shown in the table below. Some comments on these results:
  - The longer the projection period, the lower the variation, because there is more total deaths over the period.
  - The variations in the table are somewhat overstated, because the variation in number of lives in force due to stochastic lapse also causes variation in amount of deaths.
  - The variation in the table is somewhat understated vs. the "real world" because it assumes equal face amounts, whereas typical portfolios would have a mix of face amounts.
  - If the starting point were a later duration than at issue, higher expected mortality rates would increase the total deaths, and reduce the variation.

| Projection | Std. Dev./ Average, of PV Deaths @ 5% | | | |
|---|---|---|---|---|
| Period | 10,000 Lives | | 100,000 Lives | |
| In Years | 2% Lapse | 6% Lapse | 2% Lapse | 6% Lapse |
| 10 | 9.8% | 11.4% | 3.3% | 3.7% |
| 20 | 5.2% | 6.6% | 1.6% | 2.2% |
| 30 | 3.2% | 4.7% | 1.0% | 1.5% |
| 50 | 1.8% | 3.5% | 0.6% | 1.2% |

- An obvious problem is that we cannot set a single load that will cover randomness for both large and small companies – if we set it to cover small companies, it will be too much for larger companies. RBC factors for mortality do have larger factors for smaller volumes.
- Alternatively, perhaps the company variation margin will be deemed sufficient to cover the effects of randomness for companies without credible data. Companies with credible data may omit the company variation margin, but should perform their own analysis of impact on randomness on the value of reserves.

**Unknown Variations:**

- According to the 2001 CSO report, this covers:
  - One-time events, such as an epidemic
  - Changes in overall mortality levels that might occur due to things like AIDS or changes in general health conditions
  - By definition, this cannot be quantified
  - They did not try to quantify this (the one hypothetical example they constructed used only 0.1 per thousand for this).
- Small probability events (e.g., epidemic) should be covered by capital?

- It was noted that the absence of future mortality improvement in the assumptions represents a considerable margin for changes in overall mortality levels.
- The “company variation” component of margin at the higher ages may reflect an element of trend variance (where trends are caused by items such as antiselection).
- But, we should consider possible adverse trends, such as obesity. Note that smokers and older females have not had much improvement over the past 20 years.
- PBR will reflect changes when they become known.

## QUESTIONS REGARDING MARGINS

The level of margins to be used for mortality tables is determined by the LHATF. The Valuation Table Team would like to assist LHATF by determining which factors are important regarding margins. The Valuation Table Team could use this information to develop potential margins for LHATF to consider.

Questions that would assist in determining the margins to consider:

1) Please confirm: Are we to determine margins for the PBA Gross Premium methodology, as opposed to the net premium methodology being discussed by the ACLI?

2) Regarding margins for company variation:

   a. Assuming that companies without any credible experience will use the Valuation Tables as a default basis, the tables will need a margin sufficient to cover company variation. Keeping in mind that there is considerable variation by company for mortality levels, does LHATF have a target percentile for industry coverage by these margins?

   b. Does the fact that PBR assumptions are to be updated as experience emerges allow for lower margin to cover company variation?

3) The experience underlying the industry tables have varying credibility by age, gender, risk class and duration. Is LHATF agreeable to having an overall margin that is allocated to these "cells" assuming similar credibility for all "cells"? For example, this might imply that margins could vary by duration such that the margin in the years closest to the valuation date is lower than the margin in later years (e.g., 20 years from the valuation date).

4) The Team is leaning towards a conclusion that "one-time" events (e.g., epidemics) should be covered by surplus, and not by reserves. Does LHATF agree?

5) Since reserve margins are not released in a manner that would cover annual fluctuation, and consistent with item (4) above, the Team is leaning toward a conclusion that the effect of randomness (due to having a small number of lives) should be considered in the context of present value of death benefits (i.e., a lifetime randomness rather than a year-by-year randomness). Does LHATF agree?

6) Currently, choosing a higher margin may result in first and sometimes second year strain, which is inconsistent with CRVM currently. Is LHATF comfortable with this or should the margin format/level be such to avoid this strain at issue?

7) Is LHATF comfortable with companies that have credible experience use lower margins than those without, depending on a level of credibility and possibly within some defined parameters?

**SAMPLE CALCULATION SPREADSHEET**

The attached calculation spreadsheet entitled "PBRReserveTesting – VBTTablesandMargins" was designed by Tom Kalmbach to evaluate different margin formulas.

The attached power point presentation entitled "ReserveExamplesPowerPoint" used the calculation spreadsheet to show examples of the effect of different margins on the reserves.

# Sample Reserve Calculation Spreadsheet

Impact of Different Choices for
New Table Mortality Margin

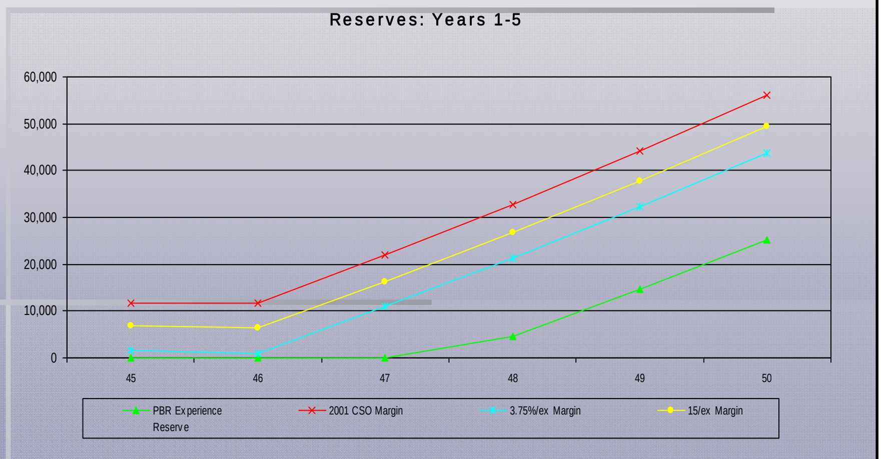


# Assumption Summary

- PBR Reserves
  - Assumes AG38 Lapse Rates (Interim Solution)
  - 5% Investment Yield all years
  - Expenses
    - 99% FY Premium, 5% Renewal Premium
    - $300 FY expense, $75 renewal years
  - 8% profit margin in gross premiums
  - 2008 VBT – RR100 - Mortality Table
  - Margins
    - Mortality margins vary depending on selection.
    - Interest margin 50bps
    - Expense margin – none
- **CRVM Reserves**
  - 4% Interest
  - 2008 VBT – RR100 - Mortality Table
  - Mortality Margins vary depending on selection

# Impact of Various Margins on PBR Type Reserves

Male 45, 2001 VBT, Pay $10,439 All Years, Lifetime $1,000,000 Death Benefit, 8% before tax profit margin on premium.



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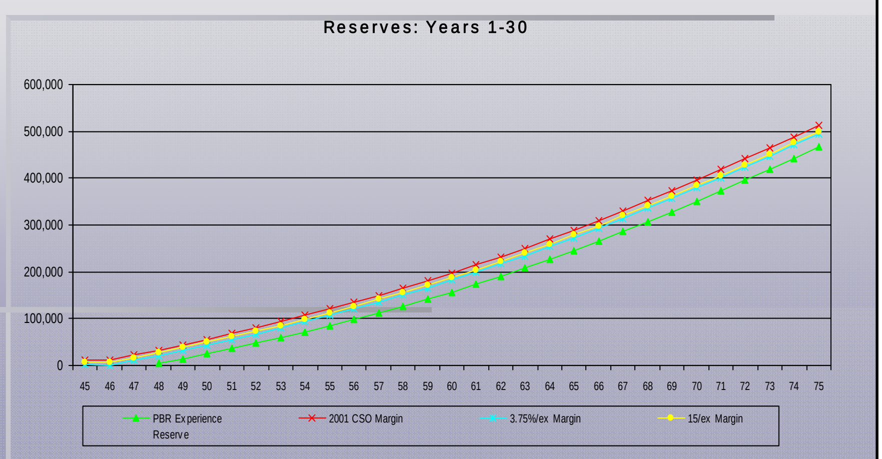

## Impact of Various Margins on CRVM Type Reserves

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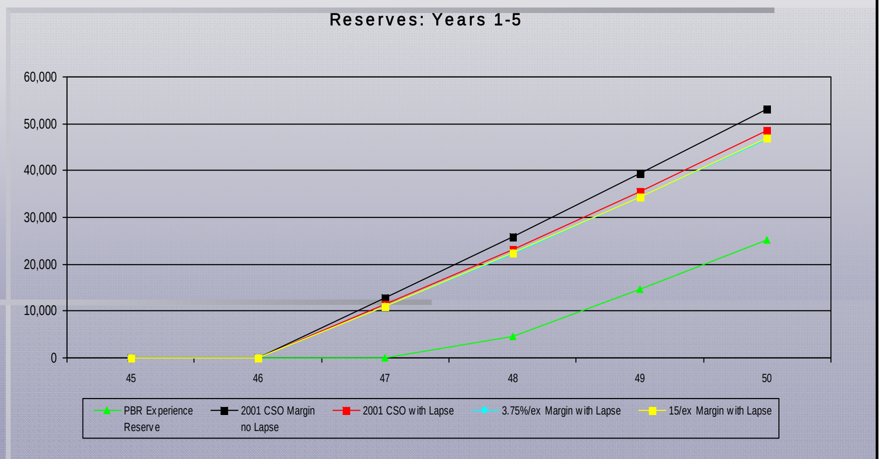




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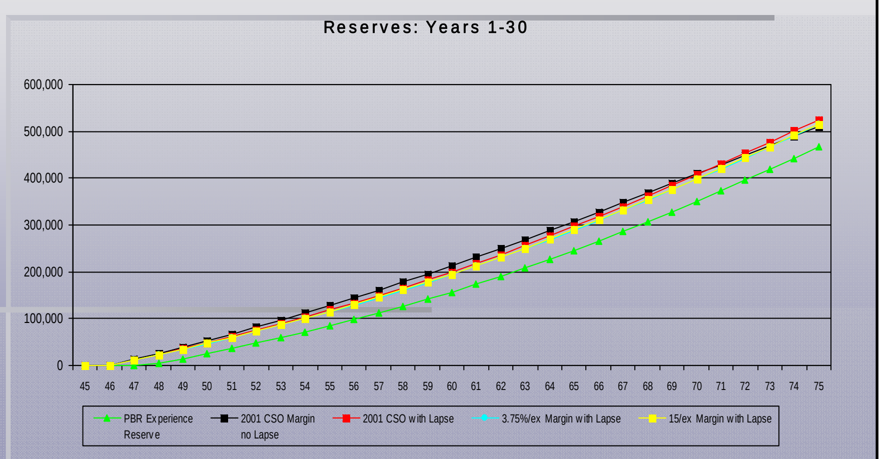
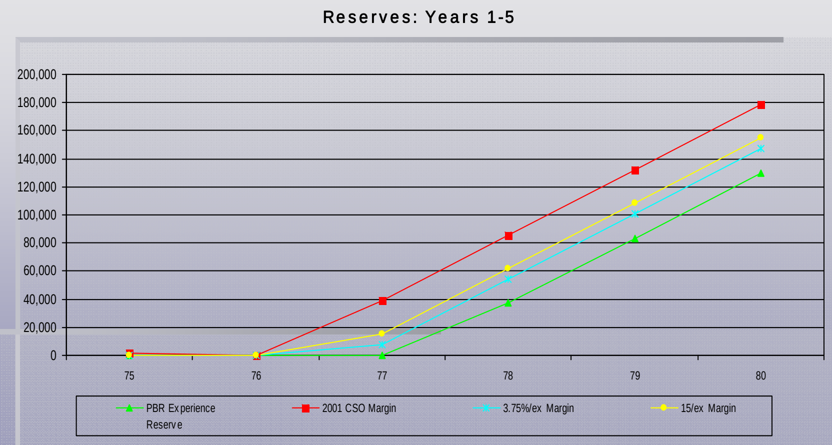


## Impact of Various Margins on PBR Type Reserves

Male 75, 2001 VBT, Pay $58,948 All Years, Lifetime $1,000,000 Death Benefit, 8% before tax margin on premium.



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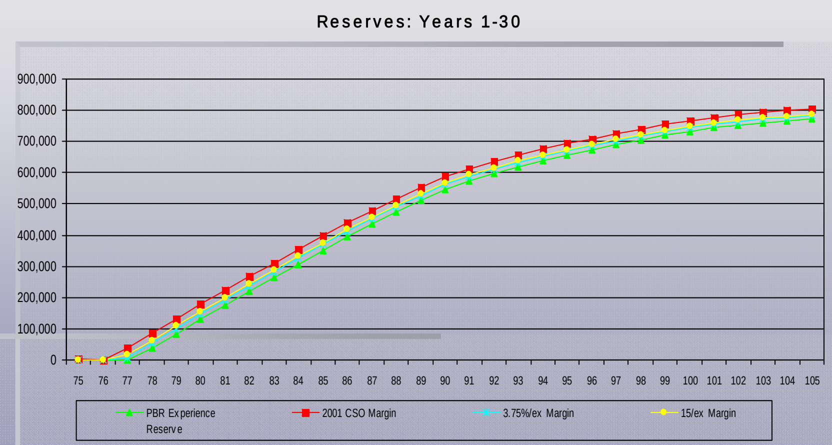
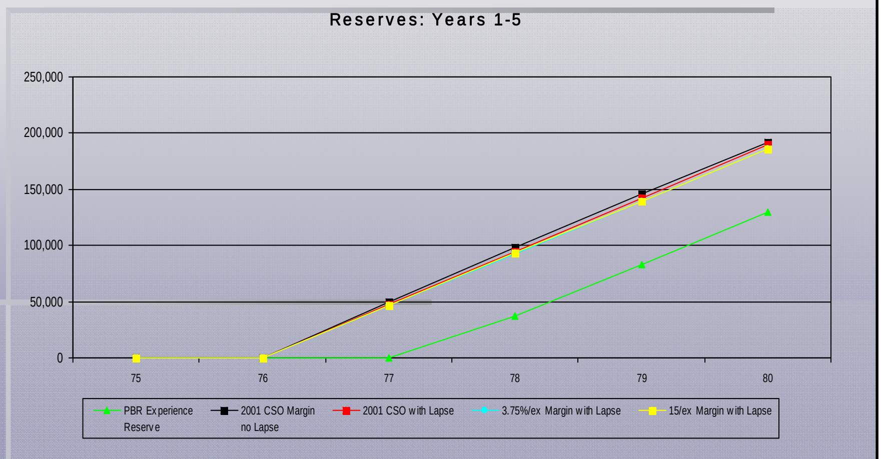


## Impact of Various Margins on CRVM Type Reserves

Male 75, 2001 VBT, Pay $58,948 All Years, Lifetime $1 million Death Benefit, 8% before tax margin on premium.






## Impact of Various Margins on CRVM Type Reserves

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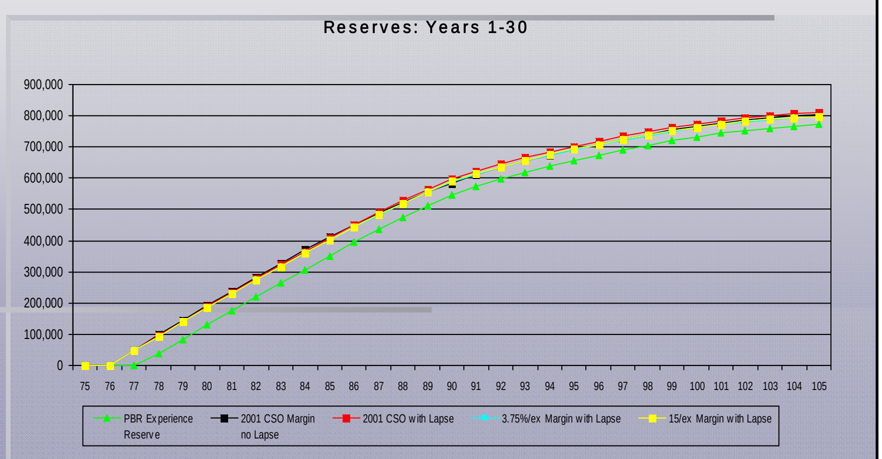

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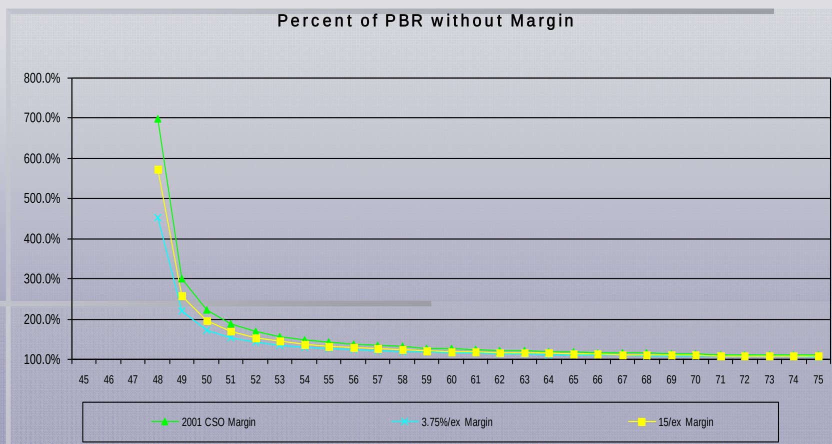




# Impact of Various Margins on CRVM Type Reserves

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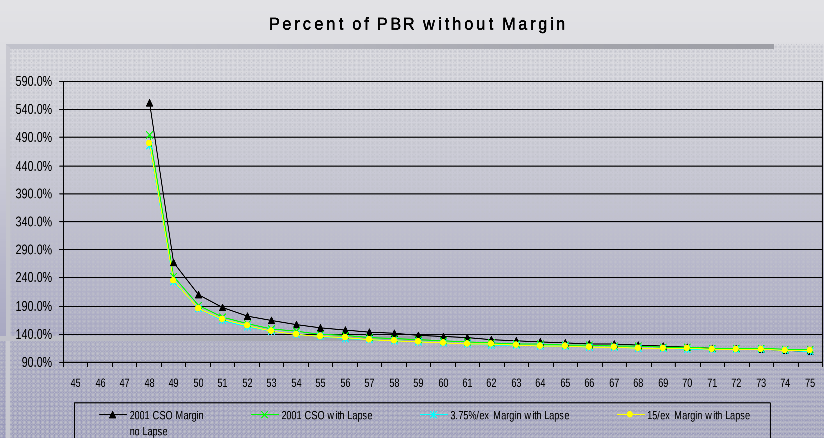

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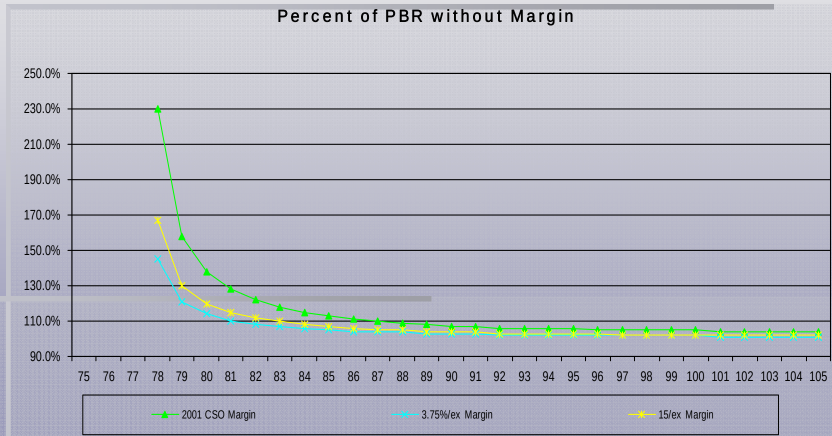




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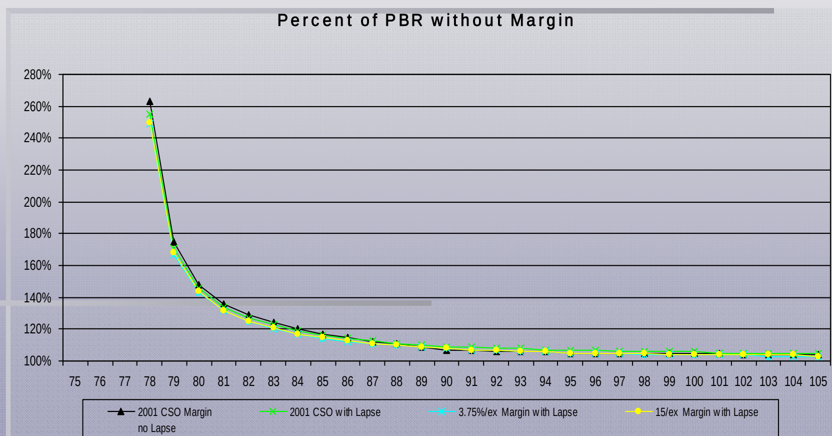


Scenario: MNS75UCS0D121P121M15
Margin 15

| Age | Duration | Gross Premium | CRVM Net Premium No Lapse | CRVM Net Premium with Lapse | Death Benefits | Experience Reserves | Reserve With Margin |
|---|---|---|---|---|---|---|---|
| 75 | 0 | 58,948 | 7,429 | 7,280 | 1,000,000 | - | - |
| 76 | 1 | 58,948 | 57,141 | 54,121 | 1,000,000 | - | - |
| 77 | 2 | 58,948 | 57,141 | 54,121 | 1,000,000 | - | 15,618 |
| 78 | 3 | 58,948 | 57,141 | 54,121 | 1,000,000 | 37,249 | 62,039 |
| 79 | 4 | 58,948 | 57,141 | 54,121 | 1,000,000 | 83,311 | 108,546 |
| 80 | 5 | 58,948 | 57,141 | 54,121 | 1,000,000 | 129,669 | 155,239 |
| 81 | 6 | 58,948 | 57,141 | 54,121 | 1,000,000 | 174,386 | 199,908 |
| 82 | 7 | 58,948 | 57,141 | 54,121 | 1,000,000 | 218,851 | 244,203 |
| 83 | 8 | 58,948 | 57,141 | 54,121 | 1,000,000 | 263,134 | 288,193 |
| 84 | 9 | 58,948 | 57,141 | 54,121 | 1,000,000 | 307,345 | 331,989 |
| 85 | 10 | 58,948 | 57,141 | 54,121 | 1,000,000 | 351,671 | 375,774 |
| 86 | 11 | 58,948 | 57,141 | 54,121 | 1,000,000 | 394,116 | 417,628 |
| 87 | 12 | 58,948 | 57,141 | 54,121 | 1,000,000 | 434,760 | 457,647 |
| 88 | 13 | 58,948 | 57,141 | 54,121 | 1,000,000 | 473,647 | 495,896 |
| 89 | 14 | 58,948 | 57,141 | 54,121 | 1,000,000 | 510,697 | 532,326 |
| 90 | 15 | 58,948 | 57,141 | 54,121 | 1,000,000 | 545,837 | 566,906 |
| 91 | 16 | 58,948 | 57,141 | 54,121 | 1,000,000 | 572,253 | 592,596 |
| 92 | 17 | 58,948 | 57,141 | 54,121 | 1,000,000 | 596,505 | 616,153 |
| 93 | 18 | 58,948 | 57,141 | 54,121 | 1,000,000 | 618,578 | 637,572 |
| 94 | 19 | 58,948 | 57,141 | 54,121 | 1,000,000 | 638,404 | 656,799 |
| 95 | 20 | 58,948 | 57,141 | 54,121 | 1,000,000 | 656,386 | 674,226 |
| 96 | 21 | 58,948 | 57,141 | 54,121 | 1,000,000 | 673,620 | 690,911 |
| 97 | 22 | 58,948 | 57,141 | 54,121 | 1,000,000 | 689,899 | 706,656 |
| 98 | 23 | 58,948 | 57,141 | 54,121 | 1,000,000 | 705,739 | 721,958 |
| 99 | 24 | 58,948 | 57,141 | 54,121 | 1,000,000 | 720,455 | 736,160 |
| 100 | 25 | 58,948 | 57,141 | 54,121 | 1,000,000 | 733,337 | 748,588 |
| 101 | 26 | 58,948 | 57,141 | 54,121 | 1,000,000 | 744,309 | 759,172 |
| 102 | 27 | 58,948 | 57,141 | 54,121 | 1,000,000 | 753,421 | 767,962 |
| 103 | 28 | 58,948 | 57,141 | 54,121 | 1,000,000 | 760,781 | 775,066 |
| 104 | 29 | 58,948 | 57,141 | 54,121 | 1,000,000 | 766,744 | 780,823 |
| 105 | 30 | 58,948 | 57,141 | 54,121 | 1,000,000 | 771,712 | 785,619 |
| 106 | 31 | 58,948 | 57,141 | 54,121 | 1,000,000 | 775,776 | 789,541 |
| 107 | 32 | 58,948 | 57,141 | 54,121 | 1,000,000 | 778,898 | 792,553 |
| 108 | 33 | 58,948 | 57,141 | 54,121 | 1,000,000 | 780,692 | 794,284 |
| 109 | 34 | 58,948 | 57,141 | 54,121 | 1,000,000 | 781,919 | 795,467 |
| 110 | 35 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 111 | 36 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 112 | 37 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 113 | 38 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 114 | 39 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 115 | 40 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 116 | 41 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 117 | 42 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 118 | 43 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 119 | 44 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 120 | 45 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 121 | 46 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |

Scenario: MNS75UCS0D121P121M15
Margin 15

| Age | Duration | Gross Premium | CRVM Net Premium No Lapse | CRVM Net Premium with Lapse | Death Benefits | Experience Reserves | Reserve With Margin |
|---|---|---|---|---|---|---|---|
| 122 | 47 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 123 | 48 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 124 | 49 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 125 | 50 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 126 | 51 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 127 | 52 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 128 | 53 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 129 | 54 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 130 | 55 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 131 | 56 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 132 | 57 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 133 | 58 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 134 | 59 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 135 | 60 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 136 | 61 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 137 | 62 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 138 | 63 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 139 | 64 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 140 | 65 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 141 | 66 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 142 | 67 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 143 | 68 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 144 | 69 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 145 | 70 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 146 | 71 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 147 | 72 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 148 | 73 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 149 | 74 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 150 | 75 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 151 | 76 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 152 | 77 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 153 | 78 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 154 | 79 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 155 | 80 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 156 | 81 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 157 | 82 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |
| 158 | 83 | 58,948 | 57,141 | 54,121 | 1,000,000 | 782,557 | 796,082 |

| CRVM No Lapse | CRVM with Lapse | Reserve with Margin / CRVM No Lapse | Reserve with Margin / CRVM with Lapse |
|---|---|---|---|
| - | - | #DIV/0! | #DIV/0! |
| - | - | #DIV/0! | #DIV/0! |
| 48,647 | 46,633 | 32% | 33% |
| 96,290 | 93,145 | 64% | 67% |
| 142,992 | 139,641 | 76% | 78% |
| 188,797 | 186,224 | 82% | 83% |
| 233,760 | 230,371 | 86% | 87% |
| 277,844 | 274,037 | 88% | 89% |
| 321,098 | 317,293 | 90% | 91% |
| 363,599 | 360,247 | 91% | 92% |
| 405,482 | 403,079 | 93% | 93% |
| 444,853 | 443,957 | 94% | 94% |
| 481,733 | 482,991 | 95% | 95% |
| 516,069 | 520,264 | 96% | 95% |
| 547,627 | 555,755 | 97% | 96% |
| 576,077 | 589,467 | 98% | 96% |
| 601,567 | 614,151 | 99% | 96% |
| 624,908 | 636,755 | 99% | 97% |
| 646,106 | 657,283 | 99% | 97% |
| 665,116 | 675,693 | 99% | 97% |
| 682,333 | 692,367 | 99% | 97% |
| 698,794 | 708,308 | 99% | 98% |
| 714,310 | 723,334 | 99% | 98% |
| 729,366 | 737,914 | 99% | 98% |
| 743,321 | 751,429 | 99% | 98% |
| 755,522 | 763,243 | 99% | 98% |
| 765,904 | 773,298 | 99% | 98% |
| 774,522 | 781,643 | 99% | 98% |
| 781,482 | 788,384 | 99% | 98% |
| 787,122 | 793,846 | 99% | 98% |
| 791,817 | 798,393 | 99% | 98% |
| 795,655 | 802,109 | 99% | 98% |
| 798,599 | 804,960 | 99% | 98% |
| 800,292 | 806,599 | 99% | 98% |
| 801,447 | 807,719 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |

| CRVM No Lapse | CRVM with Lapse | Reserve with Margin / CRVM No Lapse | Reserve with Margin / CRVM with Lapse |
|---|---|---|---|
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |
| 802,047 | 808,299 | 99% | 98% |

**Slide 2 Data: 45 PBR - Reserves**

| Age | Duration | Gross Premium | Experience Reserve | 2001 CSO Margin | 3.75%/ex Margin | 15/ex Margin |
|---|---|---|---|---|---|---|
| 45 | 0 | 10,439 | - | 11,708 | 1,497 | 6,845 |
| 46 | 1 | 10,439 | - | 11,573 | 961 | 6,374 |
| 47 | 2 | 10,439 | - | 21,910 | 10,886 | 16,365 |
| 48 | 3 | 10,439 | 4,691 | 32,733 | 21,287 | 26,833 |
| 49 | 4 | 10,439 | 14,684 | 44,097 | 32,220 | 37,834 |
| 50 | 5 | 10,439 | 25,245 | 56,051 | 43,734 | 49,416 |
| 51 | 6 | 10,439 | 36,047 | 67,935 | 55,303 | 60,993 |
| 52 | 7 | 10,439 | 47,355 | 80,313 | 67,370 | 73,064 |
| 53 | 8 | 10,439 | 59,177 | 93,187 | 79,938 | 85,632 |
| 54 | 9 | 10,439 | 71,512 | 106,554 | 93,006 | 98,696 |
| 55 | 10 | 10,439 | 84,353 | 120,405 | 106,564 | 112,245 |
| 56 | 11 | 10,439 | 97,711 | 134,747 | 120,621 | 126,290 |
| 57 | 12 | 10,439 | 111,601 | 149,593 | 135,190 | 140,843 |
| 58 | 13 | 10,439 | 126,042 | 164,955 | 150,285 | 155,918 |
| 59 | 14 | 10,439 | 141,061 | 180,858 | 165,933 | 171,540 |
| 60 | 15 | 10,439 | 156,693 | 197,331 | 182,163 | 187,740 |
| 61 | 16 | 10,439 | 172,980 | 214,411 | 199,015 | 204,556 |
| 62 | 17 | 10,439 | 189,966 | 232,134 | 216,526 | 222,026 |
| 63 | 18 | 10,439 | 207,678 | 250,523 | 234,721 | 240,175 |
| 64 | 19 | 10,439 | 226,137 | 269,593 | 253,616 | 259,017 |
| 65 | 20 | 10,439 | 245,338 | 289,334 | 273,202 | 278,545 |
| 66 | 21 | 10,439 | 265,245 | 309,710 | 293,441 | 298,722 |
| 67 | 22 | 10,439 | 285,795 | 330,656 | 314,270 | 319,483 |
| 68 | 23 | 10,439 | 306,901 | 352,090 | 335,602 | 340,744 |
| 69 | 24 | 10,439 | 328,451 | 373,905 | 357,330 | 362,399 |
| 70 | 25 | 10,439 | 350,324 | 395,989 | 379,335 | 384,330 |
| 71 | 26 | 10,439 | 372,405 | 418,238 | 401,509 | 406,431 |
| 72 | 27 | 10,439 | 395,081 | 441,016 | 424,225 | 429,073 |
| 73 | 28 | 10,439 | 418,354 | 464,327 | 447,482 | 452,256 |
| 74 | 29 | 10,439 | 442,239 | 488,190 | 471,295 | 475,996 |
| 75 | 30 | 10,439 | 466,751 | 512,626 | 495,680 | 500,312 |
| 76 | 31 | 10,439 | 486,734 | 531,994 | 515,189 | 519,701 |
| 77 | 32 | 10,439 | 506,715 | 551,288 | 534,645 | 539,036 |
| 78 | 33 | 10,439 | 526,656 | 570,472 | 554,012 | 558,279 |
| 79 | 34 | 10,439 | 546,526 | 589,519 | 573,262 | 577,404 |
| 80 | 35 | 10,439 | 566,305 | 608,410 | 592,376 | 596,390 |
| 81 | 36 | 10,439 | 585,975 | 627,128 | 611,337 | 615,222 |
| 82 | 37 | 10,439 | 605,438 | 645,584 | 630,052 | 633,809 |
| 83 | 38 | 10,439 | 624,680 | 663,768 | 648,512 | 652,140 |
| 84 | 39 | 10,439 | 643,706 | 681,684 | 666,720 | 670,218 |
| 85 | 40 | 10,439 | 662,528 | 699,344 | 684,689 | 688,057 |
| 86 | 41 | 10,439 | 680,894 | 716,524 | 702,184 | 705,425 |
| 87 | 42 | 10,439 | 698,727 | 733,157 | 719,135 | 722,252 |
| 88 | 43 | 10,439 | 715,954 | 749,182 | 735,476 | 738,472 |
| 89 | 44 | 10,439 | 732,416 | 764,461 | 751,062 | 753,942 |
| 90 | 45 | 10,439 | 747,967 | 778,870 | 765,761 | 768,532 |
| 91 | 46 | 10,439 | 762,626 | 792,431 | 779,593 | 782,262 |

**Slide 2 Data: 45 PBR - Reserves**

| Age | Duration | Gross Premium | Experience Reserve | 2001 CSO Margin | 3.75%/ex Margin | 15/ex Margin |
|---|---|---|---|---|---|---|
| 92 | 47 | 10,439 | 776,085 | 804,877 | 792,275 | 794,852 |
| 93 | 48 | 10,439 | 788,334 | 816,208 | 803,805 | 806,300 |
| 94 | 49 | 10,439 | 799,336 | 826,399 | 814,153 | 816,575 |
| 95 | 50 | 10,439 | 809,315 | 835,654 | 823,530 | 825,890 |
| 96 | 51 | 10,439 | 818,878 | 844,519 | 832,507 | 834,807 |
| 97 | 52 | 10,439 | 827,912 | 852,894 | 840,977 | 843,222 |
| 98 | 53 | 10,439 | 836,703 | 861,036 | 849,206 | 851,400 |
| 99 | 54 | 10,439 | 844,869 | 868,610 | 856,842 | 858,990 |
| 100 | 55 | 10,439 | 852,018 | 875,270 | 863,521 | 865,632 |
| 101 | 56 | 10,439 | 858,107 | 880,982 | 869,207 | 871,289 |
| 102 | 57 | 10,439 | 863,163 | 885,770 | 873,926 | 875,987 |
| 103 | 58 | 10,439 | 867,248 | 889,688 | 877,737 | 879,783 |
| 104 | 59 | 10,439 | 870,557 | 892,910 | 880,825 | 882,860 |
| 105 | 60 | 10,439 | 873,314 | 895,634 | 883,396 | 885,424 |
| 106 | 61 | 10,439 | 875,569 | 897,907 | 885,498 | 887,520 |
| 107 | 62 | 10,439 | 877,302 | 899,708 | 887,112 | 889,130 |
| 108 | 63 | 10,439 | 878,297 | 900,840 | 888,039 | 890,055 |
| 109 | 64 | 10,439 | 878,978 | 901,687 | 888,673 | 890,687 |
| 110 | 65 | 10,439 | 879,332 | 902,238 | 889,002 | 891,016 |
| 111 | 66 | 10,439 | 879,332 | 902,465 | 889,002 | 891,016 |
| 112 | 67 | 10,439 | 879,332 | 902,694 | 889,002 | 891,016 |
| 113 | 68 | 10,439 | 879,332 | 902,925 | 889,002 | 891,016 |
| 114 | 69 | 10,439 | 879,332 | 903,156 | 889,002 | 891,016 |
| 115 | 70 | 10,439 | 879,332 | 903,388 | 889,002 | 891,016 |
| 116 | 71 | 10,439 | 879,332 | 903,621 | 889,002 | 891,016 |
| 117 | 72 | 10,439 | 879,332 | 903,856 | 889,002 | 891,016 |
| 118 | 73 | 10,439 | 879,332 | 904,091 | 889,002 | 891,016 |
| 119 | 74 | 10,439 | 879,332 | 904,328 | 889,002 | 891,016 |
| 120 | 75 | 10,439 | 879,332 | 904,565 | 889,002 | 891,016 |
| 121 | 76 | 10,439 | 879,332 | 904,803 | 889,002 | 891,016 |
| 122 | 77 | 10,439 | 879,332 | 905,043 | 889,002 | 891,016 |
| 123 | 78 | 10,439 | 879,332 | 905,283 | 889,002 | 891,016 |
| 124 | 79 | 10,439 | 879,332 | 905,524 | 889,002 | 891,016 |
| 125 | 80 | 10,439 | 879,332 | 905,766 | 889,002 | 891,016 |
| 126 | 81 | 10,439 | 879,332 | 906,009 | 889,002 | 891,016 |
| 127 | 82 | 10,439 | 879,332 | 906,252 | 889,002 | 891,016 |
| 128 | 83 | 10,439 | 879,332 | 906,496 | 889,002 | 891,016 |

**Slide 3: Data- 45 CRVM - with Lapse**

| Age | Duration | Gross Premium | Experience Reserve | 2001 CSO Margin no Lapse | 2001 CSO with Lapse | 3.75%/ex Margin with Lapse | 15/ex Margin with Lapse |
|---|---|---|---|---|---|---|---|
| 45 | 0 | 10,439 | - | - | - | - | - |
| 46 | 1 | 10,439 | - | - | - | - | - |
| 47 | 2 | 10,439 | - | 12,787 | 11,347 | 10,912 | 10,981 |
| 48 | 3 | 10,439 | 4,691 | 25,887 | 23,188 | 22,311 | 22,450 |
| 49 | 4 | 10,439 | 14,684 | 39,335 | 35,576 | 34,252 | 34,458 |
| 50 | 5 | 10,439 | 25,245 | 53,160 | 48,559 | 46,780 | 47,055 |
| 51 | 6 | 10,439 | 36,047 | 67,388 | 61,541 | 59,328 | 59,665 |
| 52 | 7 | 10,439 | 47,355 | 82,023 | 75,012 | 72,366 | 72,763 |
| 53 | 8 | 10,439 | 59,177 | 97,057 | 88,973 | 85,897 | 86,353 |
| 54 | 9 | 10,439 | 71,512 | 112,477 | 103,419 | 99,916 | 100,428 |
| 55 | 10 | 10,439 | 84,353 | 128,262 | 118,337 | 114,411 | 114,977 |
| 56 | 11 | 10,439 | 97,711 | 144,409 | 133,733 | 129,389 | 130,008 |
| 57 | 12 | 10,439 | 111,601 | 160,917 | 149,617 | 144,860 | 145,530 |
| 58 | 13 | 10,439 | 126,042 | 177,789 | 165,998 | 160,836 | 161,554 |
| 59 | 14 | 10,439 | 141,061 | 195,036 | 182,900 | 177,340 | 178,105 |
| 60 | 15 | 10,439 | 156,693 | 212,670 | 200,346 | 194,399 | 195,207 |
| 61 | 16 | 10,439 | 172,980 | 230,715 | 218,373 | 212,049 | 212,898 |
| 62 | 17 | 10,439 | 189,966 | 249,189 | 237,012 | 230,323 | 231,211 |
| 63 | 18 | 10,439 | 207,678 | 268,097 | 256,282 | 249,242 | 250,166 |
| 64 | 19 | 10,439 | 226,137 | 287,434 | 276,195 | 268,817 | 269,775 |
| 65 | 20 | 10,439 | 245,338 | 307,169 | 296,736 | 289,037 | 290,025 |
| 66 | 21 | 10,439 | 265,245 | 327,244 | 317,866 | 309,860 | 310,876 |
| 67 | 22 | 10,439 | 285,795 | 347,575 | 339,518 | 331,221 | 332,264 |
| 68 | 23 | 10,439 | 306,901 | 368,055 | 361,606 | 353,033 | 354,100 |
| 69 | 24 | 10,439 | 328,451 | 388,555 | 384,025 | 375,190 | 376,278 |
| 70 | 25 | 10,439 | 350,324 | 408,936 | 406,662 | 397,574 | 398,684 |
| 71 | 26 | 10,439 | 372,405 | 429,064 | 429,414 | 420,083 | 421,213 |
| 72 | 27 | 10,439 | 395,081 | 449,261 | 452,639 | 443,075 | 444,225 |
| 73 | 28 | 10,439 | 418,354 | 469,486 | 476,339 | 466,552 | 467,722 |
| 74 | 29 | 10,439 | 442,239 | 489,702 | 500,530 | 490,524 | 491,717 |
| 75 | 30 | 10,439 | 466,751 | 509,862 | 525,232 | 515,007 | 516,224 |
| 76 | 31 | 10,439 | 486,734 | 529,931 | 544,671 | 534,358 | 535,582 |
| 77 | 32 | 10,439 | 506,715 | 549,872 | 563,987 | 553,606 | 554,834 |
| 78 | 33 | 10,439 | 526,656 | 569,649 | 583,144 | 572,717 | 573,946 |
| 79 | 34 | 10,439 | 546,526 | 589,236 | 602,116 | 591,663 | 592,893 |
| 80 | 35 | 10,439 | 566,305 | 608,613 | 620,886 | 610,428 | 611,655 |
| 81 | 36 | 10,439 | 585,975 | 627,766 | 639,438 | 628,995 | 630,218 |
| 82 | 37 | 10,439 | 605,438 | 646,607 | 657,688 | 647,279 | 648,496 |
| 83 | 38 | 10,439 | 624,680 | 665,126 | 675,627 | 665,270 | 666,478 |
| 84 | 39 | 10,439 | 643,706 | 683,328 | 693,258 | 682,971 | 684,171 |
| 85 | 40 | 10,439 | 662,528 | 701,228 | 710,597 | 700,399 | 701,587 |
| 86 | 41 | 10,439 | 680,894 | 718,603 | 727,427 | 717,329 | 718,505 |
| 87 | 42 | 10,439 | 698,727 | 735,391 | 743,688 | 733,698 | 734,862 |
| 88 | 43 | 10,439 | 715,954 | 751,530 | 759,322 | 749,445 | 750,597 |
| 89 | 44 | 10,439 | 732,416 | 766,890 | 774,200 | 764,435 | 765,576 |
| 90 | 45 | 10,439 | 747,967 | 781,350 | 788,206 | 778,548 | 779,677 |
| 91 | 46 | 10,439 | 762,626 | 794,936 | 801,366 | 791,805 | 792,925 |

**Slide 3: Data- 45 CRVM - with Lapse**

| Age | Duration | Gross Premium | Experience Reserve | 2001 CSO Margin no Lapse | 2001 CSO with Lapse | 3.75%/ex Margin with Lapse | 15/ex Margin with Lapse |
|---|---|---|---|---|---|---|---|
| 92 | 47 | 10,439 | 776,085 | 807,388 | 813,427 | 803,943 | 805,056 |
| 93 | 48 | 10,439 | 788,334 | 818,710 | 824,395 | 814,966 | 816,072 |
| 94 | 49 | 10,439 | 799,336 | 828,883 | 834,249 | 824,849 | 825,953 |
| 95 | 50 | 10,439 | 809,315 | 838,115 | 843,191 | 833,798 | 834,901 |
| 96 | 51 | 10,439 | 818,878 | 846,944 | 851,744 | 842,353 | 843,456 |
| 97 | 52 | 10,439 | 827,912 | 855,277 | 859,815 | 850,415 | 851,520 |
| 98 | 53 | 10,439 | 836,703 | 863,365 | 867,650 | 858,236 | 859,345 |
| 99 | 54 | 10,439 | 844,869 | 870,880 | 874,929 | 865,484 | 866,598 |
| 100 | 55 | 10,439 | 852,018 | 877,483 | 881,325 | 871,818 | 872,939 |
| 101 | 56 | 10,439 | 858,107 | 883,140 | 886,805 | 877,205 | 878,335 |
| 102 | 57 | 10,439 | 863,163 | 887,880 | 891,395 | 881,674 | 882,814 |
| 103 | 58 | 10,439 | 867,248 | 891,756 | 895,150 | 885,282 | 886,431 |
| 104 | 59 | 10,439 | 870,557 | 894,942 | 898,237 | 888,203 | 889,362 |
| 105 | 60 | 10,439 | 873,314 | 897,636 | 900,846 | 890,635 | 891,802 |
| 106 | 61 | 10,439 | 875,569 | 899,881 | 903,021 | 892,621 | 893,797 |
| 107 | 62 | 10,439 | 877,302 | 901,660 | 904,744 | 894,144 | 895,327 |
| 108 | 63 | 10,439 | 878,297 | 902,778 | 905,826 | 895,020 | 896,207 |
| 109 | 64 | 10,439 | 878,978 | 903,614 | 906,636 | 895,618 | 896,807 |
| 110 | 65 | 10,439 | 879,332 | 904,157 | 907,162 | 895,928 | 897,119 |
| 111 | 66 | 10,439 | 879,332 | 904,382 | 907,380 | 895,928 | 897,119 |
| 112 | 67 | 10,439 | 879,332 | 904,609 | 907,600 | 895,928 | 897,119 |
| 113 | 68 | 10,439 | 879,332 | 904,836 | 907,820 | 895,928 | 897,119 |
| 114 | 69 | 10,439 | 879,332 | 905,065 | 908,042 | 895,928 | 897,119 |
| 115 | 70 | 10,439 | 879,332 | 905,295 | 908,264 | 895,928 | 897,119 |
| 116 | 71 | 10,439 | 879,332 | 905,525 | 908,488 | 895,928 | 897,119 |
| 117 | 72 | 10,439 | 879,332 | 905,757 | 908,712 | 895,928 | 897,119 |
| 118 | 73 | 10,439 | 879,332 | 905,990 | 908,938 | 895,928 | 897,119 |
| 119 | 74 | 10,439 | 879,332 | 906,224 | 909,164 | 895,928 | 897,119 |
| 120 | 75 | 10,439 | 879,332 | 906,458 | 909,392 | 895,928 | 897,119 |
| 121 | 76 | 10,439 | 879,332 | 906,694 | 909,620 | 895,928 | 897,119 |
| 122 | 77 | 10,439 | 879,332 | 906,931 | 909,849 | 895,928 | 897,119 |
| 123 | 78 | 10,439 | 879,332 | 907,168 | 910,079 | 895,928 | 897,119 |
| 124 | 79 | 10,439 | 879,332 | 907,406 | 910,310 | 895,928 | 897,119 |
| 125 | 80 | 10,439 | 879,332 | 907,645 | 910,541 | 895,928 | 897,119 |
| 126 | 81 | 10,439 | 879,332 | 907,885 | 910,774 | 895,928 | 897,119 |
| 127 | 82 | 10,439 | 879,332 | 908,126 | 911,007 | 895,928 | 897,119 |
| 128 | 83 | 10,439 | 879,332 | 908,368 | 911,241 | 895,928 | 897,119 |

**Slide 4 Data: 75 PBR - Reserves**

| Age | Duration | Gross Premium | Experience Reserve | 2001 CSO Margin | 3.75%/ex Margin | 15/ex Margin |
|---|---|---|---|---|---|---|
| 75 | 0 | 58,948 | - | 1,722 | - | - |
| 76 | 1 | 58,948 | - | - | - | - |
| 77 | 2 | 58,948 | - | 39,100 | 7,261 | 15,618 |
| 78 | 3 | 58,948 | 37,249 | 85,503 | 53,878 | 62,039 |
| 79 | 4 | 58,948 | 83,311 | 131,968 | 100,582 | 108,546 |
| 80 | 5 | 58,948 | 129,669 | 178,602 | 147,471 | 155,239 |
| 81 | 6 | 58,948 | 174,386 | 222,928 | 192,421 | 199,908 |
| 82 | 7 | 58,948 | 218,851 | 266,839 | 237,000 | 244,203 |
| 83 | 8 | 58,948 | 263,134 | 310,404 | 281,278 | 288,193 |
| 84 | 9 | 58,948 | 307,345 | 353,731 | 325,365 | 331,989 |
| 85 | 10 | 58,948 | 351,671 | 397,002 | 369,444 | 375,774 |
| 86 | 11 | 58,948 | 394,116 | 438,362 | 411,577 | 417,628 |
| 87 | 12 | 58,948 | 434,760 | 477,918 | 451,856 | 457,647 |
| 88 | 13 | 58,948 | 473,647 | 515,753 | 490,343 | 495,896 |
| 89 | 14 | 58,948 | 510,697 | 551,856 | 526,979 | 532,326 |
| 90 | 15 | 58,948 | 545,837 | 586,248 | 561,721 | 566,906 |
| 91 | 16 | 58,948 | 572,253 | 611,622 | 587,602 | 592,596 |
| 92 | 17 | 58,948 | 596,505 | 634,910 | 611,331 | 616,153 |
| 93 | 18 | 58,948 | 618,578 | 656,111 | 632,904 | 637,572 |
| 94 | 19 | 58,948 | 638,404 | 675,180 | 652,266 | 656,799 |
| 95 | 20 | 58,948 | 656,386 | 692,497 | 669,812 | 674,226 |
| 96 | 21 | 58,948 | 673,620 | 709,083 | 686,608 | 690,911 |
| 97 | 22 | 58,948 | 689,899 | 724,753 | 702,455 | 706,656 |
| 98 | 23 | 58,948 | 705,739 | 739,987 | 717,853 | 721,958 |
| 99 | 24 | 58,948 | 720,455 | 754,159 | 732,141 | 736,160 |
| 100 | 25 | 58,948 | 733,337 | 766,621 | 744,638 | 748,588 |
| 101 | 26 | 58,948 | 744,309 | 777,309 | 755,276 | 759,172 |
| 102 | 27 | 58,948 | 753,421 | 786,267 | 764,106 | 767,962 |
| 103 | 28 | 58,948 | 760,781 | 793,597 | 771,237 | 775,066 |
| 104 | 29 | 58,948 | 766,744 | 799,625 | 777,015 | 780,823 |
| 105 | 30 | 58,948 | 771,712 | 804,724 | 781,825 | 785,619 |
| 106 | 31 | 58,948 | 775,776 | 808,976 | 785,758 | 789,541 |
| 107 | 32 | 58,948 | 778,898 | 812,346 | 788,777 | 792,553 |
| 108 | 33 | 58,948 | 780,692 | 814,465 | 790,512 | 794,284 |
| 109 | 34 | 58,948 | 781,919 | 816,050 | 791,698 | 795,467 |
| 110 | 35 | 58,948 | 782,557 | 817,079 | 792,313 | 796,082 |
| 111 | 36 | 58,948 | 782,557 | 817,505 | 792,313 | 796,082 |
| 112 | 37 | 58,948 | 782,557 | 817,934 | 792,313 | 796,082 |
| 113 | 38 | 58,948 | 782,557 | 818,364 | 792,313 | 796,082 |
| 114 | 39 | 58,948 | 782,557 | 818,797 | 792,313 | 796,082 |
| 115 | 40 | 58,948 | 782,557 | 819,232 | 792,313 | 796,082 |
| 116 | 41 | 58,948 | 782,557 | 819,668 | 792,313 | 796,082 |
| 117 | 42 | 58,948 | 782,557 | 820,107 | 792,313 | 796,082 |
| 118 | 43 | 58,948 | 782,557 | 820,547 | 792,313 | 796,082 |
| 119 | 44 | 58,948 | 782,557 | 820,990 | 792,313 | 796,082 |
| 120 | 45 | 58,948 | 782,557 | 821,434 | 792,313 | 796,082 |
| 121 | 46 | 58,948 | 782,557 | 821,880 | 792,313 | 796,082 |

**Slide 4 Data: 75 PBR - Reserves**

| Age | Duration | Gross Premium | Experience Reserve | 2001 CSO Margin | 3.75%/ex Margin | 15/ex Margin |
|---|---|---|---|---|---|---|
| 122 | 47 | 58,948 | 782,557 | 822,328 | 792,313 | 796,082 |
| 123 | 48 | 58,948 | 782,557 | 822,777 | 792,313 | 796,082 |
| 124 | 49 | 58,948 | 782,557 | 823,228 | 792,313 | 796,082 |
| 125 | 50 | 58,948 | 782,557 | 823,681 | 792,313 | 796,082 |
| 126 | 51 | 58,948 | 782,557 | 824,135 | 792,313 | 796,082 |
| 127 | 52 | 58,948 | 782,557 | 824,590 | 792,313 | 796,082 |
| 128 | 53 | 58,948 | 782,557 | 825,048 | 792,313 | 796,082 |
| 129 | 54 | 58,948 | 782,557 | 825,506 | 792,313 | 796,082 |
| 130 | 55 | 58,948 | 782,557 | 825,966 | 792,313 | 796,082 |
| 131 | 56 | 58,948 | 782,557 | 826,428 | 792,313 | 796,082 |
| 132 | 57 | 58,948 | 782,557 | 826,890 | 792,313 | 796,082 |
| 133 | 58 | 58,948 | 782,557 | 827,354 | 792,313 | 796,082 |
| 134 | 59 | 58,948 | 782,557 | 827,819 | 792,313 | 796,082 |
| 135 | 60 | 58,948 | 782,557 | 828,286 | 792,313 | 796,082 |
| 136 | 61 | 58,948 | 782,557 | 828,753 | 792,313 | 796,082 |
| 137 | 62 | 58,948 | 782,557 | 829,222 | 792,313 | 796,082 |
| 138 | 63 | 58,948 | 782,557 | 829,692 | 792,313 | 796,082 |
| 139 | 64 | 58,948 | 782,557 | 830,162 | 792,313 | 796,082 |
| 140 | 65 | 58,948 | 782,557 | 830,634 | 792,313 | 796,082 |
| 141 | 66 | 58,948 | 782,557 | 831,107 | 792,313 | 796,082 |
| 142 | 67 | 58,948 | 782,557 | 831,580 | 792,313 | 796,082 |
| 143 | 68 | 58,948 | 782,557 | 832,055 | 792,313 | 796,082 |
| 144 | 69 | 58,948 | 782,557 | 832,530 | 792,313 | 796,082 |
| 145 | 70 | 58,948 | 782,557 | 833,006 | 792,313 | 796,082 |
| 146 | 71 | 58,948 | 782,557 | 833,483 | 792,313 | 796,082 |
| 147 | 72 | 58,948 | 782,557 | 833,961 | 792,313 | 796,082 |
| 148 | 73 | 58,948 | 782,557 | 834,439 | 792,313 | 796,082 |
| 149 | 74 | 58,948 | 782,557 | 834,918 | 792,313 | 796,082 |
| 150 | 75 | 58,948 | 782,557 | 835,398 | 792,313 | 796,082 |
| 151 | 76 | 58,948 | 782,557 | 835,878 | 792,313 | 796,082 |
| 152 | 77 | 58,948 | 782,557 | 836,359 | 792,313 | 796,082 |
| 153 | 78 | 58,948 | 782,557 | 836,840 | 792,313 | 796,082 |
| 154 | 79 | 58,948 | 782,557 | 837,322 | 792,313 | 796,082 |
| 155 | 80 | 58,948 | 782,557 | 837,804 | 792,313 | 796,082 |
| 156 | 81 | 58,948 | 782,557 | 838,287 | 792,313 | 796,082 |
| 157 | 82 | 58,948 | 782,557 | 838,770 | 792,313 | 796,082 |
| 158 | 83 | 58,948 | 782,557 | 839,254 | 792,313 | 796,082 |

**Slide 5: Data- 75 CRVM - with Lapse**

| Age | Duration | Gross Premium | Experience Reserve | 2001 CSO Margin no Lapse | 2001 CSO with Lapse | 3.75%/ex Margin with Lapse | 15/ex Margin with Lapse |
|---|---|---|---|---|---|---|---|
| 75 | - | 58,948 | - | - | - | - | - |
| 76 | 1 | 58,948 | - | - | - | - | - |
| 77 | 2 | 58,948 | - | 49,567 | 47,513 | 46,516 | 46,633 |
| 78 | 3 | 58,948 | 37,249 | 98,075 | 94,865 | 92,919 | 93,145 |
| 79 | 4 | 58,948 | 83,311 | 145,586 | 142,160 | 139,310 | 139,641 |
| 80 | 5 | 58,948 | 129,669 | 192,147 | 189,505 | 185,792 | 186,224 |
| 81 | 6 | 58,948 | 174,386 | 237,809 | 234,308 | 229,859 | 230,371 |
| 82 | 7 | 58,948 | 218,851 | 282,537 | 278,575 | 273,452 | 274,037 |
| 83 | 8 | 58,948 | 263,134 | 326,382 | 322,377 | 316,642 | 317,293 |
| 84 | 9 | 58,948 | 307,345 | 369,420 | 365,824 | 359,537 | 360,247 |
| 85 | 10 | 58,948 | 351,671 | 411,785 | 409,097 | 402,314 | 403,079 |
| 86 | 11 | 58,948 | 394,116 | 451,597 | 450,380 | 443,143 | 443,957 |
| 87 | 12 | 58,948 | 434,760 | 488,884 | 489,792 | 482,129 | 482,991 |
| 88 | 13 | 58,948 | 473,647 | 523,599 | 527,432 | 519,355 | 520,264 |
| 89 | 14 | 58,948 | 510,697 | 555,514 | 563,304 | 554,793 | 555,755 |
| 90 | 15 | 58,948 | 545,837 | 584,310 | 597,451 | 588,437 | 589,467 |
| 91 | 16 | 58,948 | 572,253 | 610,139 | 622,464 | 613,075 | 614,151 |
| 92 | 17 | 58,948 | 596,505 | 633,812 | 645,388 | 635,634 | 636,755 |
| 93 | 18 | 58,948 | 618,578 | 655,338 | 666,234 | 656,119 | 657,283 |
| 94 | 19 | 58,948 | 638,404 | 674,679 | 684,963 | 674,487 | 675,693 |
| 95 | 20 | 58,948 | 656,386 | 692,229 | 701,959 | 691,118 | 692,367 |
| 96 | 21 | 58,948 | 673,620 | 709,016 | 718,215 | 707,017 | 708,308 |
| 97 | 22 | 58,948 | 689,899 | 724,857 | 733,555 | 722,000 | 723,334 |
| 98 | 23 | 58,948 | 705,739 | 740,235 | 748,447 | 736,536 | 737,914 |
| 99 | 24 | 58,948 | 720,455 | 754,522 | 762,283 | 750,006 | 751,429 |
| 100 | 25 | 58,948 | 733,337 | 767,074 | 774,438 | 761,777 | 763,243 |
| 101 | 26 | 58,948 | 744,309 | 777,830 | 784,854 | 771,789 | 773,298 |
| 102 | 27 | 58,948 | 753,421 | 786,841 | 793,579 | 780,094 | 781,643 |
| 103 | 28 | 58,948 | 760,781 | 794,210 | 800,715 | 786,799 | 788,384 |
| 104 | 29 | 58,948 | 766,744 | 800,268 | 806,582 | 792,229 | 793,846 |
| 105 | 30 | 58,948 | 771,712 | 805,389 | 811,541 | 796,747 | 798,393 |
| 106 | 31 | 58,948 | 775,776 | 809,658 | 815,675 | 800,439 | 802,109 |
| 107 | 32 | 58,948 | 778,898 | 813,039 | 818,949 | 803,271 | 804,960 |
| 108 | 33 | 58,948 | 780,692 | 815,164 | 821,008 | 804,898 | 806,599 |
| 109 | 34 | 58,948 | 781,919 | 816,754 | 822,547 | 806,009 | 807,719 |
| 110 | 35 | 58,948 | 782,557 | 817,786 | 823,546 | 806,585 | 808,299 |
| 111 | 36 | 58,948 | 782,557 | 818,214 | 823,961 | 806,585 | 808,299 |
| 112 | 37 | 58,948 | 782,557 | 818,645 | 824,378 | 806,585 | 808,299 |
| 113 | 38 | 58,948 | 782,557 | 819,078 | 824,797 | 806,585 | 808,299 |
| 114 | 39 | 58,948 | 782,557 | 819,512 | 825,218 | 806,585 | 808,299 |
| 115 | 40 | 58,948 | 782,557 | 819,949 | 825,641 | 806,585 | 808,299 |
| 116 | 41 | 58,948 | 782,557 | 820,388 | 826,066 | 806,585 | 808,299 |
| 117 | 42 | 58,948 | 782,557 | 820,829 | 826,493 | 806,585 | 808,299 |
| 118 | 43 | 58,948 | 782,557 | 821,271 | 826,921 | 806,585 | 808,299 |
| 119 | 44 | 58,948 | 782,557 | 821,716 | 827,352 | 806,585 | 808,299 |
| 120 | 45 | 58,948 | 782,557 | 822,162 | 827,784 | 806,585 | 808,299 |
| 121 | 46 | 58,948 | 782,557 | 822,610 | 828,218 | 806,585 | 808,299 |

**Slide 5: Data- 75 CRVM - with Lapse**

| Age | Duration | Gross Premium | Experience Reserve | 2001 CSO Margin no Lapse | 2001 CSO with Lapse | 3.75%/ex Margin with Lapse | 15/ex Margin with Lapse |
|---|---|---|---|---|---|---|---|
| 122 | 47 | 58,948 | 782,557 | 823,059 | 828,653 | 806,585 | 808,299 |
| 123 | 48 | 58,948 | 782,557 | 823,511 | 829,090 | 806,585 | 808,299 |
| 124 | 49 | 58,948 | 782,557 | 823,964 | 829,529 | 806,585 | 808,299 |
| 125 | 50 | 58,948 | 782,557 | 824,418 | 829,969 | 806,585 | 808,299 |
| 126 | 51 | 58,948 | 782,557 | 824,875 | 830,411 | 806,585 | 808,299 |
| 127 | 52 | 58,948 | 782,557 | 825,332 | 830,854 | 806,585 | 808,299 |
| 128 | 53 | 58,948 | 782,557 | 825,791 | 831,299 | 806,585 | 808,299 |
| 129 | 54 | 58,948 | 782,557 | 826,252 | 831,745 | 806,585 | 808,299 |
| 130 | 55 | 58,948 | 782,557 | 826,714 | 832,192 | 806,585 | 808,299 |
| 131 | 56 | 58,948 | 782,557 | 827,177 | 832,641 | 806,585 | 808,299 |
| 132 | 57 | 58,948 | 782,557 | 827,642 | 833,090 | 806,585 | 808,299 |
| 133 | 58 | 58,948 | 782,557 | 828,107 | 833,542 | 806,585 | 808,299 |
| 134 | 59 | 58,948 | 782,557 | 828,574 | 833,994 | 806,585 | 808,299 |
| 135 | 60 | 58,948 | 782,557 | 829,043 | 834,447 | 806,585 | 808,299 |
| 136 | 61 | 58,948 | 782,557 | 829,512 | 834,902 | 806,585 | 808,299 |
| 137 | 62 | 58,948 | 782,557 | 829,982 | 835,357 | 806,585 | 808,299 |
| 138 | 63 | 58,948 | 782,557 | 830,454 | 835,814 | 806,585 | 808,299 |
| 139 | 64 | 58,948 | 782,557 | 830,926 | 836,271 | 806,585 | 808,299 |
| 140 | 65 | 58,948 | 782,557 | 831,400 | 836,730 | 806,585 | 808,299 |
| 141 | 66 | 58,948 | 782,557 | 831,874 | 837,189 | 806,585 | 808,299 |
| 142 | 67 | 58,948 | 782,557 | 832,350 | 837,650 | 806,585 | 808,299 |
| 143 | 68 | 58,948 | 782,557 | 832,826 | 838,111 | 806,585 | 808,299 |
| 144 | 69 | 58,948 | 782,557 | 833,303 | 838,573 | 806,585 | 808,299 |
| 145 | 70 | 58,948 | 782,557 | 833,780 | 839,035 | 806,585 | 808,299 |
| 146 | 71 | 58,948 | 782,557 | 834,259 | 839,499 | 806,585 | 808,299 |
| 147 | 72 | 58,948 | 782,557 | 834,738 | 839,963 | 806,585 | 808,299 |
| 148 | 73 | 58,948 | 782,557 | 835,218 | 840,428 | 806,585 | 808,299 |
| 149 | 74 | 58,948 | 782,557 | 835,699 | 840,893 | 806,585 | 808,299 |
| 150 | 75 | 58,948 | 782,557 | 836,180 | 841,359 | 806,585 | 808,299 |
| 151 | 76 | 58,948 | 782,557 | 836,662 | 841,825 | 806,585 | 808,299 |
| 152 | 77 | 58,948 | 782,557 | 837,144 | 842,292 | 806,585 | 808,299 |
| 153 | 78 | 58,948 | 782,557 | 837,627 | 842,760 | 806,585 | 808,299 |
| 154 | 79 | 58,948 | 782,557 | 838,110 | 843,228 | 806,585 | 808,299 |
| 155 | 80 | 58,948 | 782,557 | 838,594 | 843,696 | 806,585 | 808,299 |
| 156 | 81 | 58,948 | 782,557 | 839,078 | 844,165 | 806,585 | 808,299 |
| 157 | 82 | 58,948 | 782,557 | 839,562 | 844,634 | 806,585 | 808,299 |
| 158 | 83 | 58,948 | 782,557 | 840,047 | 845,104 | 806,585 | 808,299 |

**Slide 6 Data: 45 PBR - % of PBR No Margin**

| Age | Duration | Gross Premium | 2001 CSO Margin | 3.75%/ex Margin | 15/ex Margin |
|---|---|---|---|---|---|
| 45 | 0 | 10,439 | na | na | na |
| 46 | 1 | 10,439 | na | na | na |
| 47 | 2 | 10,439 | na | na | na |
| 48 | 3 | 10,439 | 698% | 454% | 572% |
| 49 | 4 | 10,439 | 300% | 219% | 258% |
| 50 | 5 | 10,439 | 222% | 173% | 196% |
| 51 | 6 | 10,439 | 188% | 153% | 169% |
| 52 | 7 | 10,439 | 170% | 142% | 154% |
| 53 | 8 | 10,439 | 157% | 135% | 145% |
| 54 | 9 | 10,439 | 149% | 130% | 138% |
| 55 | 10 | 10,439 | 143% | 126% | 133% |
| 56 | 11 | 10,439 | 138% | 123% | 129% |
| 57 | 12 | 10,439 | 134% | 121% | 126% |
| 58 | 13 | 10,439 | 131% | 119% | 124% |
| 59 | 14 | 10,439 | 128% | 118% | 122% |
| 60 | 15 | 10,439 | 126% | 116% | 120% |
| 61 | 16 | 10,439 | 124% | 115% | 118% |
| 62 | 17 | 10,439 | 122% | 114% | 117% |
| 63 | 18 | 10,439 | 121% | 113% | 116% |
| 64 | 19 | 10,439 | 119% | 112% | 115% |
| 65 | 20 | 10,439 | 118% | 111% | 114% |
| 66 | 21 | 10,439 | 117% | 111% | 113% |
| 67 | 22 | 10,439 | 116% | 110% | 112% |
| 68 | 23 | 10,439 | 115% | 109% | 111% |
| 69 | 24 | 10,439 | 114% | 109% | 110% |
| 70 | 25 | 10,439 | 113% | 108% | 110% |
| 71 | 26 | 10,439 | 112% | 108% | 109% |
| 72 | 27 | 10,439 | 112% | 107% | 109% |
| 73 | 28 | 10,439 | 111% | 107% | 108% |
| 74 | 29 | 10,439 | 110% | 107% | 108% |
| 75 | 30 | 10,439 | 110% | 106% | 107% |
| 76 | 31 | 10,439 | 109% | 106% | 107% |
| 77 | 32 | 10,439 | 109% | 106% | 106% |
| 78 | 33 | 10,439 | 108% | 105% | 106% |
| 79 | 34 | 10,439 | 108% | 105% | 106% |
| 80 | 35 | 10,439 | 107% | 105% | 105% |
| 81 | 36 | 10,439 | 107% | 104% | 105% |
| 82 | 37 | 10,439 | 107% | 104% | 105% |
| 83 | 38 | 10,439 | 106% | 104% | 104% |
| 84 | 39 | 10,439 | 106% | 104% | 104% |
| 85 | 40 | 10,439 | 106% | 103% | 104% |
| 86 | 41 | 10,439 | 105% | 103% | 104% |
| 87 | 42 | 10,439 | 105% | 103% | 103% |
| 88 | 43 | 10,439 | 105% | 103% | 103% |
| 89 | 44 | 10,439 | 104% | 103% | 103% |
| 90 | 45 | 10,439 | 104% | 102% | 103% |
| 91 | 46 | 10,439 | 104% | 102% | 103% |

**Slide 6 Data: 45 PBR - % of PBR No Margin**

| Age | Duration | Gross Premium | 2001 CSO Margin | 3.75%/ex Margin | 15/ex Margin |
|---|---|---|---|---|---|
| 92 | 47 | 10,439 | 104% | 102% | 102% |
| 93 | 48 | 10,439 | 104% | 102% | 102% |
| 94 | 49 | 10,439 | 103% | 102% | 102% |
| 95 | 50 | 10,439 | 103% | 102% | 102% |
| 96 | 51 | 10,439 | 103% | 102% | 102% |
| 97 | 52 | 10,439 | 103% | 102% | 102% |
| 98 | 53 | 10,439 | 103% | 101% | 102% |
| 99 | 54 | 10,439 | 103% | 101% | 102% |
| 100 | 55 | 10,439 | 103% | 101% | 102% |
| 101 | 56 | 10,439 | 103% | 101% | 102% |
| 102 | 57 | 10,439 | 103% | 101% | 101% |
| 103 | 58 | 10,439 | 103% | 101% | 101% |
| 104 | 59 | 10,439 | 103% | 101% | 101% |
| 105 | 60 | 10,439 | 103% | 101% | 101% |
| 106 | 61 | 10,439 | 103% | 101% | 101% |
| 107 | 62 | 10,439 | 103% | 101% | 101% |
| 108 | 63 | 10,439 | 103% | 101% | 101% |
| 109 | 64 | 10,439 | 103% | 101% | 101% |
| 110 | 65 | 10,439 | 103% | 101% | 101% |
| 111 | 66 | 10,439 | 103% | 101% | 101% |
| 112 | 67 | 10,439 | 103% | 101% | 101% |
| 113 | 68 | 10,439 | 103% | 101% | 101% |
| 114 | 69 | 10,439 | 103% | 101% | 101% |
| 115 | 70 | 10,439 | 103% | 101% | 101% |
| 116 | 71 | 10,439 | 103% | 101% | 101% |
| 117 | 72 | 10,439 | 103% | 101% | 101% |
| 118 | 73 | 10,439 | 103% | 101% | 101% |
| 119 | 74 | 10,439 | 103% | 101% | 101% |
| 120 | 75 | 10,439 | 103% | 101% | 101% |
| 121 | 76 | 10,439 | 103% | 101% | 101% |
| 122 | 77 | 10,439 | 103% | 101% | 101% |
| 123 | 78 | 10,439 | 103% | 101% | 101% |
| 124 | 79 | 10,439 | 103% | 101% | 101% |
| 125 | 80 | 10,439 | 103% | 101% | 101% |
| 126 | 81 | 10,439 | 103% | 101% | 101% |
| 127 | 82 | 10,439 | 103% | 101% | 101% |
| 128 | 83 | 10,439 | 103% | 101% | 101% |

**Slide 7: Data- 45 CRVM - % of PBR No Margin**

| Age | Duration | Gross Premium | 2001 CSO Margin no Lapse | 2001 CSO with Lapse | 3.75%/ex Margin with Lapse | 15/ex Margin with Lapse |
|---|---|---|---|---|---|---|
| 45 | 0 | 10,439 | na | na | na | na |
| 46 | 1 | 10,439 | na | na | na | na |
| 47 | 2 | 10,439 | na | na | na | na |
| 48 | 3 | 10,439 | 552% | 494% | 476% | 479% |
| 49 | 4 | 10,439 | 268% | 242% | 233% | 235% |
| 50 | 5 | 10,439 | 211% | 192% | 185% | 186% |
| 51 | 6 | 10,439 | 187% | 171% | 165% | 166% |
| 52 | 7 | 10,439 | 173% | 158% | 153% | 154% |
| 53 | 8 | 10,439 | 164% | 150% | 145% | 146% |
| 54 | 9 | 10,439 | 157% | 145% | 140% | 140% |
| 55 | 10 | 10,439 | 152% | 140% | 136% | 136% |
| 56 | 11 | 10,439 | 148% | 137% | 132% | 133% |
| 57 | 12 | 10,439 | 144% | 134% | 130% | 130% |
| 58 | 13 | 10,439 | 141% | 132% | 128% | 128% |
| 59 | 14 | 10,439 | 138% | 130% | 126% | 126% |
| 60 | 15 | 10,439 | 136% | 128% | 124% | 125% |
| 61 | 16 | 10,439 | 133% | 126% | 123% | 123% |
| 62 | 17 | 10,439 | 131% | 125% | 121% | 122% |
| 63 | 18 | 10,439 | 129% | 123% | 120% | 120% |
| 64 | 19 | 10,439 | 127% | 122% | 119% | 119% |
| 65 | 20 | 10,439 | 125% | 121% | 118% | 118% |
| 66 | 21 | 10,439 | 123% | 120% | 117% | 117% |
| 67 | 22 | 10,439 | 122% | 119% | 116% | 116% |
| 68 | 23 | 10,439 | 120% | 118% | 115% | 115% |
| 69 | 24 | 10,439 | 118% | 117% | 114% | 115% |
| 70 | 25 | 10,439 | 117% | 116% | 113% | 114% |
| 71 | 26 | 10,439 | 115% | 115% | 113% | 113% |
| 72 | 27 | 10,439 | 114% | 115% | 112% | 112% |
| 73 | 28 | 10,439 | 112% | 114% | 112% | 112% |
| 74 | 29 | 10,439 | 111% | 113% | 111% | 111% |
| 75 | 30 | 10,439 | 109% | 113% | 110% | 111% |
| 76 | 31 | 10,439 | 109% | 112% | 110% | 110% |
| 77 | 32 | 10,439 | 109% | 111% | 109% | 109% |
| 78 | 33 | 10,439 | 108% | 111% | 109% | 109% |
| 79 | 34 | 10,439 | 108% | 110% | 108% | 108% |
| 80 | 35 | 10,439 | 107% | 110% | 108% | 108% |
| 81 | 36 | 10,439 | 107% | 109% | 107% | 108% |
| 82 | 37 | 10,439 | 107% | 109% | 107% | 107% |
| 83 | 38 | 10,439 | 106% | 108% | 106% | 107% |
| 84 | 39 | 10,439 | 106% | 108% | 106% | 106% |
| 85 | 40 | 10,439 | 106% | 107% | 106% | 106% |
| 86 | 41 | 10,439 | 106% | 107% | 105% | 106% |
| 87 | 42 | 10,439 | 105% | 106% | 105% | 105% |
| 88 | 43 | 10,439 | 105% | 106% | 105% | 105% |
| 89 | 44 | 10,439 | 105% | 106% | 104% | 105% |
| 90 | 45 | 10,439 | 104% | 105% | 104% | 104% |
| 91 | 46 | 10,439 | 104% | 105% | 104% | 104% |

**Slide 7: Data- 45 CRVM - % of PBR No Margin**

| Age | Duration | Gross Premium | 2001 CSO Margin no Lapse | 2001 CSO with Lapse | 3.75%/ex Margin with Lapse | 15/ex Margin with Lapse |
|---|---|---|---|---|---|---|
| 92 | 47 | 10,439 | 104% | 105% | 104% | 104% |
| 93 | 48 | 10,439 | 104% | 105% | 103% | 104% |
| 94 | 49 | 10,439 | 104% | 104% | 103% | 103% |
| 95 | 50 | 10,439 | 104% | 104% | 103% | 103% |
| 96 | 51 | 10,439 | 103% | 104% | 103% | 103% |
| 97 | 52 | 10,439 | 103% | 104% | 103% | 103% |
| 98 | 53 | 10,439 | 103% | 104% | 103% | 103% |
| 99 | 54 | 10,439 | 103% | 104% | 102% | 103% |
| 100 | 55 | 10,439 | 103% | 103% | 102% | 102% |
| 101 | 56 | 10,439 | 103% | 103% | 102% | 102% |
| 102 | 57 | 10,439 | 103% | 103% | 102% | 102% |
| 103 | 58 | 10,439 | 103% | 103% | 102% | 102% |
| 104 | 59 | 10,439 | 103% | 103% | 102% | 102% |
| 105 | 60 | 10,439 | 103% | 103% | 102% | 102% |
| 106 | 61 | 10,439 | 103% | 103% | 102% | 102% |
| 107 | 62 | 10,439 | 103% | 103% | 102% | 102% |
| 108 | 63 | 10,439 | 103% | 103% | 102% | 102% |
| 109 | 64 | 10,439 | 103% | 103% | 102% | 102% |
| 110 | 65 | 10,439 | 103% | 103% | 102% | 102% |
| 111 | 66 | 10,439 | 103% | 103% | 102% | 102% |
| 112 | 67 | 10,439 | 103% | 103% | 102% | 102% |
| 113 | 68 | 10,439 | 103% | 103% | 102% | 102% |
| 114 | 69 | 10,439 | 103% | 103% | 102% | 102% |
| 115 | 70 | 10,439 | 103% | 103% | 102% | 102% |
| 116 | 71 | 10,439 | 103% | 103% | 102% | 102% |
| 117 | 72 | 10,439 | 103% | 103% | 102% | 102% |
| 118 | 73 | 10,439 | 103% | 103% | 102% | 102% |
| 119 | 74 | 10,439 | 103% | 103% | 102% | 102% |
| 120 | 75 | 10,439 | 103% | 103% | 102% | 102% |
| 121 | 76 | 10,439 | 103% | 103% | 102% | 102% |
| 122 | 77 | 10,439 | 103% | 103% | 102% | 102% |
| 123 | 78 | 10,439 | 103% | 103% | 102% | 102% |
| 124 | 79 | 10,439 | 103% | 104% | 102% | 102% |
| 125 | 80 | 10,439 | 103% | 104% | 102% | 102% |
| 126 | 81 | 10,439 | 103% | 104% | 102% | 102% |
| 127 | 82 | 10,439 | 103% | 104% | 102% | 102% |
| 128 | 83 | 10,439 | 103% | 104% | 102% | 102% |

**Slide 8 Data: 75 PBR - % of PBR No Margin**

| Age | Duration | Gross Premium | 2001 CSO Margin | 3.75%/ex Margin | 15/ex Margin |
|---|---|---|---|---|---|
| 75 | 0 | 58,948 | na | na | na |
| 76 | 1 | 58,948 | na | na | na |
| 77 | 2 | 58,948 | na | na | na |
| 78 | 3 | 58,948 | 230% | 145% | 167% |
| 79 | 4 | 58,948 | 158% | 121% | 130% |
| 80 | 5 | 58,948 | 138% | 114% | 120% |
| 81 | 6 | 58,948 | 128% | 110% | 115% |
| 82 | 7 | 58,948 | 122% | 108% | 112% |
| 83 | 8 | 58,948 | 118% | 107% | 110% |
| 84 | 9 | 58,948 | 115% | 106% | 108% |
| 85 | 10 | 58,948 | 113% | 105% | 107% |
| 86 | 11 | 58,948 | 111% | 104% | 106% |
| 87 | 12 | 58,948 | 110% | 104% | 105% |
| 88 | 13 | 58,948 | 109% | 104% | 105% |
| 89 | 14 | 58,948 | 108% | 103% | 104% |
| 90 | 15 | 58,948 | 107% | 103% | 104% |
| 91 | 16 | 58,948 | 107% | 103% | 104% |
| 92 | 17 | 58,948 | 106% | 102% | 103% |
| 93 | 18 | 58,948 | 106% | 102% | 103% |
| 94 | 19 | 58,948 | 106% | 102% | 103% |
| 95 | 20 | 58,948 | 106% | 102% | 103% |
| 96 | 21 | 58,948 | 105% | 102% | 103% |
| 97 | 22 | 58,948 | 105% | 102% | 102% |
| 98 | 23 | 58,948 | 105% | 102% | 102% |
| 99 | 24 | 58,948 | 105% | 102% | 102% |
| 100 | 25 | 58,948 | 105% | 102% | 102% |
| 101 | 26 | 58,948 | 104% | 101% | 102% |
| 102 | 27 | 58,948 | 104% | 101% | 102% |
| 103 | 28 | 58,948 | 104% | 101% | 102% |
| 104 | 29 | 58,948 | 104% | 101% | 102% |
| 105 | 30 | 58,948 | 104% | 101% | 102% |
| 106 | 31 | 58,948 | 104% | 101% | 102% |
| 107 | 32 | 58,948 | 104% | 101% | 102% |
| 108 | 33 | 58,948 | 104% | 101% | 102% |
| 109 | 34 | 58,948 | 104% | 101% | 102% |
| 110 | 35 | 58,948 | 104% | 101% | 102% |
| 111 | 36 | 58,948 | 104% | 101% | 102% |
| 112 | 37 | 58,948 | 105% | 101% | 102% |
| 113 | 38 | 58,948 | 105% | 101% | 102% |
| 114 | 39 | 58,948 | 105% | 101% | 102% |
| 115 | 40 | 58,948 | 105% | 101% | 102% |
| 116 | 41 | 58,948 | 105% | 101% | 102% |
| 117 | 42 | 58,948 | 105% | 101% | 102% |
| 118 | 43 | 58,948 | 105% | 101% | 102% |
| 119 | 44 | 58,948 | 105% | 101% | 102% |
| 120 | 45 | 58,948 | 105% | 101% | 102% |
| 121 | 46 | 58,948 | 105% | 101% | 102% |

**Slide 8 Data: 75 PBR - % of PBR No Margin**

| Age | Duration | Gross Premium | 2001 CSO Margin | 3.75%/ex Margin | 15/ex Margin |
|---|---|---|---|---|---|
| 122 | 47 | 58,948 | 105% | 101% | 102% |
| 123 | 48 | 58,948 | 105% | 101% | 102% |
| 124 | 49 | 58,948 | 105% | 101% | 102% |
| 125 | 50 | 58,948 | 105% | 101% | 102% |
| 126 | 51 | 58,948 | 105% | 101% | 102% |
| 127 | 52 | 58,948 | 105% | 101% | 102% |
| 128 | 53 | 58,948 | 105% | 101% | 102% |
| 129 | 54 | 58,948 | 105% | 101% | 102% |
| 130 | 55 | 58,948 | 106% | 101% | 102% |
| 131 | 56 | 58,948 | 106% | 101% | 102% |
| 132 | 57 | 58,948 | 106% | 101% | 102% |
| 133 | 58 | 58,948 | 106% | 101% | 102% |
| 134 | 59 | 58,948 | 106% | 101% | 102% |
| 135 | 60 | 58,948 | 106% | 101% | 102% |
| 136 | 61 | 58,948 | 106% | 101% | 102% |
| 137 | 62 | 58,948 | 106% | 101% | 102% |
| 138 | 63 | 58,948 | 106% | 101% | 102% |
| 139 | 64 | 58,948 | 106% | 101% | 102% |
| 140 | 65 | 58,948 | 106% | 101% | 102% |
| 141 | 66 | 58,948 | 106% | 101% | 102% |
| 142 | 67 | 58,948 | 106% | 101% | 102% |
| 143 | 68 | 58,948 | 106% | 101% | 102% |
| 144 | 69 | 58,948 | 106% | 101% | 102% |
| 145 | 70 | 58,948 | 106% | 101% | 102% |
| 146 | 71 | 58,948 | 107% | 101% | 102% |
| 147 | 72 | 58,948 | 107% | 101% | 102% |
| 148 | 73 | 58,948 | 107% | 101% | 102% |
| 149 | 74 | 58,948 | 107% | 101% | 102% |
| 150 | 75 | 58,948 | 107% | 101% | 102% |
| 151 | 76 | 58,948 | 107% | 101% | 102% |
| 152 | 77 | 58,948 | 107% | 101% | 102% |
| 153 | 78 | 58,948 | 107% | 101% | 102% |
| 154 | 79 | 58,948 | 107% | 101% | 102% |
| 155 | 80 | 58,948 | 107% | 101% | 102% |
| 156 | 81 | 58,948 | 107% | 101% | 102% |
| 157 | 82 | 58,948 | 107% | 101% | 102% |
| 158 | 83 | 58,948 | 107% | 101% | 102% |

**Slide 9: Data- 75 CRVM -% PBR No Margin**

| Age | Duration | Gross Premium | 2001 CSO Margin no Lapse | 2001 CSO with Lapse | 3.75%/ex Margin with Lapse | 15/ex Margin with Lapse |
|---|---|---|---|---|---|---|
| 75 | - | 58,948 | na | na | na | na |
| 76 | 1 | 58,948 | na | na | na | na |
| 77 | 2 | 58,948 | na | na | na | na |
| 78 | 3 | 58,948 | 263% | 255% | 249% | 250% |
| 79 | 4 | 58,948 | 175% | 171% | 167% | 168% |
| 80 | 5 | 58,948 | 148% | 146% | 143% | 144% |
| 81 | 6 | 58,948 | 136% | 134% | 132% | 132% |
| 82 | 7 | 58,948 | 129% | 127% | 125% | 125% |
| 83 | 8 | 58,948 | 124% | 123% | 120% | 121% |
| 84 | 9 | 58,948 | 120% | 119% | 117% | 117% |
| 85 | 10 | 58,948 | 117% | 116% | 114% | 115% |
| 86 | 11 | 58,948 | 115% | 114% | 112% | 113% |
| 87 | 12 | 58,948 | 112% | 113% | 111% | 111% |
| 88 | 13 | 58,948 | 111% | 111% | 110% | 110% |
| 89 | 14 | 58,948 | 109% | 110% | 109% | 109% |
| 90 | 15 | 58,948 | 107% | 109% | 108% | 108% |
| 91 | 16 | 58,948 | 107% | 109% | 107% | 107% |
| 92 | 17 | 58,948 | 106% | 108% | 107% | 107% |
| 93 | 18 | 58,948 | 106% | 108% | 106% | 106% |
| 94 | 19 | 58,948 | 106% | 107% | 106% | 106% |
| 95 | 20 | 58,948 | 105% | 107% | 105% | 105% |
| 96 | 21 | 58,948 | 105% | 107% | 105% | 105% |
| 97 | 22 | 58,948 | 105% | 106% | 105% | 105% |
| 98 | 23 | 58,948 | 105% | 106% | 104% | 105% |
| 99 | 24 | 58,948 | 105% | 106% | 104% | 104% |
| 100 | 25 | 58,948 | 105% | 106% | 104% | 104% |
| 101 | 26 | 58,948 | 105% | 105% | 104% | 104% |
| 102 | 27 | 58,948 | 104% | 105% | 104% | 104% |
| 103 | 28 | 58,948 | 104% | 105% | 103% | 104% |
| 104 | 29 | 58,948 | 104% | 105% | 103% | 104% |
| 105 | 30 | 58,948 | 104% | 105% | 103% | 103% |
| 106 | 31 | 58,948 | 104% | 105% | 103% | 103% |
| 107 | 32 | 58,948 | 104% | 105% | 103% | 103% |
| 108 | 33 | 58,948 | 104% | 105% | 103% | 103% |
| 109 | 34 | 58,948 | 104% | 105% | 103% | 103% |
| 110 | 35 | 58,948 | 105% | 105% | 103% | 103% |
| 111 | 36 | 58,948 | 105% | 105% | 103% | 103% |
| 112 | 37 | 58,948 | 105% | 105% | 103% | 103% |
| 113 | 38 | 58,948 | 105% | 105% | 103% | 103% |
| 114 | 39 | 58,948 | 105% | 105% | 103% | 103% |
| 115 | 40 | 58,948 | 105% | 106% | 103% | 103% |
| 116 | 41 | 58,948 | 105% | 106% | 103% | 103% |
| 117 | 42 | 58,948 | 105% | 106% | 103% | 103% |
| 118 | 43 | 58,948 | 105% | 106% | 103% | 103% |
| 119 | 44 | 58,948 | 105% | 106% | 103% | 103% |
| 120 | 45 | 58,948 | 105% | 106% | 103% | 103% |
| 121 | 46 | 58,948 | 105% | 106% | 103% | 103% |

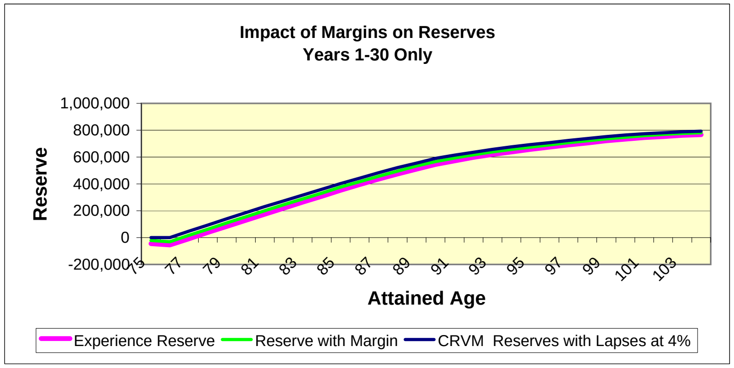
**Slide 9: Data- 75 CRVM -% PBR No Margin**

| Age | Duration | Gross Premium | 2001 CSO Margin no Lapse | 2001 CSO with Lapse | 3.75%/ex Margin with Lapse | 15/ex Margin with Lapse |
|---|---|---|---|---|---|---|
| 122 | 47 | 58,948 | 105% | 106% | 103% | 103% |
| 123 | 48 | 58,948 | 105% | 106% | 103% | 103% |
| 124 | 49 | 58,948 | 105% | 106% | 103% | 103% |
| 125 | 50 | 58,948 | 105% | 106% | 103% | 103% |
| 126 | 51 | 58,948 | 105% | 106% | 103% | 103% |
| 127 | 52 | 58,948 | 105% | 106% | 103% | 103% |
| 128 | 53 | 58,948 | 106% | 106% | 103% | 103% |
| 129 | 54 | 58,948 | 106% | 106% | 103% | 103% |
| 130 | 55 | 58,948 | 106% | 106% | 103% | 103% |
| 131 | 56 | 58,948 | 106% | 106% | 103% | 103% |
| 132 | 57 | 58,948 | 106% | 106% | 103% | 103% |
| 133 | 58 | 58,948 | 106% | 107% | 103% | 103% |
| 134 | 59 | 58,948 | 106% | 107% | 103% | 103% |
| 135 | 60 | 58,948 | 106% | 107% | 103% | 103% |
| 136 | 61 | 58,948 | 106% | 107% | 103% | 103% |
| 137 | 62 | 58,948 | 106% | 107% | 103% | 103% |
| 138 | 63 | 58,948 | 106% | 107% | 103% | 103% |
| 139 | 64 | 58,948 | 106% | 107% | 103% | 103% |
| 140 | 65 | 58,948 | 106% | 107% | 103% | 103% |
| 141 | 66 | 58,948 | 106% | 107% | 103% | 103% |
| 142 | 67 | 58,948 | 106% | 107% | 103% | 103% |
| 143 | 68 | 58,948 | 106% | 107% | 103% | 103% |
| 144 | 69 | 58,948 | 106% | 107% | 103% | 103% |
| 145 | 70 | 58,948 | 107% | 107% | 103% | 103% |
| 146 | 71 | 58,948 | 107% | 107% | 103% | 103% |
| 147 | 72 | 58,948 | 107% | 107% | 103% | 103% |
| 148 | 73 | 58,948 | 107% | 107% | 103% | 103% |
| 149 | 74 | 58,948 | 107% | 107% | 103% | 103% |
| 150 | 75 | 58,948 | 107% | 108% | 103% | 103% |
| 151 | 76 | 58,948 | 107% | 108% | 103% | 103% |
| 152 | 77 | 58,948 | 107% | 108% | 103% | 103% |
| 153 | 78 | 58,948 | 107% | 108% | 103% | 103% |
| 154 | 79 | 58,948 | 107% | 108% | 103% | 103% |
| 155 | 80 | 58,948 | 107% | 108% | 103% | 103% |
| 156 | 81 | 58,948 | 107% | 108% | 103% | 103% |
| 157 | 82 | 58,948 | 107% | 108% | 103% | 103% |
| 158 | 83 | 58,948 | 107% | 108% | 103% | 103% |

**2008 VBT - Reserve Impact Testing**
**Purposes: Evaluate different Margin Formulas and Valuation Tables**
**Analysis of Mortality Margins on Valuation Basic Tables**

25-75 2 Genders 2 Smoking Each USC

| | Assumption Set 1 |
|---|---|
| **Scenario Name:** | MNS75UCS0D121P121M15 |
| **Issue Age:** | 75 |
| **Gender** | M |
| **Risk Class** | NS |
| **USC Score** | 0 |
| **Death Benefits:** | 1,000,000 |
| **Coverage Period** | 121 |
| **Premium Pay Years** | 121 |
| **Experience Level Premium:** | 58,947.86 |
| **Table Name:** | VBT2008.UCS.0.MNS |
| **Margin Name:** | 15 |



**Calculations**

| | | Mortality and Lapse Information | | | | | | Lx No Mortality Margin | | | Lx With Mortality Margin | | | Interest | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Attained Age | Time | VBT Table For t to t+1 | tpx | BOY Curtate Life Expectancy | Mortality Margin | Valuation Mortality Rate | Lapse Rates for t to t+1 | Lapses | Deaths | Valuation lx | Lapses | Deaths | Valuation lx | Discount Rates for t to t+1 | Interest margin |
| | 0 | | 1 | | | | | | | 1,000,000 | | | 1,000,000 | | |
| 75 | 1 | 6.6500 | 0.9934 | 13.9428 | 1.076 | 7.7258 | 2.00% | 20,000 | 6,517 | 973,483 | 20,000 | 7,571 | 972,429 | 5.00% | 0.50% |
| 76 | 2 | 10.1800 | 0.9832 | 13.0361 | 1.151 | 11.3306 | 2.00% | 19,470 | 9,712 | 943,204 | 19,449 | 10,798 | 942,182 | 5.00% | 0.50% |
| 77 | 3 | 13.9600 | 0.9695 | 12.1702 | 1.233 | 15.1925 | 2.00% | 18,864 | 12,904 | 910,297 | 18,844 | 14,028 | 909,311 | 5.00% | 0.50% |
| 78 | 4 | 18.0200 | 0.9520 | 11.3425 | 1.322 | 19.3425 | 2.00% | 18,206 | 16,075 | 874,835 | 18,186 | 17,237 | 873,888 | 5.00% | 0.50% |
| 79 | 5 | 22.4200 | 0.9307 | 10.5506 | 1.422 | 23.8417 | 2.00% | 17,497 | 19,222 | 836,898 | 17,478 | 20,418 | 835,992 | 5.00% | 0.50% |
| 80 | 6 | 27.2000 | 0.9054 | 9.7926 | 1.532 | 28.7318 | 1.00% | 8,369 | 22,536 | 804,724 | 8,360 | 23,779 | 803,853 | 5.00% | 0.50% |
| 81 | 7 | 32.5400 | 0.8759 | 9.0664 | 1.654 | 34.1945 | 1.00% | 8,047 | 25,924 | 769,435 | 8,039 | 27,212 | 768,602 | 5.00% | 0.50% |
| 82 | 8 | 38.4000 | 0.8423 | 8.3713 | 1.792 | 40.1918 | 1.00% | 7,694 | 29,251 | 731,125 | 7,686 | 30,583 | 730,333 | 5.00% | 0.50% |
| 83 | 9 | 44.8300 | 0.8045 | 7.7056 | 1.947 | 46.7766 | 1.00% | 7,311 | 32,449 | 689,956 | 7,303 | 33,821 | 689,209 | 5.00% | 0.50% |
| 84 | 10 | 51.8500 | 0.7628 | 7.0673 | 2.122 | 53.9725 | 1.00% | 6,900 | 35,416 | 646,190 | 6,892 | 36,826 | 645,490 | 5.00% | 0.50% |
| 85 | 11 | 63.0200 | 0.7147 | 6.4538 | 2.324 | 65.3442 | 1.00% | 6,462 | 40,316 | 597,926 | 6,455 | 41,757 | 597,278 | 5.00% | 0.50% |
| 86 | 12 | 75.2900 | 0.6609 | 5.8879 | 2.548 | 77.8376 | 1.00% | 5,979 | 44,568 | 545,871 | 5,973 | 46,026 | 545,280 | 5.00% | 0.50% |
| 87 | 13 | 88.8700 | 0.6022 | 5.3672 | 2.795 | 91.6647 | 1.00% | 5,459 | 48,026 | 490,875 | 5,453 | 49,483 | 490,344 | 5.00% | 0.50% |
| 88 | 14 | 104.1700 | 0.5395 | 4.8908 | 3.067 | 107.2370 | 1.00% | 4,909 | 50,623 | 433,853 | 4,903 | 52,057 | 433,383 | 5.00% | 0.50% |
| 89 | 15 | 121.3800 | 0.4740 | 4.4595 | 3.364 | 124.7436 | 1.00% | 4,339 | 52,134 | 375,935 | 4,334 | 53,521 | 375,528 | 5.00% | 0.50% |
| 90 | 16 | 139.3300 | 0.4079 | 4.0755 | 3.681 | 143.0105 | 0.00% | - | 52,379 | 322,173 | - | 53,704 | 321,824 | 5.00% | 0.50% |
| 91 | 17 | 156.3400 | 0.3442 | 3.7353 | 4.016 | 160.3557 | 0.00% | - | 50,368 | 270,510 | - | 51,606 | 270,217 | 5.00% | 0.50% |
| 92 | 18 | 174.2800 | 0.2842 | 3.4275 | 4.376 | 178.6564 | 0.00% | - | 47,145 | 222,182 | - | 48,276 | 221,941 | 5.00% | 0.50% |
| 93 | 19 | 193.1000 | 0.2293 | 3.1509 | 4.761 | 197.8605 | 0.00% | - | 42,903 | 178,221 | - | 43,913 | 178,028 | 5.00% | 0.50% |
| 94 | 20 | 211.4600 | 0.1808 | 2.9050 | 5.164 | 216.6236 | 0.00% | - | 37,687 | 139,614 | - | 38,565 | 139,463 | 5.00% | 0.50% |
| 95 | 21 | 227.6700 | 0.1397 | 2.6840 | 5.589 | 233.2587 | 0.00% | - | 31,786 | 107,048 | - | 32,531 | 106,932 | 5.00% | 0.50% |
| 96 | 22 | 245.4800 | 0.1054 | 2.4752 | 6.060 | 251.5402 | 0.00% | - | 26,278 | 80,121 | - | 26,898 | 80,034 | 5.00% | 0.50% |
| 97 | 23 | 262.9500 | 0.0777 | 2.2805 | 6.578 | 269.5276 | 0.00% | - | 21,068 | 58,526 | - | 21,571 | 58,463 | 5.00% | 0.50% |
| 98 | 24 | 283.6500 | 0.0556 | 2.0940 | 7.163 | 290.8132 | 0.00% | - | 16,601 | 41,506 | - | 17,002 | 41,461 | 5.00% | 0.50% |
| 99 | 25 | 306.9900 | 0.0386 | 1.9232 | 7.799 | 314.7895 | 0.00% | - | 12,742 | 28,440 | - | 13,052 | 28,410 | 5.00% | 0.50% |
| 100 | 26 | 330.1500 | 0.0258 | 1.7752 | 8.450 | 338.6000 | 0.00% | - | 9,390 | 18,810 | - | 9,619 | 18,790 | 5.00% | 0.50% |
| 101 | 27 | 352.1200 | 0.0167 | 1.6501 | 9.091 | 361.2105 | 0.00% | - | 6,624 | 12,016 | - | 6,787 | 12,003 | 5.00% | 0.50% |
| 102 | 28 | 372.1800 | 0.0105 | 1.5469 | 9.697 | 381.8769 | 0.00% | - | 4,472 | 7,427 | - | 4,584 | 7,419 | 5.00% | 0.50% |
| 103 | 29 | 389.2600 | 0.0064 | 1.4639 | 10.247 | 399.5067 | 0.00% | - | 2,891 | 4,460 | - | 2,964 | 4,455 | 5.00% | 0.50% |
| 104 | 30 | 403.4000 | 0.0038 | 1.3969 | 10.738 | 414.1380 | 0.00% | - | 1,799 | 2,613 | - | 1,845 | 2,610 | 5.00% | 0.50% |
| 105 | 31 | 415.8500 | 0.0022 | 1.3415 | 11.182 | 427.0319 | 0.00% | - | 1,087 | 1,497 | - | 1,115 | 1,496 | 5.00% | 0.50% |
| 106 | 32 | 426.9000 | 0.0013 | 1.2964 | 11.570 | 438.4703 | 0.00% | - | 639 | 841 | - | 656 | 840 | 5.00% | 0.50% |
| 107 | 33 | 437.1600 | 0.0007 | 1.2621 | 11.885 | 449.0448 | 0.00% | - | 368 | 463 | - | 377 | 463 | 5.00% | 0.50% |
| 108 | 34 | 442.6300 | 0.0004 | 1.2424 | 12.073 | 454.7033 | 0.00% | - | 205 | 253 | - | 210 | 252 | 5.00% | 0.50% |
| 109 | 35 | 446.9200 | 0.0002 | 1.2291 | 12.204 | 459.1244 | 0.00% | - | 113 | 137 | - | 116 | 136 | 5.00% | 0.50% |
| 110 | 36 | 450.0000 | 0.0001 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 61 | 73 | - | 63 | 73 | 5.00% | 0.50% |
| 111 | 37 | 450.0000 | 0.0001 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 33 | 40 | - | 34 | 39 | 5.00% | 0.50% |
| 112 | 38 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 18 | 21 | - | 18 | 21 | 5.00% | 0.50% |
| 113 | 39 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 10 | 11 | - | 10 | 11 | 5.00% | 0.50% |
| 114 | 40 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 5 | 6 | - | 5 | 6 | 5.00% | 0.50% |
| 115 | 41 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 3 | 3 | - | 3 | 3 | 5.00% | 0.50% |
| 116 | 42 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 1 | 2 | - | 2 | 2 | 5.00% | 0.50% |
| 117 | 43 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 1 | 1 | - | 1 | 1 | 5.00% | 0.50% |
| 118 | 44 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 1 | - | 0 | 1 | 5.00% | 0.50% |
| 119 | 45 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 120 | 46 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 121 | 47 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 122 | 48 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 123 | 49 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 124 | 50 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |

**Calculations**

| | | Mortality and Lapse Information | | | | | | Lx No Mortality Margin | | | Lx With Mortality Margin | | | Interest | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Attained Age | Time | VBT Table For t to t+1 | tpx | BOY Curtate Life Expectancy | Mortality Margin | Valuation Mortality Rate | Lapse Rates for t to t+1 | Lapses | Deaths | Valuation lx | Lapses | Deaths | Valuation lx | Discount Rates for t to t+1 | Interest margin |
| 125 | 51 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 126 | 52 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 127 | 53 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 128 | 54 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 129 | 55 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 130 | 56 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 131 | 57 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 132 | 58 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 133 | 59 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 134 | 60 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 135 | 61 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 136 | 62 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 137 | 63 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 138 | 64 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 139 | 65 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 140 | 66 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 141 | 67 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 142 | 68 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 143 | 69 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 144 | 70 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 145 | 71 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 146 | 72 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 147 | 73 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 148 | 74 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 149 | 75 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 150 | 76 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 151 | 77 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 152 | 78 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 153 | 79 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 154 | 80 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 155 | 81 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 156 | 82 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 157 | 83 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 158 | 84 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 159 | 85 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 160 | 86 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 161 | 87 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 162 | 88 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 163 | 89 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 164 | 90 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 165 | 91 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 166 | 92 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 167 | 93 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 168 | 94 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 169 | 95 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 170 | 96 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 171 | 97 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 172 | 98 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 173 | 99 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2728 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 174 | 100 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2728 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 175 | 101 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2728 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |

**Calculations**

| | | Mortality and Lapse Information | | | | | | Lx No Mortality Margin | | | Lx With Mortality Margin | | | Interest | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Attained Age | Time | VBT Table For t to t+1 | tpx | BOY Curtate Life Expectancy | Mortality Margin | Valuation Mortality Rate | Lapse Rates for t to t+1 | Lapses | Deaths | Valuation lx | Lapses | Deaths | Valuation lx | Discount Rates for t to t+1 | Interest margin |
| 176 | 102 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2729 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 177 | 103 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2730 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 178 | 104 | 450.0000 | 0.0000 | 1.2222 | 12.273 | 462.2732 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 179 | 105 | 450.0000 | 0.0000 | 1.2221 | 12.274 | 462.2736 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 180 | 106 | 450.0000 | 0.0000 | 1.2221 | 12.274 | 462.2743 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 181 | 107 | 450.0000 | 0.0000 | 1.2219 | 12.276 | 462.2756 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 182 | 108 | 450.0000 | 0.0000 | 1.2217 | 12.278 | 462.2779 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 183 | 109 | 450.0000 | 0.0000 | 1.2213 | 12.282 | 462.2821 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 184 | 110 | 450.0000 | 0.0000 | 1.2205 | 12.290 | 462.2898 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 185 | 111 | 450.0000 | 0.0000 | 1.2191 | 12.304 | 462.3039 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 186 | 112 | 450.0000 | 0.0000 | 1.2166 | 12.330 | 462.3295 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 187 | 113 | 450.0000 | 0.0000 | 1.2120 | 12.376 | 462.3764 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 188 | 114 | 450.0000 | 0.0000 | 1.2036 | 12.462 | 462.4625 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 189 | 115 | 450.0000 | 0.0000 | 1.1884 | 12.622 | 462.6221 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 190 | 116 | 450.0000 | 0.0000 | 1.1607 | 12.923 | 462.9231 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 191 | 117 | 450.0000 | 0.0000 | 1.1104 | 13.509 | 463.5089 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 192 | 118 | 450.0000 | 0.0000 | 1.0189 | 14.722 | 464.7221 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 193 | 119 | 450.0000 | 0.0000 | 0.8525 | 17.595 | 467.5953 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 194 | 120 | 450.0000 | 0.0000 | 0.5500 | 27.273 | 477.2727 | 0.00% | - | 0 | 0 | - | 0 | 0 | 5.00% | 0.50% |
| 195 | 121 | 1000.0000 | 0.0000 | 0.0000 | 0.000 | 1000.0000 | 0.00% | - | 0 | - | - | 0 | - | 5.00% | 0.50% |

**Calculations**

| | | Non-Decremented Benefits and Expenses | | | For Premium Determination using No Mortality Margin or Interest Margin | | | | | | | | | | | Experience Res | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Attained Age | Time | EOY Benefits On Death | EOY Benefits On Surrender | BOY Expenses | BOY Present Value of Death Benefits | BOY Present Value of Surrender Benefits | BOY Present Value of Per Policy Expenses | Present Value of Benefits and Policy Expenses | Percent of Premium Value of Expenses | Percent of Premium Profit Margin | $1 for Pay Years | BOY PV of $1 | Boy Present Value of Premium Expenses and Profit | Premium | Premium Expenses and Profit | BOY PV of Premiums | PV of Premium Expenses |
| | 0 | | 0 | | | | | | | | | | | | | | |
| 75 | 1 | 1,000,000 | 0 | 300 | 427,630 | - | 933 | 428,563 | 99.00% | 8.00% | $ 1 | 9.4370 | 217% | 58,948 | 63,074 | 556,291 | 83,226 |
| 76 | 2 | 1,000,000 | 0 | 75 | 454,547 | - | 683 | 455,230 | 5.00% | 8.00% | $ 1 | 9.1002 | 118% | 58,948 | 7,663 | 536,435 | 26,822 |
| 77 | 3 | 1,000,000 | 0 | 75 | 481,739 | - | 658 | 482,397 | 5.00% | 8.00% | $ 1 | 8.7680 | 114% | 58,948 | 7,663 | 516,855 | 25,843 |
| 78 | 4 | 1,000,000 | 0 | 75 | 509,299 | - | 633 | 509,932 | 5.00% | 8.00% | $ 1 | 8.4407 | 110% | 58,948 | 7,663 | 497,561 | 24,878 |
| 79 | 5 | 1,000,000 | 0 | 75 | 537,340 | - | 609 | 537,949 | 5.00% | 8.00% | $ 1 | 8.1185 | 106% | 58,948 | 7,663 | 478,567 | 23,928 |
| 80 | 6 | 1,000,000 | 0 | 75 | 565,991 | - | 585 | 566,577 | 5.00% | 8.00% | $ 1 | 7.8019 | 101% | 58,948 | 7,663 | 459,902 | 22,995 |
| 81 | 7 | 1,000,000 | 0 | 75 | 589,118 | - | 556 | 589,674 | 5.00% | 8.00% | $ 1 | 7.4158 | 96% | 58,948 | 7,663 | 437,145 | 21,857 |
| 82 | 8 | 1,000,000 | 0 | 75 | 612,203 | - | 528 | 612,731 | 5.00% | 8.00% | $ 1 | 7.0335 | 91% | 58,948 | 7,663 | 414,610 | 20,730 |
| 83 | 9 | 1,000,000 | 0 | 75 | 635,302 | - | 499 | 635,801 | 5.00% | 8.00% | $ 1 | 6.6547 | 87% | 58,948 | 7,663 | 392,281 | 19,614 |
| 84 | 10 | 1,000,000 | 0 | 75 | 658,495 | - | 471 | 658,966 | 5.00% | 8.00% | $ 1 | 6.2789 | 82% | 58,948 | 7,663 | 370,128 | 18,506 |
| 85 | 11 | 1,000,000 | 0 | 75 | 681,911 | - | 443 | 682,354 | 5.00% | 8.00% | $ 1 | 5.9050 | 77% | 58,948 | 7,663 | 348,088 | 17,404 |
| 86 | 12 | 1,000,000 | 0 | 75 | 704,625 | - | 416 | 705,041 | 5.00% | 8.00% | $ 1 | 5.5522 | 72% | 58,948 | 7,663 | 327,289 | 16,364 |
| 87 | 13 | 1,000,000 | 0 | 75 | 726,757 | - | 392 | 727,148 | 5.00% | 8.00% | $ 1 | 5.2212 | 68% | 58,948 | 7,663 | 307,777 | 15,389 |
| 88 | 14 | 1,000,000 | 0 | 75 | 748,447 | - | 369 | 748,816 | 5.00% | 8.00% | $ 1 | 4.9137 | 64% | 58,948 | 7,663 | 289,651 | 14,483 |
| 89 | 15 | 1,000,000 | 0 | 75 | 769,831 | - | 348 | 770,178 | 5.00% | 8.00% | $ 1 | 4.6336 | 60% | 58,948 | 7,663 | 273,138 | 13,657 |
| 90 | 16 | 1,000,000 | 0 | 75 | 791,135 | - | 329 | 791,464 | 5.00% | 8.00% | $ 1 | 4.3862 | 57% | 58,948 | 7,663 | 258,555 | 12,928 |
| 91 | 17 | 1,000,000 | 0 | 75 | 803,284 | - | 310 | 803,593 | 5.00% | 8.00% | $ 1 | 4.1310 | 54% | 58,948 | 7,663 | 243,516 | 12,176 |
| 92 | 18 | 1,000,000 | 0 | 75 | 814,437 | - | 292 | 814,729 | 5.00% | 8.00% | $ 1 | 3.8968 | 51% | 58,948 | 7,663 | 229,710 | 11,485 |
| 93 | 19 | 1,000,000 | 0 | 75 | 824,588 | - | 276 | 824,864 | 5.00% | 8.00% | $ 1 | 3.6837 | 48% | 58,948 | 7,663 | 217,144 | 10,857 |
| 94 | 20 | 1,000,000 | 0 | 75 | 833,706 | - | 262 | 833,968 | 5.00% | 8.00% | $ 1 | 3.4922 | 45% | 58,948 | 7,663 | 205,856 | 10,293 |
| 95 | 21 | 1,000,000 | 0 | 75 | 841,975 | - | 249 | 842,224 | 5.00% | 8.00% | $ 1 | 3.3185 | 43% | 58,948 | 7,663 | 195,620 | 9,781 |
| 96 | 22 | 1,000,000 | 0 | 75 | 849,901 | - | 236 | 850,137 | 5.00% | 8.00% | $ 1 | 3.1521 | 41% | 58,948 | 7,663 | 185,808 | 9,290 |
| 97 | 23 | 1,000,000 | 0 | 75 | 857,388 | - | 225 | 857,612 | 5.00% | 8.00% | $ 1 | 2.9949 | 39% | 58,948 | 7,663 | 176,541 | 8,827 |
| 98 | 24 | 1,000,000 | 0 | 75 | 864,673 | - | 213 | 864,886 | 5.00% | 8.00% | $ 1 | 2.8419 | 37% | 58,948 | 7,663 | 167,522 | 8,376 |
| 99 | 25 | 1,000,000 | 0 | 75 | 871,440 | - | 202 | 871,643 | 5.00% | 8.00% | $ 1 | 2.6998 | 35% | 58,948 | 7,663 | 159,145 | 7,957 |
| 100 | 26 | 1,000,000 | 0 | 75 | 877,364 | - | 193 | 877,557 | 5.00% | 8.00% | $ 1 | 2.5753 | 33% | 58,948 | 7,663 | 151,811 | 7,591 |
| 101 | 27 | 1,000,000 | 0 | 75 | 882,410 | - | 185 | 882,596 | 5.00% | 8.00% | $ 1 | 2.4694 | 32% | 58,948 | 7,663 | 145,565 | 7,278 |
| 102 | 28 | 1,000,000 | 0 | 75 | 886,601 | - | 179 | 886,779 | 5.00% | 8.00% | $ 1 | 2.3814 | 31% | 58,948 | 7,663 | 140,378 | 7,019 |
| 103 | 29 | 1,000,000 | 0 | 75 | 889,986 | - | 173 | 890,159 | 5.00% | 8.00% | $ 1 | 2.3103 | 30% | 58,948 | 7,663 | 136,187 | 6,809 |
| 104 | 30 | 1,000,000 | 0 | 75 | 892,728 | - | 169 | 892,897 | 5.00% | 8.00% | $ 1 | 2.2527 | 29% | 58,948 | 7,663 | 132,792 | 6,640 |
| 105 | 31 | 1,000,000 | 0 | 75 | 895,013 | - | 165 | 895,178 | 5.00% | 8.00% | $ 1 | 2.2047 | 29% | 58,948 | 7,663 | 129,964 | 6,498 |
| 106 | 32 | 1,000,000 | 0 | 75 | 896,882 | - | 162 | 897,044 | 5.00% | 8.00% | $ 1 | 2.1655 | 28% | 58,948 | 7,663 | 127,651 | 6,383 |
| 107 | 33 | 1,000,000 | 0 | 75 | 898,317 | - | 160 | 898,478 | 5.00% | 8.00% | $ 1 | 2.1353 | 28% | 58,948 | 7,663 | 125,873 | 6,294 |
| 108 | 34 | 1,000,000 | 0 | 75 | 899,142 | - | 159 | 899,301 | 5.00% | 8.00% | $ 1 | 2.1180 | 28% | 58,948 | 7,663 | 124,852 | 6,243 |
| 109 | 35 | 1,000,000 | 0 | 75 | 899,707 | - | 158 | 899,865 | 5.00% | 8.00% | $ 1 | 2.1062 | 27% | 58,948 | 7,663 | 124,154 | 6,208 |
| 110 | 36 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 111 | 37 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 112 | 38 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 113 | 39 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 114 | 40 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 115 | 41 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 116 | 42 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 117 | 43 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 118 | 44 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 119 | 45 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 120 | 46 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 121 | 47 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 122 | 48 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 123 | 49 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 124 | 50 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |

**Calculations**

| Attained Age | Time | Non-Decremented Benefits and Expenses: EOY Benefits On Death | EOY Benefits On Surrender | BOY Expenses | For Premium Determination using No Mortality Margin or Interest Margin: BOY Present Value of Death Benefits | BOY Present Value of Surrender Benefits | BOY Present Value of Per Policy Expenses | Present Value of Benefits and Policy Expenses | Percent of Premium Value of Expenses | Percent of Premium Profit Margin | $1 for Pay Years | BOY PV of $1 | Boy Present Value of Premium Expenses and Profit | Premium | Premium Expenses and Profit | Experience Res: BOY PV of Premiums | PV of Premium Expenses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 125 | 51 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 126 | 52 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 127 | 53 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 128 | 54 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 129 | 55 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 130 | 56 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 131 | 57 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 132 | 58 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 133 | 59 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 134 | 60 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 135 | 61 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 136 | 62 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 137 | 63 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 138 | 64 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 139 | 65 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 140 | 66 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 141 | 67 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 142 | 68 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 143 | 69 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 144 | 70 | 1,000,000 | 0 | 75 | 900,000 | - | 158 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 145 | 71 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 146 | 72 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 147 | 73 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 148 | 74 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 149 | 75 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 150 | 76 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 151 | 77 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 152 | 78 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 153 | 79 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 154 | 80 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 155 | 81 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 156 | 82 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 157 | 83 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 158 | 84 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 159 | 85 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 160 | 86 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 161 | 87 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 162 | 88 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 163 | 89 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 164 | 90 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 165 | 91 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 166 | 92 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 167 | 93 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 168 | 94 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 169 | 95 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 170 | 96 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,791 | 6,190 |
| 171 | 97 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,790 | 6,190 |
| 172 | 98 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,790 | 6,190 |
| 173 | 99 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,790 | 6,190 |
| 174 | 100 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,790 | 6,190 |
| 175 | 101 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,790 | 6,190 |

**Calculations**

| | | Non-Decremented Benefits and Expenses | | | For Premium Determination using No Mortality Margin or Interest Margin | | | | | | | | | | | Experience Res | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Attained Age | Time | EOY Benefits On Death | EOY Benefits On Surrender | BOY Expenses | BOY Present Value of Death Benefits | BOY Present Value of Surrender Benefits | BOY Present Value of Per Policy Expenses | Present Value of Benefits and Policy Expenses | Percent of Premium Value of Expenses | Percent of Premium Profit Margin | $1 for Pay Years | BOY PV of $1 | Boy Present Value of Premium Expenses and Profit | Premium | Premium Expenses and Profit | BOY PV of Premiums | PV of Premium Expenses |
| 176 | 102 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,790 | 6,190 |
| 177 | 103 | 1,000,000 | 0 | 75 | 900,000 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,790 | 6,189 |
| 178 | 104 | 1,000,000 | 0 | 75 | 900,001 | - | 157 | 900,158 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,789 | 6,189 |
| 179 | 105 | 1,000,000 | 0 | 75 | 900,002 | - | 157 | 900,159 | 5.00% | 8.00% | $ 1 | 2.1000 | 27% | 58,948 | 7,663 | 123,788 | 6,189 |
| 180 | 106 | 1,000,000 | 0 | 75 | 900,003 | - | 157 | 900,161 | 5.00% | 8.00% | $ 1 | 2.0999 | 27% | 58,948 | 7,663 | 123,787 | 6,189 |
| 181 | 107 | 1,000,000 | 0 | 75 | 900,006 | - | 157 | 900,164 | 5.00% | 8.00% | $ 1 | 2.0999 | 27% | 58,948 | 7,663 | 123,783 | 6,189 |
| 182 | 108 | 1,000,000 | 0 | 75 | 900,012 | - | 157 | 900,169 | 5.00% | 8.00% | $ 1 | 2.0998 | 27% | 58,948 | 7,663 | 123,776 | 6,189 |
| 183 | 109 | 1,000,000 | 0 | 75 | 900,022 | - | 157 | 900,180 | 5.00% | 8.00% | $ 1 | 2.0995 | 27% | 58,948 | 7,663 | 123,763 | 6,188 |
| 184 | 110 | 1,000,000 | 0 | 75 | 900,043 | - | 157 | 900,200 | 5.00% | 8.00% | $ 1 | 2.0991 | 27% | 58,948 | 7,663 | 123,738 | 6,187 |
| 185 | 111 | 1,000,000 | 0 | 75 | 900,081 | - | 157 | 900,239 | 5.00% | 8.00% | $ 1 | 2.0983 | 27% | 58,948 | 7,663 | 123,690 | 6,184 |
| 186 | 112 | 1,000,000 | 0 | 75 | 900,156 | - | 157 | 900,313 | 5.00% | 8.00% | $ 1 | 2.0967 | 27% | 58,948 | 7,663 | 123,598 | 6,180 |
| 187 | 113 | 1,000,000 | 0 | 75 | 900,297 | - | 157 | 900,454 | 5.00% | 8.00% | $ 1 | 2.0938 | 27% | 58,948 | 7,663 | 123,423 | 6,171 |
| 188 | 114 | 1,000,000 | 0 | 75 | 900,567 | - | 157 | 900,723 | 5.00% | 8.00% | $ 1 | 2.0881 | 27% | 58,948 | 7,663 | 123,089 | 6,154 |
| 189 | 115 | 1,000,000 | 0 | 75 | 901,082 | - | 156 | 901,238 | 5.00% | 8.00% | $ 1 | 2.0773 | 27% | 58,948 | 7,663 | 122,451 | 6,123 |
| 190 | 116 | 1,000,000 | 0 | 75 | 902,066 | - | 154 | 902,220 | 5.00% | 8.00% | $ 1 | 2.0566 | 27% | 58,948 | 7,663 | 121,234 | 6,062 |
| 191 | 117 | 1,000,000 | 0 | 75 | 903,943 | - | 151 | 904,095 | 5.00% | 8.00% | $ 1 | 2.0172 | 26% | 58,948 | 7,663 | 118,909 | 5,945 |
| 192 | 118 | 1,000,000 | 0 | 75 | 907,528 | - | 146 | 907,674 | 5.00% | 8.00% | $ 1 | 1.9419 | 25% | 58,948 | 7,663 | 114,471 | 5,724 |
| 193 | 119 | 1,000,000 | 0 | 75 | 914,372 | - | 135 | 914,507 | 5.00% | 8.00% | $ 1 | 1.7982 | 23% | 58,948 | 7,663 | 105,999 | 5,300 |
| 194 | 120 | 1,000,000 | 0 | 75 | 927,438 | - | 114 | 927,552 | 5.00% | 8.00% | $ 1 | 1.5238 | 20% | 58,948 | 7,663 | 89,825 | 4,491 |
| 195 | 121 | 1,000,000 | 0 | 75 | 952,381 | - | 75 | 952,456 | 5.00% | 8.00% | $ 1 | 1.0000 | 13% | 58,948 | 7,663 | 58,948 | 2,947 |

**Calculations**

| | | erve (no margin) | |
|---|---|---|---|
| Attained Age | Time | PV of Benefits and All Expenses | Experience Reserve |
| | 0 | | |
| 75 | 1 | 511,788 | (44,503) |
| 76 | 2 | 482,052 | (54,384) |
| 77 | 3 | 508,240 | (8,616) |
| 78 | 4 | 534,810 | 37,249 |
| 79 | 5 | 561,878 | 83,311 |
| 80 | 6 | 589,572 | 129,669 |
| 81 | 7 | 611,531 | 174,386 |
| 82 | 8 | 633,461 | 218,851 |
| 83 | 9 | 655,415 | 263,134 |
| 84 | 10 | 677,473 | 307,345 |
| 85 | 11 | 699,759 | 351,671 |
| 86 | 12 | 721,406 | 394,116 |
| 87 | 13 | 742,537 | 434,760 |
| 88 | 14 | 763,298 | 473,647 |
| 89 | 15 | 783,835 | 510,697 |
| 90 | 16 | 804,392 | 545,837 |
| 91 | 17 | 815,769 | 572,253 |
| 92 | 18 | 826,215 | 596,505 |
| 93 | 19 | 835,721 | 618,578 |
| 94 | 20 | 844,261 | 638,404 |
| 95 | 21 | 852,005 | 656,386 |
| 96 | 22 | 859,428 | 673,620 |
| 97 | 23 | 866,439 | 689,899 |
| 98 | 24 | 873,262 | 705,739 |
| 99 | 25 | 879,600 | 720,455 |
| 100 | 26 | 885,148 | 733,337 |
| 101 | 27 | 889,874 | 744,309 |
| 102 | 28 | 893,798 | 753,421 |
| 103 | 29 | 896,968 | 760,781 |
| 104 | 30 | 899,537 | 766,744 |
| 105 | 31 | 901,676 | 771,712 |
| 106 | 32 | 903,427 | 775,776 |
| 107 | 33 | 904,771 | 778,898 |
| 108 | 34 | 905,544 | 780,692 |
| 109 | 35 | 906,072 | 781,919 |
| 110 | 36 | 906,347 | 782,557 |
| 111 | 37 | 906,347 | 782,557 |
| 112 | 38 | 906,347 | 782,557 |
| 113 | 39 | 906,347 | 782,557 |
| 114 | 40 | 906,347 | 782,557 |
| 115 | 41 | 906,347 | 782,557 |
| 116 | 42 | 906,347 | 782,557 |
| 117 | 43 | 906,347 | 782,557 |
| 118 | 44 | 906,347 | 782,557 |
| 119 | 45 | 906,347 | 782,557 |
| 120 | 46 | 906,347 | 782,557 |
| 121 | 47 | 906,347 | 782,557 |
| 122 | 48 | 906,347 | 782,557 |
| 123 | 49 | 906,347 | 782,557 |
| 124 | 50 | 906,347 | 782,557 |

**Calculations**

| | | erve (no margin) | |
|---|---|---|---|
| Attained Age | Time | PV of Benefits and All Expenses | Experience Reserve |
| 125 | 51 | 906,347 | 782,557 |
| 126 | 52 | 906,347 | 782,557 |
| 127 | 53 | 906,347 | 782,557 |
| 128 | 54 | 906,347 | 782,557 |
| 129 | 55 | 906,347 | 782,557 |
| 130 | 56 | 906,347 | 782,557 |
| 131 | 57 | 906,347 | 782,557 |
| 132 | 58 | 906,347 | 782,557 |
| 133 | 59 | 906,347 | 782,557 |
| 134 | 60 | 906,347 | 782,557 |
| 135 | 61 | 906,347 | 782,557 |
| 136 | 62 | 906,347 | 782,557 |
| 137 | 63 | 906,347 | 782,557 |
| 138 | 64 | 906,347 | 782,557 |
| 139 | 65 | 906,347 | 782,557 |
| 140 | 66 | 906,347 | 782,557 |
| 141 | 67 | 906,347 | 782,557 |
| 142 | 68 | 906,347 | 782,557 |
| 143 | 69 | 906,347 | 782,557 |
| 144 | 70 | 906,347 | 782,557 |
| 145 | 71 | 906,347 | 782,557 |
| 146 | 72 | 906,347 | 782,557 |
| 147 | 73 | 906,347 | 782,557 |
| 148 | 74 | 906,347 | 782,557 |
| 149 | 75 | 906,347 | 782,557 |
| 150 | 76 | 906,347 | 782,557 |
| 151 | 77 | 906,347 | 782,557 |
| 152 | 78 | 906,347 | 782,557 |
| 153 | 79 | 906,347 | 782,557 |
| 154 | 80 | 906,347 | 782,557 |
| 155 | 81 | 906,347 | 782,557 |
| 156 | 82 | 906,347 | 782,557 |
| 157 | 83 | 906,347 | 782,557 |
| 158 | 84 | 906,347 | 782,557 |
| 159 | 85 | 906,347 | 782,557 |
| 160 | 86 | 906,347 | 782,557 |
| 161 | 87 | 906,347 | 782,557 |
| 162 | 88 | 906,347 | 782,557 |
| 163 | 89 | 906,347 | 782,557 |
| 164 | 90 | 906,347 | 782,557 |
| 165 | 91 | 906,347 | 782,557 |
| 166 | 92 | 906,347 | 782,557 |
| 167 | 93 | 906,347 | 782,557 |
| 168 | 94 | 906,347 | 782,557 |
| 169 | 95 | 906,347 | 782,557 |
| 170 | 96 | 906,347 | 782,557 |
| 171 | 97 | 906,347 | 782,557 |
| 172 | 98 | 906,347 | 782,557 |
| 173 | 99 | 906,347 | 782,557 |
| 174 | 100 | 906,347 | 782,557 |
| 175 | 101 | 906,347 | 782,557 |

**Calculations**

| | | erve (no margin) | |
|---|---|---|---|
| Attained Age | Time | PV of Benefits and All Expenses | Experience Reserve |
| 176 | 102 | 906,347 | 782,557 |
| 177 | 103 | 906,347 | 782,558 |
| 178 | 104 | 906,348 | 782,558 |
| 179 | 105 | 906,349 | 782,560 |
| 180 | 106 | 906,350 | 782,563 |
| 181 | 107 | 906,353 | 782,570 |
| 182 | 108 | 906,358 | 782,582 |
| 183 | 109 | 906,368 | 782,605 |
| 184 | 110 | 906,387 | 782,649 |
| 185 | 111 | 906,423 | 782,734 |
| 186 | 112 | 906,493 | 782,895 |
| 187 | 113 | 906,625 | 783,202 |
| 188 | 114 | 906,878 | 783,789 |
| 189 | 115 | 907,360 | 784,909 |
| 190 | 116 | 908,281 | 787,048 |
| 191 | 117 | 910,040 | 791,131 |
| 192 | 118 | 913,397 | 798,926 |
| 193 | 119 | 919,807 | 813,808 |
| 194 | 120 | 932,043 | 842,218 |
| 195 | 121 | 955,403 | 896,455 |

**Calculations**

Calculations for Reserve with Mortality and Interest Margins

| Attained Age | Time | BOY Present Value of Death Benefits | BOY Present Value of Surrender Benefits | BOY Present Value of Per Policy Expenses | Percent of Premium Value of Expenses | Boy Present Value of Premium Expenses | Present Value of Benefits and Expenses | Premiums | PV of Premiums | Reserve With Margin |
|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | | | | | | | | | |
| 75 | 1 | 460,539 | - | 946 | 58,358 | 83,759 | 545,245 | 58,948 | 566,968 | (21,723) |
| 76 | 2 | 487,123 | - | 695 | 2,947 | 27,297 | 515,114 | 58,948 | 545,933 | (30,819) |
| 77 | 3 | 513,924 | - | 668 | 2,947 | 26,262 | 540,854 | 58,948 | 525,236 | 15,618 |
| 78 | 4 | 541,038 | - | 642 | 2,947 | 25,244 | 566,925 | 58,948 | 504,886 | 62,039 |
| 79 | 5 | 568,579 | - | 617 | 2,947 | 24,245 | 593,441 | 58,948 | 484,895 | 108,546 |
| 80 | 6 | 596,675 | - | 592 | 2,947 | 23,265 | 620,531 | 58,948 | 465,292 | 155,239 |
| 81 | 7 | 618,873 | - | 562 | 2,947 | 22,080 | 641,515 | 58,948 | 441,607 | 199,908 |
| 82 | 8 | 640,978 | - | 532 | 2,947 | 20,911 | 662,421 | 58,948 | 418,219 | 244,203 |
| 83 | 9 | 663,045 | - | 503 | 2,947 | 19,756 | 683,303 | 58,948 | 395,110 | 288,193 |
| 84 | 10 | 685,154 | - | 474 | 2,947 | 18,613 | 704,240 | 58,948 | 372,251 | 331,989 |
| 85 | 11 | 707,427 | - | 445 | 2,947 | 17,479 | 725,350 | 58,948 | 349,576 | 375,774 |
| 86 | 12 | 729,021 | - | 418 | 2,947 | 16,411 | 745,850 | 58,948 | 328,222 | 417,628 |
| 87 | 13 | 750,069 | - | 392 | 2,947 | 15,411 | 765,872 | 58,948 | 308,225 | 457,647 |
| 88 | 14 | 770,722 | - | 369 | 2,947 | 14,484 | 785,575 | 58,948 | 289,679 | 495,896 |
| 89 | 15 | 791,143 | - | 347 | 2,947 | 13,640 | 805,130 | 58,948 | 272,805 | 532,326 |
| 90 | 16 | 811,593 | - | 328 | 2,947 | 12,896 | 824,817 | 58,948 | 257,910 | 566,906 |
| 91 | 17 | 822,769 | - | 309 | 2,947 | 12,131 | 835,208 | 58,948 | 242,612 | 592,596 |
| 92 | 18 | 833,017 | - | 291 | 2,947 | 11,429 | 844,737 | 58,948 | 228,584 | 616,153 |
| 93 | 19 | 842,334 | - | 275 | 2,947 | 10,791 | 853,400 | 58,948 | 215,829 | 637,572 |
| 94 | 20 | 850,699 | - | 260 | 2,947 | 10,219 | 861,177 | 58,948 | 204,379 | 656,799 |
| 95 | 21 | 858,280 | - | 247 | 2,947 | 9,700 | 868,227 | 58,948 | 194,000 | 674,226 |
| 96 | 22 | 865,538 | - | 234 | 2,947 | 9,203 | 874,976 | 58,948 | 184,065 | 690,911 |
| 97 | 23 | 872,388 | - | 222 | 2,947 | 8,734 | 881,345 | 58,948 | 174,688 | 706,656 |
| 98 | 24 | 879,045 | - | 211 | 2,947 | 8,279 | 887,534 | 58,948 | 165,576 | 721,958 |
| 99 | 25 | 885,223 | - | 200 | 2,947 | 7,856 | 893,279 | 58,948 | 157,118 | 736,160 |
| 100 | 26 | 890,629 | - | 190 | 2,947 | 7,486 | 898,306 | 58,948 | 149,718 | 748,588 |
| 101 | 27 | 895,234 | - | 182 | 2,947 | 7,171 | 902,587 | 58,948 | 143,415 | 759,172 |
| 102 | 28 | 899,058 | - | 176 | 2,947 | 6,909 | 906,142 | 58,948 | 138,180 | 767,962 |
| 103 | 29 | 902,148 | - | 170 | 2,947 | 6,698 | 909,016 | 58,948 | 133,950 | 775,066 |
| 104 | 30 | 904,652 | - | 166 | 2,947 | 6,526 | 911,344 | 58,948 | 130,521 | 780,823 |
| 105 | 31 | 906,739 | - | 162 | 2,947 | 6,383 | 913,284 | 58,948 | 127,666 | 785,619 |
| 106 | 32 | 908,445 | - | 159 | 2,947 | 6,266 | 914,871 | 58,948 | 125,330 | 789,541 |
| 107 | 33 | 909,755 | - | 157 | 2,947 | 6,177 | 916,089 | 58,948 | 123,536 | 792,553 |
| 108 | 34 | 910,508 | - | 156 | 2,947 | 6,125 | 916,789 | 58,948 | 122,505 | 794,284 |
| 109 | 35 | 911,023 | - | 155 | 2,947 | 6,090 | 917,268 | 58,948 | 121,801 | 795,467 |
| 110 | 36 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 111 | 37 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 112 | 38 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 113 | 39 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 114 | 40 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 115 | 41 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 116 | 42 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 117 | 43 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 118 | 44 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 119 | 45 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 120 | 46 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 121 | 47 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 122 | 48 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 123 | 49 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 124 | 50 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |

**Calculations**

| | | Calculations for Reserve with Mortality and Interest Margins | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Attained Age | Time | BOY Present Value of Death Benefits | BOY Present Value of Surrender Benefits | BOY Present Value of Per Policy Expenses | Percent of Premium Value of Expenses | Boy Present Value of Premium Expenses | Present Value of Benefits and Expenses | Premiums | PV of Premiums | Reserve With Margin |
| 125 | 51 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 126 | 52 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 127 | 53 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 128 | 54 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 129 | 55 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 130 | 56 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 131 | 57 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 132 | 58 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 133 | 59 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 134 | 60 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 135 | 61 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 136 | 62 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 137 | 63 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 138 | 64 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 139 | 65 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 140 | 66 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 141 | 67 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 142 | 68 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 143 | 69 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 144 | 70 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 145 | 71 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 146 | 72 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 147 | 73 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 148 | 74 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 149 | 75 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 150 | 76 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 151 | 77 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 152 | 78 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 153 | 79 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 154 | 80 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 155 | 81 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 156 | 82 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 157 | 83 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 158 | 84 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 159 | 85 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 160 | 86 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 161 | 87 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 162 | 88 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 163 | 89 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 164 | 90 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 165 | 91 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 166 | 92 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 167 | 93 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 168 | 94 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 169 | 95 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 170 | 96 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 171 | 97 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 172 | 98 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 173 | 99 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 174 | 100 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,435 | 796,082 |
| 175 | 101 | 911,290 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,434 | 796,082 |

**Calculations**

| Attained Age | Time | BOY Present Value of Death Benefits | BOY Present Value of Surrender Benefits | BOY Present Value of Per Policy Expenses | Percent of Premium Value of Expenses | Boy Present Value of Premium Expenses | Present Value of Benefits and Expenses | Premiums | PV of Premiums | Reserve With Margin |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Calculations for Reserve with Mortality and Interest Margins | | | | | | | | |
| 176 | 102 | 911,291 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,434 | 796,083 |
| 177 | 103 | 911,291 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,434 | 796,083 |
| 178 | 104 | 911,291 | - | 155 | 2,947 | 6,072 | 917,517 | 58,948 | 121,433 | 796,084 |
| 179 | 105 | 911,292 | - | 154 | 2,947 | 6,072 | 917,518 | 58,948 | 121,432 | 796,086 |
| 180 | 106 | 911,294 | - | 154 | 2,947 | 6,071 | 917,520 | 58,948 | 121,430 | 796,090 |
| 181 | 107 | 911,297 | - | 154 | 2,947 | 6,071 | 917,523 | 58,948 | 121,426 | 796,097 |
| 182 | 108 | 911,302 | - | 154 | 2,947 | 6,071 | 917,528 | 58,948 | 121,418 | 796,110 |
| 183 | 109 | 911,313 | - | 154 | 2,947 | 6,070 | 917,538 | 58,948 | 121,404 | 796,134 |
| 184 | 110 | 911,333 | - | 154 | 2,947 | 6,069 | 917,556 | 58,948 | 121,377 | 796,179 |
| 185 | 111 | 911,370 | - | 154 | 2,947 | 6,066 | 917,591 | 58,948 | 121,326 | 796,265 |
| 186 | 112 | 911,440 | - | 154 | 2,947 | 6,061 | 917,656 | 58,948 | 121,230 | 796,426 |
| 187 | 113 | 911,572 | - | 154 | 2,947 | 6,052 | 917,778 | 58,948 | 121,049 | 796,729 |
| 188 | 114 | 911,820 | - | 154 | 2,947 | 6,035 | 918,009 | 58,948 | 120,709 | 797,300 |
| 189 | 115 | 912,289 | - | 153 | 2,947 | 6,003 | 918,445 | 58,948 | 120,067 | 798,378 |
| 190 | 116 | 913,175 | - | 151 | 2,947 | 5,943 | 919,269 | 58,948 | 118,854 | 800,415 |
| 191 | 117 | 914,851 | - | 148 | 2,947 | 5,828 | 920,827 | 58,948 | 116,561 | 804,266 |
| 192 | 118 | 918,021 | - | 143 | 2,947 | 5,611 | 923,775 | 58,948 | 112,221 | 811,553 |
| 193 | 119 | 924,024 | - | 132 | 2,947 | 5,200 | 929,357 | 58,948 | 104,003 | 825,353 |
| 194 | 120 | 935,397 | - | 113 | 2,947 | 4,422 | 939,932 | 58,948 | 88,435 | 851,497 |
| 195 | 121 | 956,938 | - | 75 | 2,947 | 2,947 | 959,960 | 58,948 | 58,948 | 901,012 |