



AMERICAN ACADEMY *of* ACTUARIES

Tax Calculations by the American Academy of Actuaries' Life-Risk Based Capital Committee's Codification Subgroup

**Presented to the National Association of Insurance Commissioners' Life Risk-Based Capital Working Group
March 2001 – Nashville, TN**

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Codification Subgroup

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Summary

Recommended Pre-tax and After-tax Factors for 2001 Life RBC and Deferred Tax Assets (DTAs)/Deferred Tax Liabilities (DTLs) Recognition, Reflecting Codification

The American Academy of Actuaries' Life Risk-Based Capital Codification Subgroup has completed its review of all the codification changes and has reported on them at each quarterly NAIC meeting for the past two years. It completed its recommended structural changes in December (all except for real estate were approved). The December recommendations included the structural changes to recognize deferred taxes in the RBC factors and the related deferred tax assets and liabilities. These recommendations were designed to provide substantial future flexibility, i.e. to change factors with minimal effort if future tax rates were to change or if capital gains were to receive different taxable treatment than income, and to be able to continue the current RBC factors unchanged for 2001 if the regulators ultimately were to decide that that was their preference.

The NAIC's RBC Task Force agreed that if the Academy Codification Subgroup completed its recommendations as to (1) the tax treatment for each RBC factor—either as taxable income, or taxable capital gain/loss or some combination of these two, (2) the tax factor assumed to apply to each RBC factor, and (3) the tax-adjusted RBC factors and the pre-tax factors for each risk in the formula, for the March 2001 NAIC Meeting, that it would consider these recommendations for possible exposure and comment at that meeting. After exposure for comments, recommendations for final approval were to be made in June, for implementation in the Life RBC Formula for the year 2001.

The attached report describes the subgroup's recommendations, its rationale, and the pre-tax and after-tax factors. The AAA Life RBC Committee has reviewed and supports these recommendations. The report's key conclusions are summarized below:

Deferred Tax Assets (DTAs) and Deferred Tax Liabilities (DTLs)

Full recognition of DTAs and DTLs in Total Adjusted Capital (TAC) is recommended with no RBC factor applied to these items in the RBC formula at this time.

After-tax RBC Factors Recommendations

The recommended Life RBC factors are shown on pages 9-11 of the attached report. The C-1 fixed income after-tax RBC asset factors are generally lower than the current factors since the tax assumption for modeling bond defaults was changed from 50% tax recognition with a one-year delay in tax recoverability, to 75% with no delay. This change, relative to the bond model used to develop the current factors, is due to the codification change that recognized deferred taxes. Most of the other non-asset factors were not changed since they already were fully tax-adjusted (100%).

The largest absolute factor changes recommended are to the C-1 factors for higher risk bonds and preferred stock and unaffiliated common stock. The Real Estate factors did not change since they were already fully tax-adjusted. More specifically within the C-1 category of risk, unaffiliated common stock would change the most, as expected; other high-risk fixed dollar asset factors would have the next most substantial absolute changes.

The recommended tax adjusted fixed income RBC asset factors reflect both tax adjustments and other changes that primarily reflect the current statutory AVR structure and the beginning balance assumed in the bond factor modeling. No changes were made to the bond default assumptions used in the original model.

The tax assumptions used were consistently applied to the RBC factors. The rationale for each of the recommendations is given in the report.

Sensitivity Test/Pre-tax Factors/Subsidiaries

The sensitivity test recommended adjusts the RBC results and TAC to a pre-tax basis (or something in between pre and post-tax, if desired) to provide regulators with the ability to identify and review other possible weakly capitalized companies.

All pre-tax RBC factors are determined by dividing the tax-adjusted factors by one less the recognized portion of the tax rate.

Plans for Testing the Impact of the Recommended Changes

Proposed sampling will provide an indication of possible effects of these recommendations especially for weakly capitalized companies and possible future actions.

I. LIFE INSURANCE RBC TAX DECISIONS FOR TOTAL ADJUSTED CAPITAL (TAC), RISK-BASED CAPITAL (RBC) AND FACTOR DEVELOPMENT

A. Recommendation 1: All DTLs recognized in the statutory statement should be included in TAC.

Rationale/Comments: The Academy's LRBC Committee had previously recommended that all Deferred Tax Liabilities be recognized and the committee continues to believe that is appropriate since, if the assets marked to market value in the statement (primarily common stock) were to be sold to cover losses, the value received would be reduced by taxes on the realized gain.

B. Recommendation 2: All DTAs recognized in the statutory statement should be included TAC.

Rationale/Comments: It is not the role of the Committee to second-guess the codification decisions unless they are clearly inappropriate for RBC purposes. The Committee does not think that is the case for DTAs and, therefore, recommend that all admitted DTAs be recognized as part of TAC.

Note: The amounts used for DTLs and DTAs would be the amounts reported in the statutory statements.

C. Recommendation 3: Tax Classification of the RBC Factors.

- 1. All C-1 factors of the RBC Formula will be classified as taxable capital gain/loss items.**
- 2. All C-2, C-3, C-4 factors of the RBC Formula will be classified as taxable income items.**

Rationale/Comments: Since each RBC component of a factor either entirely, or predominately, measures either a taxable income loss or a capital loss event, we classified each of them accordingly. Further refinement by type for any one component was unlikely to have any material impact on the aggregate RBC results of most companies.

Note: This recommendation provides for future flexibility since currently the tax rate is the same for taxable income and capital gains/losses.

D. Recommendation 4: Tax Structure: For fixed income C-1 components eliminate the one-year delay in tax recognition in the development of the bond factors.

Rationale/Comments: The one-year delay in tax recognition assumed in the original modeling of the bond C-1 factors will be eliminated since with the recognition of deferred taxes and DTAs tax recognition occurs at the time the asset is written down, rather than when it is sold.

E. Recommendation 5: Tax Adjustment Percentages.

- 1. For all C-1 fixed income factors: 75% tax adjustment**
- 2. For all C-1 equity factors such as Common Stock and real estate: 100% tax adjustment**
- 3. For C-2 Health factors (other than Disability Income and Long-Term Care): 0% tax adjustment; for all other C-2 factors: 100% tax adjustments**
- 4. For C-3 and C-4 factors: 100% tax adjustment**

Rationale/Comments: The recognition of taxes, including deferred taxes, in the development of the RBC factors should reflect NAIC codification SSAP 10. The earlier recommendations for DTLs and DTAs recognition were based on NAIC codification decisions. To implement these changes in developing the RBC factors, one must first determine each component's classification for tax purposes as either taxable income or taxable capital gain/loss items. This classification will also make it easier to make future possible changes if either of the income or capital gain tax rates were to be changed (currently they are the same).

The codification decision to recognize deferred taxes in the financial statement, subject to various conditions, will change many RBC factors. However, deferred tax asset recognition is limited by various tests. The resulting recognition of deferred tax assets will vary from time to time based on current economic conditions, as well as company taxes paid in recent years, surplus and other defined variables.

Generally, the asset default C-1 fixed income factors were determined using the original bond models, modified to reflect current AVR structure and reserve objective and the changes and tax recognition due to codification. The original bond model included a tax recognition assumption of 50% with a one-year delay in recognition. While the recognition of deferred taxes should theoretically increase the tax adjustment assumption from 50% to 100%, codification limits on the recognition of DTAs should decrease the tax adjustment to something less than the full 100%. Since the codification DTA limitations will vary from year to year due to economic changes (real estate cycle, stock market, etc.) and could, in some cases, also vary from company to company, the Committee concluded that a percentage between the current and full tax adjustments should be used in the development of the RBC factors. Upon further discussion, the Committee decided to recommend a 75% tax adjustment for all taxable fixed income components.

RBC equity components should be fully tax adjusted since these investments are made anticipating capital gains. For example, a company would only invest in common stock with an average of about 1% dividend yield if it could assume that capital gains on average would increase the total return above that available from fixed income investments. As expected,

most of equity investment market values do exceed their tax basis and this excess will absorb or cushion most, if not all, of the future losses that may occur measured on the tax base.

For unaffiliated common stock, full adjustment is conservative, as well as correct. For real estate, the current market value, before loss, will often exceed the depreciated book values shown on the financial statement. The tax basis of these assets is generally less than book values due to accelerated tax depreciation. There are also other likely sources of taxable gain such as appreciation in value due to favorable market conditions. Hence, full recognition of taxes in most cases is appropriate.

The only notable exception to these general recommendations for the full recognition of taxes for income items is for the RBC Health C-2 factors (other than those for Disability Income and Long-Term Care) where the pre-tax and after-tax-RBC factors are recommended to be identical. Often health companies are single line entities that, as such, have fewer other significant sources of gains to offset their losses.

Moreover, current studies show that many weakly capitalized health companies are not currently taxpayers. As a result, the Committee recommendation is a zero tax adjustment for these health components.

The C-3 factor is fully adjusted since it is assumed borrowing to cover the losses will cover any shortages.

The C-4 factors are unchanged since they were already fully tax-adjusted.

Summary of Tax-Adjustments by RBC Component

| <u>RBC Component</u> | <u>Tax Adjustment</u> |
|----------------------------|-----------------------|
| C-1 Equity | 100% |
| C-1 Fixed Income | 75% |
| C-2 Health (not DI or LTC) | 0% |
| C-2 Other | 100% |
| C-3 | 100% |
| C-4 | 100% |

The Committee also added a new sensitivity test that identifies for regulators potential companies for further review to determine if the tax adjustments used in the RBC Formula were appropriate. See Recommendation 7. The treatment of subsidiaries under this sensitivity test is described in Recommendation 10.

F. Recommendation 6: Asset Concentration Factor.

- 1. Minimum after-tax-adjusted factor: 0.8%.**
- 2. Maximum after-tax-adjusted factor: 45%.**

Rationale/Comments: The current instructions indicate that any asset with a RBC factor of less than 1% is not to be doubled. The underlying rationale for that minimum was to eliminate the possibility that a company could purchase Class 1 or higher-grade investments to avoid doubling the factor on some otherwise top ten riskier investments. With the new factors the intent is to maintain the same objective. However, since the proposed bonds Class 2 after-tax factors are less than one percent, we are recommending lowering the minimum tax adjusted factor to 0.8%. This will eliminate Class 1 preferred stock as is done currently.

As to the maximum recommendation of 45%, this change reflects, in large part, the proposed common stock treatment exposed for comment in December for possible adoption in March. Under this new proposal, the concentration risk for unaffiliated common stock (which is currently excluded from the asset concentration factor) will be captured by a new element in the RBC formula that will increase the basic risk factor for the 5 largest stock holdings by 50%. This change and the new RBC factors led to a fresh look at the maximum factor. Under the common stock proposal, the maximum, after the new tax recognition, becomes 45% (20% times the maximum beta factor of 1.5 times 1.5).

Since any maximum is somewhat arbitrary, the Committee decided to recognize this change, although it is not part of the asset concentration factor, in its recommendation to increase the maximum from 30% to 45%.

G. Recommendation 7: Sensitivity Test

1. Determine Total Adjusted Capital assuming all DTAs and DTLs are zero.
2. Determine RBC on a pretax basis.

~~Rationale/Comments: This sensitivity test is designed to alert regulators as to any company that may be weakly capitalized if they are not and/or were not taxpayers. Regulators, as part of their risk/solvency analysis or decision making, can then determine or ask for individual company results, reflecting such facts as actual prior years taxes paid; tax sharing agreements, if any; previous capital gains taxes paid in the last three years; and other important tax considerations to determine if the RBC and/or TAC results are appropriate for that company.~~

Regulators can also vary the elements of the proposed sensitivity test, if desired, since all the information to do so is available. For example, some regulators may continue to recognize the DTLs in TAC while zeroing out DTAs and using pre-tax RBC since this is more conservative.

Regulators could also use only a portion of the difference between the pre-tax RBC value and the after-tax RBC value as not all adverse events are likely to occur simultaneously, and many other variations are possible.

Note: The treatment of subsidiaries under this Sensitivity test is described in Recommendation 10.

H. Recommendation 8:

1. Develop all RBC risk factors based on after tax-adjusted basis.
2. The pre-tax RBC factors will be determined by dividing the after-tax adjusted RBC factors by $(1 - \text{tax rate adjustment})$.

Rationale/Comments: This recommendation assures mathematically accurate after-tax results. If one instead started by developing factors based on a model without any assumed tax recognition and subsequently applied a tax rate to these results, there would be modest mathematical differences from the factor results determined as recommended (based on a model that assumed full reductions for taxes on all projected losses. These differences would be modest for the smaller size factors, but would be significant for the larger size RBC factors.

I. Recommendation 9: RBC/TAC for Subsidiaries: Insurance and Non-insurance

1. RBC is:
 - (a) determined using the NAIC insurance RBC formulas for all US insurance and investment subsidiaries. This includes life, P&C, and investment subsidiaries.
 - (b) for Canadian insurance subsidiaries, MCCSR, the Canadian version of RBC.
 - (c) for other (not Canadian) alien insurance subsidiaries, 100% of equity.

- (d) **for holding companies in excess of indirect affiliates, RBC is defined by applying the unaffiliated common stock factor to the equity of the affiliate, whether on a statutory or a GAAP basis.**
- (e) **for all other subsidiaries, RBC is defined by applying the unaffiliated common stock factor to its equity, whether on a statutory or a GAAP basis.**

2. **Total Adjusted Capital includes equity of all subsidiaries. Most non-insurance subsidiaries report on a GAAP basis, which reflects deferred taxes. For US insurance and investment subsidiaries, the equity or capital will reflect DTAs and DTLs according to codification standards. For Canadian insurance and investment subsidiaries, the equity reflects deferred taxes. For other (not Canadian) alien insurance subsidiaries, the equity is not calculated consistently in the various countries – it could reflect or not reflect deferred taxes.**

Rationale/Comments: No additional formula changes are needed to implement TAC or RBC for insurance or non-insurance subsidiaries on a GAAP or statutory basis.

The current 100% RBC factor for alien (non-Canadian) subsidiaries relies on two assumptions: 1) the amount of capital held in the country is “correct” and 2) it is often difficult to repatriate capital back to the US. Since codification changes and deferred tax recognition do not affect these assumptions, the 100% factor will continue to apply.

J. Recommendation 10: Treatment of Subsidiaries under Recommendation 7 (Sensitivity Test)

Note: The Sensitivity Test described under Recommendation 7 adjusts TAC and RBC to a pre-tax basis. Subsidiaries' results, as part of that test, must also be adjusted to a pre-tax basis. This will require:

- a. Adjusting TAC for all subsidiaries (whether on statutory or GAAP basis) reported in the parent's financial statement by deducting DTAs and adding DTLs if the RBC formula for that entity recognizes DTAs and DTLs.**
- b. For life insurance and investment subsidiaries and holding companies in excess of indirect affiliates, determining RBC using pre-tax RBC factors.**
- c. For other subsidiaries, no pre-tax adjustments to RBC are to be made.**

Rationale/Comments: Both GAAP and statutory financials for subsidiaries have deferred tax assets and deferred tax liabilities though the rules for financial statement recognition differ. As a result, all financial statements can be developed showing these terms set equal to zero.

The adjustments for pre-tax RBC for life insurance and investment subsidiaries and holding companies in excess of indirect affiliates financials are done the same way as is done for the parent. For other subsidiaries, GAAP makes a full tax adjustment but the effort to adjust taxes to 75% for fixed income asset risks is of little or no practical consequence since RBC is equal to equity and this usually will minimize its affect unless subsidiaries are a significant portion of total RBC or the total company's equity.

RBC on a pre-tax basis is limited to life insurance and investment subsidiaries since the Property/Casualty and the Health RBC Working Groups are not implementing any tax changes at this time.

As with the general sensitivity test, the regulator has the information to make alternative adjustments.

K. Recommendation 11: Testing the Effects of Codification Changes

- 1. Sample all companies below company action level, plus 10% of the other companies in March.**
- 2. Determine approximate RBC changes for companies selected for #1 by computing the RBC after-tax results using the company's 1999 (or 2000, if applicable) year-end data for each risk component of the formula, and then comparing the total RBC results to those previously reported for the company in 1999 by early April.**
- 3. Apply the sensitivity test and determine the sensitive results for the companies selected for #1, by April 30, 2001.**
- 4. Determine TAC for companies selected for #1 by sampling companies**
 - (a) for non-tax codification changes,**
 - (b) for DTAs, (c) for DTLs, by June 30, 2001.**
- 5. Review all companies' results for (1) to (4) after quarterly statements are filed on May 15. Report results in July.**

Rationale/Comments: Presumably, the regulators primary interest is in possible changes in RBC results for the company action level companies. Other companies are spot tested to determine if any unusual changes occur in the measurements for the other companies.

Note: While it is not possible to reflect the changes to Total Adjusted Capital until there are some statutory reports based on codification, the changes to RBC due to these recommendations can be illustrated or approximated by recalculating last year's results.

II. RBC FACTORS AND THEIR DEVELOPMENT

A. RBC FACTORS: CURRENT, PRE-TAX AND RECOMMENDED

BONDS, SOME DERIVATIVES, AND ASSET CONCENTRATION

| | <u>Current</u> | <u>Pre-Tax</u> | <u>Recommended</u> |
|---|----------------|----------------|--------------------|
| 1 | 0.3% | 0.4% | 0.3% |
| 2 | 1.0 | 1.3 | 0.9 |
| 3 | 4.0 | 4.6 | 3.4 |
| 4 | 9.0 | 10.0 | 7.5 |
| 5 | 20.0 | 23.0 | 17.0 |
| 6 | 30.0 | 30.0 | 20.0 |

PREFERRED STOCK.

SURPLUS NOTES, CAPITAL NOTES

| | <u>Current</u> | <u>Pre-Tax</u> | <u>Recommended</u> |
|---|----------------|----------------|--------------------|
| 1 | 0.9% | 1.1% | 0.8% |
| 2 | 2.5 | 3.0 | 2.2 |
| 3 | 6.0 | 7.2 | 5.3 |
| 4 | 13.5 | 15.0 | 11.0 |
| 5 | 25.0 | 25.0 | 18.0 |
| 6 | 30.0 | 30.0 | 20.0 |

MONEY MARKET, CASH, NON-BOND

SHORT-TERM INVESTMENTS

| | <u>Current</u> | <u>Pre-Tax</u> | <u>Recommended</u> |
|--|----------------|----------------|--------------------|
| | 0.3% | 0.4% | 0.3% |

FED HOME LOAN BANK

| | <u>Current</u> | <u>Pre-Tax</u> | <u>Recommended</u> |
|--|----------------|----------------|--------------------|
| | 2.3% | 2.7% | 2.0% |

REAL ESTATE

HOME OFFICE AND INVESTMENT

| <u>Current</u> | <u>Pre-Tax</u> | <u>Recommended</u> |
|----------------|----------------|--------------------|
| 10.0% | 15.0% | 10.0% |

FORECLOSED

| <u>Current</u> | <u>Pre-Tax</u> | <u>Recommended</u> |
|----------------|----------------|--------------------|
| 15.0% | 23.0% | 15.0% |

BA REAL ESTATE

| <u>Current</u> | <u>Pre-Tax</u> | <u>Recommended</u> |
|----------------|----------------|--------------------|
| 15.0% | 23.0% | 15.0% |

ENCUMBRANCES

| | <u>Current</u> | <u>Pre tax</u> | <u>Recommended</u> |
|------------|----------------|----------------|--------------------|
| Investment | 7.75% | 12.04% | 7.8% |
| Foreclosed | 12.75 | 20.04 | 13.0 |

MORTGAGES

GOOD STANDING

| <u>Current</u> | <u>Pre-Tax</u> | <u>Recommended</u> |
|----------------|----------------|--------------------|
| 2.25% | 2.6% | 1.9% |

RESTRUCTURED

| <u>Current</u> | <u>Pre-Tax</u> | <u>Recommended</u> |
|----------------|----------------|--------------------|
| 7.5% | 8.6% | 6.4% |

90 DAYS OVERDUE

| <u>Current</u> | <u>Pre-Tax</u> | <u>Recommended</u> |
|----------------|----------------|--------------------|
| 15.0% | 16.0% | 12.0% |

IN PROCESS OF FORECLOSURE

| <u>Current</u> | <u>Pre-Tax</u> | <u>Recommended</u> |
|----------------|----------------|--------------------|
| 20.0% | 23.0% | 17.0% |

**UNAFFILIATED COMMON STOCK
AND ALL OTHER BA SCHEDULE**

| <u>Current</u> | <u>Pre-Tax</u> | <u>Recommended</u> |
|----------------|----------------|--------------------|
| 30.0% | 30.0% | 20.0% |

AFFILIATED COMMON STOCK

| <u>Current</u> | <u>Pre-Tax</u> | <u>Recommended</u> |
|----------------|----------------|--------------------|
| 30% | 30% | 20.0% |

ALIEN INSURANCE SUBSIDIARIES

| <u>Current</u> | <u>Pre-Tax</u> | <u>Recommended</u> |
|----------------|----------------|--------------------|
| 100% | 100% | 100% |

**SEPARATE ACCOUNTS
WITH GUARANTEES**

| <u>Current</u> | <u>Pre-Tax</u> | <u>Recommended</u> |
|----------------|----------------|--------------------|
| 0.3% | 0.4% | 0.3% |

**SURPLUS IN
SEPARATE ACCOUNTS**

| | <u>Current</u> | <u>Pre-Tax</u> | <u>Recommended</u> |
|-----------|----------------|----------------|--------------------|
| | 10.0% | 11.0% | 8.3% |
| Line (12) | 2.0 | 2.4 | 1.8 |

REINSURANCE

| <u>Current</u> | <u>Pre-Tax</u> | <u>Recommended</u> |
|----------------|----------------|--------------------|
| 0.5% | 0.8% | 0.5% |

C-2, C-3, C-4 FACTORS

All recommended factors are the same as the current ones. All of the C-2 (except for certain C-2 Health factors, as noted earlier), C-3, and C-4 pre-tax factors will be the factors divided by 0.65.

B. DEVELOPMENT OF RBC FACTORS

1. General Description

The RBC factors for all asset risks were calculated using the recommended tax adjustments described above. These factors were then used to calculate a second set of RBC factors on a pre-tax basis to be used in the sensitivity test.

All assumptions used, other than tax related assumptions, were the same as those used in the original development of the RBC factors in 1991.

The tax-adjusted RBC factors were determined for the six classes of bonds the original model results (from the October 6, 1991 memorandum) for four tax assumptions: 0%, 25%, 50% and 100%. The current RBC factors are based on the original AVR structure and assumed AVR maximums with a one-year deferral of tax recognition and a 50% tax adjustment. Although the results are not linear among the various tax assumptions on this basis, they do provide an excellent initial estimate for a 75% tax recognition assumption.

Original RBC factor results are also available for the same four tax assumptions assuming (1) a level expected loss risk premium (consistent with the current AVR concept), as well as assuming (2) no AVR or other comparable reserving structure. The latter is only available pre-tax (0% tax-adjustment). While the expected loss premium results are similar to those actually used, the non-AVR RBC factors are more than double the originals.

Subsequently, additional modeling was done to eliminate the one-year delay in tax loss recognition and increase the tax recognition from 50% to 75%.

These results of this modeling for the various bond classes are shown in the following table:

| | <u>BONDS</u> | |
|---------|-----------------|-----------------------------------|
| | <u>Original</u> | Adjusted for <u>Taxes Only</u> |
| Class 1 | 0.35% | 0.20% |
| Class 2 | 1.01 | 0.56 |
| Class 3 | 3.94 | 2.64 |
| Class 4 | 8.93 | 6.50 |
| Class 5 | 21.98 | 15.40 |

Surprisingly, removing the one-year lag in the tax recognition of losses had about the same absolute affect on these factors as increasing the tax recognition from 50% to 75%. In other words, for class 3, for example, half of the change from 3.94 to 2.64 is due to eliminating the one-year lag and the other half is due to the higher tax recognition assumption.

Although we had limited our focus to changes in taxes, our investigation of the original work suggested additional changes in the process and assumptions that would improve the results and be consistent with the current AVR structure. We continued to use the original default related assumptions.

These results have been added to the previous table results for easy comparison. Note they are significantly higher than those only reflecting tax changes from codification.

BONDS

| | <u>Original Basis</u> (1) | <u>Original Adjusted for Taxes Only</u> (2) | <u>Revised Original After Taxes</u> (3) | <u>New AVR Basic Contribution</u> (4) |
|---------|----------------------------------|--|--|--|
| Class 1 | 0.35% | 0.20% | 0.35% | 0.04% |
| Class 2 | 1.01 | 0.56 | 0.94 | 0.19 |
| Class 3 | 3.94 | 2.64 | 3.41 | 0.93 |
| Class 4 | 8.93 | 6.50 | 7.53 | 2.13 |
| Class 5 | 21.98 | 15.40 | 17.39 | 4.32 |

The AVR revised basic contributions are also shown. Similar changes to those shown in column 3 and 4 will be recommended to the AVR Task Force to implement and keep the two structures on the same basis.

The Committee recommends the Revised Original After-tax factors shown in column (3) as the C-1 factors for bonds for 2001 and subsequent years.

The 75% tax adjusted bond RBC factors were used to determine the RBC factors for most of the other fixed income assets (preferred stock, money market, mortgages, etc.) since the original tax-adjusted modeled data for other tax assumptions is not available. The Committee is reviewing the preferred stock factor tax assumptions used in their 1995 modeling for the factor revisions to confirm the factors recommended (will be completed by the March meeting).

For equities, the real estate RBC factors (for both investment and for foreclosed) will continue unchanged since they already are on an after-tax basis.

For unaffiliated common stock the factor is 30% less 10% (the assumed tax rate of 35% times 30%), or 20%.

All pre-tax RBC factors were determined by dividing the tax-adjusted factors by (1) minus (the assumed percentage tax recognition times the tax rate). In other words, they are consistent with the tax-adjusted factors. They were not developed based on pre-tax modeling.

The original RBC factors other than the smaller ones were rounded significantly. After much discussion, it is recommended to round all C-1 factors to two significant digits. Although some preferred two decimal places rounded, the majority felt two-digit rounding (or rounding to one decimal if the factor was less than one percent) was preferable and consistent with the decisions made during the original factor development.

All of the C-2, C-3 and C-4 factors have also been calculated on a pre-tax basis for the sensitivity testing by dividing the recommended RBC factor by (1 – the assumed tax rate), and then rounding the result to two significant digits (or one decimal if the resulting factor is less than one percent).

2. Further Background on Underlying AVR (and Other Comparable Reserve Assumptions) Used to Determine RBC Factors

The Life RBC factors assume that future annual risk (part of the excess investment rate paid over the treasury rate) premiums are set aside and accumulated without tax until an adverse event occurs. This can either be done via the AVR or some other similar reserving structure that accomplishes the same result. In the original RBC bond modeling, the initial AVR reserve, was set equal to zero (rather than 80% - 85% level reserve objective of the current AVR or of most other actuarial life insurance reserves) which lowered the current RBC factors. The recommended

RBC factors are higher than those originally modeled (even without the tax assumption change), since an 80%-85% initial assumption was made instead of the zero assumption.

The future AVR basic (not total) contributions, or the annual contribution to a comparable reserve, is assumed to be after-tax as contributions to the AVR are below the line (operating gain line) and thus after-tax. The interest credited to these contributions is also not tax-adjusted for the same "AVR below the line" reason.

Any accumulated contributions in excess of the AVR maximum was released to surplus each year when it occurred in the original modeling, but not in the current development.

Based on the above, one could conclude that the current RBC factors for assets carried at book value are valid only if there is an AVR or comparable reserve mechanism that sets aside at least the average expected risk premium each year and accumulates these risk premiums with interest until losses occur.

In other words, if the risk premium paid as part of the higher investment return for lower quality book valued bonds is not set aside and accumulated but is either paid out or added to surplus each year, the RBC factors should be considerably higher than the current ones.

This analysis might also suggest further refinement of TAC, as to the treatment of AVR, as well as the treatment of policy reserves. This future discussion relates to the current calculation of TAC as well as the future availability of funding for losses. Since these TAC issues are not tax related, they were not pursued.