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March 16, 2018

Mr. Philip Barlow
Chair, National Association of Insurance Commissioners (NAIC)
Life Risk-Based Capital (E) Working Group

Dear Philip,

The RBC Tax Reform Work Group (TRWG) of the American Academy of Actuaries' (Academy)[1] Life Practice Council is pleased to submit comments on how the recent change in U.S. corporate tax law,[2] and in particular, the material change in the corporate tax rate from 35% to 21%, should affect the NAIC's Life Risk-Based Capital ("Life RBC") calculation of Authorized Control Level (ACL) RBC. We also provide suggested modifications to certain tax-related aspects of the Life RBC formula. The tax law changes were adopted by the U.S. Congress and signed by the president in late December 2017, to be effective for tax years starting in 2018.

Background Information

The NAIC Life RBC calculation, which determines both Total Adjusted Capital (TAC) and ACL RBC, can be used by regulators as a tool to identify potentially weakly capitalized companies. Life RBC factors, originally determined on a post-tax basis, were derived and proposed by an industry group in 1991, with regulatory implementation in 1993. Since the implementation of Life RBC, the Academy has played a key role in advising the NAIC concerning refinements to the formula, including its technical aspects. In the early 2000s, as a part of the statutory codification effort, pre-tax factors and an explicit tax offset factor were added to the structure and calculation. The net effect of these two tax-related changes was that ACL RBC remained unchanged and regulators had additional information, both pre- and post-tax, about potentially weakly capitalized companies.

The 2017 tax law changes include the first change to the corporate tax rate since the NAIC adopted the Life RBC calculation. While the codification changes to Life RBC in the early 2000s anticipated that there could be future corporate tax rate changes, until the enactment of the 2017 law, there had been no such changes.

In this letter, we offer our comments and recommendations on the effect of the new tax law on TAC and ACL RBC. Following is some background information on Life RBC to put our comments into context:

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[1] The American Academy of Actuaries is a 19,000 member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

[2] Public Law No: 115-97. https://www.congress.gov/115/bills/hr1/BILLS-115hr1enr.pdf

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1. As noted above, the purpose of the Life RBC calculation is to function as a tool to identify potentially weakly capitalized companies.
2. The Life RBC formula identifies various risk factors which can negatively affect an insurer's TAC. RBC charges for those risk factors are based on the anticipated impact on a company's TAC arising from a specified stress condition.
3. Each Life RBC factor is defined to achieve a regulator-specified statistical safety level.
4. Life RBC factors were derived based on the post-tax losses under "stressed" conditions. The reason for reflecting taxes in the determination of minimum capital requirements is that life insurance companies are assumed to be payers of federal income taxes. Therefore, the financial loss due to the "stressed" condition would be partially offset by a reduction in federal income tax expense, because losses are deductible from an insurer's taxable income. The pre-tax results are provided to regulators to enable them to adjust the RBC results as appropriate for the tax situation of specific potentially weakly capitalized companies.
5. Regardless of the tax environment, the minimum capital requirements should continue to be defined at the targeted statistical safety level.
6. The original Life RBC formula was defined to accommodate different tax rates for capital gains and ordinary income.
7. As originally designed, any changes to the tax structure or tax rates were to be reflected in the RBC factors.

Since the implementation of Life RBC in 1993, many of the Life RBC factors have been or are in the process of being updated. At the current time, the NAIC, with the Academy's assistance, is working on potential changes to several parts of Life RBC, including RBC factors for C-1 bonds, C-1 real estate and other C-1 assets, C-2 life insurance, C-3 Phase 2 capital, longevity risk, and operational risk. None of these potential changes was effective for 2017 RBC filings. An explicit operational risk charge may be included in Life RBC for 2018 filings, and the remainder of the potential changes could be effective in 2019 or later RBC filings.

Impact on TAC Due to Tax Changes

The 2017 tax law changes affect many items involved in the calculation of Life RBC. Both TAC and ACL RBC are impacted.

While the primary focus of this letter is on the potential impact the tax law changes will have on ACL RBC, we thought that it would also be useful to identify potential impacts that the tax law may have on a company's TAC. Some provisions of the law potentially result in an increase to TAC while others potentially reduce it. Most provisions are fully effective for 2018 and later years, but the tax reserve and deferred acquisition cost tax effects do not reach equilibrium for a number of years. The effect of these items varies by company, depending on the company's mix of business and tax situation, so the collective impact of these items on either a particular life insurer or the industry as a whole is not known.

The following provisions included in the tax law are expected to have a direct effect on a life insurer's taxable income and tax expense. To the extent that tax expense is lower, TAC is higher, or vice versa.

1. The tax rate is reduced from 35% to 21%, which will in general decrease tax expense.
2. The tax reserve is defined as the greater of 92.81% of statutory reserves and cash surrender value. In general, that will reduce tax reserves, and therefore increase taxable income and tax expense.
3. There is an eight-year phase-in of the difference between Dec. 31, 2017, tax reserves and the tax reserves defined in item (2) above. In general, that will increase taxable income and tax expense for tax years 2018–2025 inclusive.

4. The deferred acquisition cost tax provisions are changed, with "capitalization" percentages being increased and the amortization period being lengthened from 10 to 15 years, which generally increases taxable income and tax expense.
5. The dividends received deduction is revised, which generally increases taxable income and tax expense for affected companies.

Following are additional potential indirect impacts to TAC that arise from the application of the tax law to life insurers:

1. The value of Deferred Tax Assets (DTA) and Liabilities (DTL) are recalculated using a 21% rate. Companies with a net DTA will generally see a reduction in TAC, while those with a net DTL will generally see the reverse.
2. The tax rate used in asset adequacy analysis reduces from 35% to 21%, which may impact the amount of asset adequacy reserves for affected companies.

Given the number of items above and the differing impact for companies, we are not able to make a general comment about the aggregate impact of tax law changes on TAC for the life insurance industry. However, we expect that most, if not all, life insurers will see an increase in ACL RBC should the NAIC make the changes to Life RBC as suggested in this letter.

Rationale for Changes to ACL RBC Due to Tax Changes

The TRWG believes that there is solid logic and theoretical support for changes to the tax-related factors underlying ACL RBC (Life RBC factors) in light of the tax changes. As noted above, Life RBC factors were derived based on post-tax losses under "stressed" conditions, and any changes to the tax structure or tax rates were expected to be reflected in the Life RBC factors. Under the premise that the life insurer is paying taxes, a decrease in the federal tax rate increases required RBC, since the tax offset to a loss is reduced and the net post-tax financial loss is increased.

Lowering the tax rate causes an increase to the post-tax Life RBC factors, which may seem counterintuitive at first impression. An example helps to illustrate this point:

- Assume that a certain "stress" event produces a post-tax loss of $65.
- At the time that the current Life RBC factors were derived, the tax rate was 35%. Therefore, the pre-tax loss when the factors were derived was ($65 / (1-0.35)), or $100.
- Under the new tax law, the same $100 pre-tax loss generates a $21 tax reduction, for a post-tax loss of $79.
- Because post-tax losses from the same risk event have increased from $65 to $79, post-tax RBC factors based on this type of event would need to be adjusted upward following the tax law change.

The increase in Life RBC factors is offset, in part, for some factors, by an increase in the after-tax discount rate applied to the stressed losses. If the loss is assumed to happen "n" years in the future, the present value of the loss will be reduced due to the higher after-tax discount rate. This would temper the RBC impact of the factor change for those Life RBC factors that involve multiple-year discounting.

The tax rate change from 35% to 21% is material. There may be significant changes to an insurer's ACL RBC at such time as Life RBC factors are changed. For example, for those Life RBC factors that currently use a tax factor of 35% and assume current (that is, not future) losses from a stress event, the Life RBC factors after-tax effect would increase by ($[(1 - \text{tax factor}_{NEW})/(1 - \text{tax factor}_{OLD}) - 1]$), or ([0.79/0.65] – 1), which is 21.5%. Therefore, the maximum increase for any Life RBC factor due to tax law changes is 21.5%; however, many factors will have lower percentage increases, as outlined in this letter. As an example of a lower percentage increase, the Life RBC factor for bonds for 2019 RBC filings would increase by approximately 9.4%, as described below.

Overview of TRWG Proposed Changes to Life RBC Factors

Following is an overview of proposed changes to the Life RBC factors. There are no proposed changes to the RBC structure. We believe that the lack of changes to the structure should allow for NAIC adoption of any changes to take place as late as June 30 of the year in which the changes take effect.

All of the proposed changes to Life RBC factors are driven by the corporate tax rate change from 35% to 21%. The TRWG is not proposing changes to the calculation of TAC.

C-1o Asset Risk—Bonds

The NAIC Investment Risk-Based Capital (IRBC) Working Group is in the process of updating the Life RBC factors for bonds. Academy work groups have been assisting the IRBC Working Group in this effort, and developed the model underlying the proposed updated bond RBC factors that were exposed in late 2017. As noted above, we believe that the IRBC Working Group's goal is for updated factors to be incorporated in 2019 RBC filings. Given our expectation that the underlying bond factors used for 2018 RBC filings will likely be different from those for 2019 filings, different approaches to this component should be considered for 2018 and 2019 RBC filings.

If NAIC makes changes to Life RBC factors for 2018 filings to reflect the new tax law

It is not practical to rerun the original models that were used to develop the current bond factors, so as to directly calculate the effect of the reduced tax rate. However, we know that the post-tax discount rate used in the original models would increase if we were able to rerun those models using a 21% tax rate rather than a 35% tax rate, thereby reducing the factors. Therefore, if the NAIC makes tax changes to RBC factors for 2018, we suggest that the current pre-tax bond factors be multiplied by 0.97, to reflect discounting at a higher rate. 0.97 is an approximation developed using the bond model that calculated the currently exposed bond RBC factors.

Further, we suggest that the tax factor in LR030 be changed from 0.2625 to either 0.1575 (that is, 75% of 21%) or 0.1680 (that is, 80% of 21%) for 2018. Use of 0.1575 would be consistent with our general comment that our proposed changes to RBC are driven only by the corporate tax rate change. However, consideration could be given to the research referred to below that suggests increasing the DTA recognition from 50% to 60%, and the increased recognition could be given in 2018 RBC filings, which would change the tax factor to 0.1680 for 2018. (Note that the currently exposed C-1 bond factors already reflect the 60% DTA recognition.) If the tax factor is changed to 0.1680, the combined effect of the adjustment to the pre-tax bond factors and the tax factor revision is an approximate 9.4% post-tax increase in bond RBC. This assumes no changes to the current portfolio adjustment factor for 2018 filings.

If NAIC makes changes to Life RBC factors for 2019 filings to reflect the new tax law

There may be multiple changes to bond RBC factors for 2019 filings compared to those used for 2017 filings. Each of the following items may be included in bond RBC factors for 2019, subject in each case to enactment by the NAIC:

1. Updates to underlying bond RBC factors, currently under consideration by the NAIC IRBC Working Group, before any tax-related changes
2. Changes to the underlying bond factors which arise from discounting at a higher after-tax rate
3. Changes to the tax factor arising from changes to the tax rate
4. Changes to the tax factor arising from increased DTA recognition

Assuming that the NAIC makes changes to both the underlying bond factors (item 1 above) and tax-related RBC items for 2019 RBC filings, the Life RBC factors for 2019 filings can be determined by rerunning the model that developed the updated RBC factors with revised tax assumptions. The resulting pre-tax factors, which would reflect all four of the items listed above, could be available for use without adjustment for 2019 RBC filings.

In order to get a sense of the change in the RBC factors from the change in tax rates arising from discounting (item 2 above), the Academy C-1 Work Group has already rerun the model that was used to develop the updated C-1 bond factors that were exposed in late 2017, using a 21% tax rate rather than 35%. The pre-tax revised RBC bond factors using a 21% tax rate, before application of the tax factor, are, on average, approximately 3% less than the currently exposed pre-tax RBC bond factors which used a 35% tax rate.

The combined impact of items 3 and 4 above is that the tax factor in LR030 for bonds for 2019 filings should be 0.1680 (that is, 80% of the 21% tax rate), compared to 0.2625 (that is, 75% of the 35% tax rate) which is used for 2017 filings. Underlying the current 75% factor is the assumption that 50% of tax losses from bonds are recognized in the year that the bond loss occurs, and one-half of the remaining 50% of tax losses are recognized from the DTA. Recent research presented to the Academy Tax Work Group indicates that DTA recognition should be updated from 50% to 60%, thereby increasing the part of the tax rate to be used to (0.50 + (0.50 * 0.60)), or 80%.

If the proposals in this section are adopted by the NAIC, the average increase in Life RBC factors for C-1 bonds for 2019 RBC filings is estimated to be 9.4% (excluding any changes arising from the IRBC Working Group's revision of the bond factors), rather than the general 21.5% increase mentioned earlier in this letter. This is explained in more detail below. [3]

Finally, the Academy C-1 Work Group model that produces the portfolio adjustment factor should be rerun. Based on a preliminary rerun of the model, we expect only modest changes to the currently exposed portfolio adjustment factors when the rerun is performed.

C-1o Asset Risk—Categories Other Than Bonds

Some asset classes currently have a tax factor in LR030 of 0.35, while other asset classes have a tax factor of 0.2625.

At such time as the NAIC makes tax changes to Life RBC factors, the TRWG proposes that the tax factors for C-1o asset categories other than bonds that currently carry a 0.35 tax factor be changed to 0.21. For those asset categories that currently carry a 0.2625 tax factor, the TRWG proposes that the tax factor be the same as those for C-1 bonds. Asset classes whose RBC assumes discounting of future losses may need to be reviewed in the future due to the previously stated tempering effect of an increased after-tax discount interest rate.

The NAIC IRBC Working Group has proposed that C-1 RBC bond factors use 20 rating categories at such time as they are updated, rather than the six rating categories currently used. There are other asset

[3] Two effects reduce the general increase of 21.5% to the 9.4% increase for bonds as cited above. First, the 21.5% general increase, which is derived as [(1 – 21%)/(1 – 35%)] – 1, is associated with 100% tax recognition. When the tax recognition is less than 100%, the impact of a lower tax rate mitigates the increase. If the tax recognition of capital losses through the DTA is assumed to be 80% after the change and 75% before the change, as recommended by the Academy, the average increase in Life RBC factors for C-1 bonds is reduced from 21.5% to 12.8% per the following calculation: [(1 – 80%*21%)/(1 – 75%*35%) – 1]. Second, the after-tax discount rate is increased because of the lower tax rate, incrementally reducing the present value of the loss, further reducing the average increase after application of the tax factor from 12.8% to approximately 9.4%.

types (such as preferred stock) that also currently use six rating categories. We believe that the tax factors proposed in the preceding paragraph will work for these other asset types, whether the NAIC retains the six-category structure or moves to a 20-category structure for other asset types.

C-2 Insurance Risk—Individual and Group Life Insurance

The Academy's C-2 Work Group has been looking into developing a proposal to update the C-2 RBC charges for individual and group life insurance. As part of its work, it has developed a model that approximately reproduces the current individual life RBC factors, using a 35% tax rate. When a 21% tax rate is substituted into that model, the resulting factors are approximately 3% lower than the current factors due to the effects of discounting, which is consistent with the finding for C-1 bonds.

Therefore, when the NAIC makes tax-rate RBC factor changes, we propose that the current pre-tax RBC C-2 individual and group life factors be multiplied by 0.97 until such time as changes are made to the underlying C-2 RBC factors. When the underlying C-2 RBC factors are updated, we expect that they will already incorporate the 21% tax rate, so no reduction to the updated pre-tax factors should be necessary. Additionally, we recommend that the tax factor in LR030 be changed to 0.21.

C-2 Insurance Risk—Accident & Health (A&H)

The LRBC formula contains factors for certain A&H business that were developed with the support of the Academy's Health Solvency Subcommittee. We have reached out to this subcommittee for comments on the impact of tax reform on these factors, and further discussions with that group will allow us to firm up recommendations. .

C-3 Risk

The C-3 low-risk, medium-risk, and high-risk base factors were originally set to be 0.005, 0.01, and 0.02, respectively. Then, when RBC factors were updated due to statutory codification in the early 2000s, the base factors were grossed up for the 35% tax rate to become 0.0077, 0.0154, and 0.0308, respectively, leaving the after-tax RBC factor unchanged.

In order to have consistent tax factors with other components of the RBC formula, the TRWG proposes that the items that currently carry tax factors of 0.35 in LR030 be changed to 0.21 at such time as the NAIC makes tax changes to Life RBC factors. Additionally, in order to retain the initial intent underlying the derivation of the C-3 factors, the pre-tax factors would need to be changed to 0.0063, 0.0127, and 0.0253 respectively. (For example, the low-risk factor is derived as [0.005 / (1 – 0.21)], or 0.0063). The combined effect of these proposed pre-tax factors and the tax factor is that the net after-tax RBC charge will continue to be 0.005, 0.01, and 0.02, respectively.

It should be noted that the instructions for C-3 Phase 1 say that "tax treatment should be consistent with that used in Appointed Actuary modeling," and C-3 Phase 2 instructions make numerous references to "tax rate" and a few references to "35%." Some companies likely used a 21% tax rate in their year-end 2017 C-3 Phase 1 and C-3 Phase 2 testing, and we expect that additional companies will use 21% for 2018 testing. Based on our review of these instructions, we believe that the only NAIC action required for C-3 Phase 1 and C-3 Phase 2 testing at this time is to change any specific references to "35%" in C-3 Phase 2 instructions to refer to the current tax rate.

C-4a Business Risk and the Prospective Operational Risk Add-On Charge

C-4a (Business Risk) was originally contemplated as a proxy for the guaranty fund assessments that a life insurer might face should there be a stressed scenario where many life insurers become insolvent. The tax factor in LR030 for C-4a is 0.35, which assumed that the guaranty fund assessments occurred in short order (so no need for discounting).

The NAIC is in the process of adopting an explicit operational risk charge as a part of Life RBC. Part of that formula is a C-4a offset, as it is commonly believed that the existing C-4a charge includes some level of operational risk. The NAIC is expected to adopt an operational risk charge for 2018 Life RBC filings, equal to 3% of Life RBC, reduced by the current after-tax C-4a RBC charge (but to no less than zero), with certain C-0 related adjustments to prevent double-counting. Because RBC is post-tax, 3% of RBC is also presumably post-tax.

For C-4a, we propose changing the tax factor in LR030 from 0.35 to 0.21 at such time as the NAIC makes tax-related changes to Life RBC. We suggest no changes to the operational risk charge that is under consideration for adoption.

Effective Date of Proposed Changes to Life RBC Factors

We expect that there will be much discussion among regulators and interested parties concerning the effective date changes to Life RBC factors.

Some may suggest that the factor changes should become fully effective at the earliest reasonable date, which we believe to be for 2018 RBC filings (that is, those submitted to regulators in early 2019). Others may suggest that any changes be delayed beyond 2018 RBC filings. Still others may suggest that only some of the factor changes be made for 2018 RBC filings, while other factor changes are made in later years.

The TRWG views the decision concerning the effective date as one to be made by the regulators, taking into account public policy considerations. The TRWG will provide suggested RBC factors in support of the effective date(s) chosen by regulators. It would be appropriate to change the RBC factors as soon as is reasonably possible; however, the TRWG recognizes that in some cases other considerations come into play in the decision as to when to make the factors effective.

If the NAIC chooses to not fully implement tax-related Life RBC factor changes such as those suggested in this letter in 2018 filings, we believe that it may be advisable for regulators to increase the monitoring of companies that have TAC that is marginally higher than Company Action Level RBC until such time as the factor changes are fully implemented. For example, if the NAIC chooses to not make Life RBC tax factor changes in 2018 filings but to fully implement changes in 2019 filings, it is possible that an insurer that reported a ratio of TAC to Company Action Level RBC higher than 100% in 2018 would report a ratio of less than 100% in 2019, simply because of tax law-related changes to the Life RBC factors used to calculate Company Action Level RBC. Regulators should be aware of this possibility, and adjust their monitoring procedures for weakly capitalized companies accordingly.

We also note the following items concerning the effective date:

1. As stated above, there is solid logic and theoretical support for changes to the tax-related factors underlying Life RBC in light of the tax changes. Therefore, it would be logical to make the necessary changes for 2018 RBC filings, because the new tax law is already fully effective. However, as described in this letter, there are other considerations that regulators could assess in making their decision, such as certain updates to RBC factors targeted to be effective in 2019 filings.
2. The tax changes to Life RBC factors will increase ACL RBC, thereby causing a discontinuity in the progression of ACL RBC amounts. Also, the NAIC is targeting 2019 for the update to C-1 bond factors, which is likely to also increase ACL RBC and will cause another discontinuity in ACL RBC amounts. The NAIC should consider whether it desires to have such discontinuities in ACL RBC amounts in both 2018 and 2019 RBC filings, which would happen if tax-related RBC changes are effective in 2018 and C-1 bond factor changes are effective in 2019, or to defer the

tax changes to Life RBC factors into 2019 so there is discontinuity from these two sources in only the 2019 filings. Some may see a benefit in the “grading-in” effect of making the tax changes in 2018 and the bond changes in 2019; others may prefer to focus both changes in one year. Also, there will be discontinuities arising from tax law changes in the trend of TAC, no matter when changes are made to Life RBC factors.

3. A large contributor to the RBC of life insurers is the C-1 bond charge. The effect of tax law changes on RBC tax factors is described more fully below. If the effective date of tax-related RBC changes is 2018, there will need to be an estimation of the effect on current C-1 bond factors due to tax reform. However, if the effective date of tax-related changes to RBC factors is 2019 or later, the bond factor tax effect can be directly calculated by an updated model. The same comment about “estimation for 2018, direct calculation for 2019” could be made for the C-2 life insurance charge, depending on progress made on updating the underlying C-2 factors.
4. Certain tax-related changes of items that affect Life RBC have likely already been reflected in the 2017 annual statement and/or RBC filings of some companies. For example, the C-3 Phase 1 and Phase 2 instructions call for use of current tax rates, so we expect that tax-updated C-3 amounts (other than minimum factors) have been included in 2017 RBC filings by many companies. Similarly, we expect that asset adequacy testing and deferred tax assets/liabilities for most companies have used the new rates and rules. However, due to the late date of the signing of the tax bill relative to when 2017 RBC calculations were performed, we expect that there is some variation in practice among companies as to how aspects of the new tax law are reflected in their 2017 annual statements. We expect consistency among companies in their 2018 statements.

Other Comments

Pages LR031, LR033, and LR034 of the Life RBC form contain references to the “Tax Sensitivity Test.” We do not believe that these pages need revisions when the NAIC makes tax-related changes to Life RBC.

The RBC Trend Test (page LR035 of the Life RBC form) in its current format may need to be interpreted carefully in light of the downstream effects of the tax law changes. Both TAC and ACL are being affected, and many of the effects of the tax law changes roll out over a number of years. Note the following:

- As noted in the “Impact to Total Adjusted Capital Due to Tax Changes” section of this letter, there are numerous items that will affect the amount and rate of change of TAC due to tax reform.
- Proposed changes to major parts of Life RBC that are currently in process or anticipated in 2018 or 2019 will affect the amount and rate of change of ACL RBC.

We will be available to discuss this letter with your working group at your session during the NAIC Spring National Meeting. We stand ready to assist your working group as you move forward.

Sincerely,

Wayne E. Stuenkel, MAAA, FSA, CERA
Chairperson, RBC Tax Reform Work Group
American Academy of Actuaries