June 19, 2024

Risk-Based Capital Investment Risk and Evaluation (E) Working Group Members:

The purpose of this memo is to document the Iowa Insurance Division’s assessment of the various proposed variations to the exposed Everlake proposal for an interim charge for residual tranches of asset backed securities. We would like to stress that none of the proposed interim approaches are adequate for use on a permanent basis. The views contained in this memo are based on the data and analysis that has been performed to date, which falls short of the standard that should apply to the development of permanent RBC factors, which would involve a definition of the desired level of statistical safety, identification of predictive risk attributes, and analysis to calibrate those risk attributes to capital charges that achieve the targeted level of statistical safety.

**Everlake proposal (as modified):**

- Apply 45% to BSL CLOs, RMBS, CMBS, CRE CLOs and equity backed residuals.
- Everything else, including any specific types approved by the domiciliary regulator would receive 30%.

**Pros:**

- Relatively simple – insurers would only need to assess the type of residual.
- Based off OW study, though the degree to which the OW study supports the conclusion is questionable.

**Cons:**

- Relies on insurers classifying investments based on potentially ill-defined terms (i.e. BSL vs MM CLOs).
- Does not factor in any risk attributes other than collateral type, which may not be reliably predictive of risk.
- OW Study may not support the conclusion regarding MM vs BSL CLO risk (discussed below).
- Introducing regulator-driven optionality to an RBC outcome is not desirable.

**IID Assessment**

The merits of the Everlake proposal rely upon the results of the OW study which appear to indicate that MM CLO residuals are of lower risk than BSL CLO residuals. However, through comparison of the ACLI survey of next-most junior tranche ratings “ACLI Survey” to the sample used in the OW study (shown below), it is clear that the insurers participating in the survey hold higher-risk residuals on average than
are represented in the OW sample. It is reasonable to expect that the difference in modeled losses between MM and BSL CLOs would be substantially reduced or eliminated if a representative sample were used.

% Below IG

ACLI Survey – 80%
OW Study – 47%

% AAA or AA

ACLI Survey – 0%
OW Study – 17%

As a result, if the only risk attribute to be used is the collateral type, the IID would not support MM CLOs or Feeder Funds being in the 30% RBC bucket. However, we believe a more predictive risk attribute exists that would be a more effective variable for use in an interim solution as will be discussed further later in the memo.

Residual Tranche Thickness:

- Various proposals to use % tranche thickness (ranging between 5-25%) to group higher risk (45% charge) vs lower risk (30% charge) residual tranches.
- Some proposals use only tranche thickness while others use it in conjunction with collateral type and/or the next-most junior tranche rating.

Pros:

- More refined risk attribute.
- OW study shows correlation between tranche thickness and stress scenario losses.

Cons:

- Tranche thickness alone may not reliably predict risk without also considering risk of the underlying collateral.
- The appropriate cutoff would differ based on collateral type, meaning that either the cutoff will be a poor fit for many asset classes, or there would be many cutoffs tailored to the various collateral types, introducing more complexity to the framework.
- Relies on insurers classifying investments based on potentially ill-defined terms (i.e. BSL vs MM CLOs)
- May be subject to manipulation (i.e. there would be an incentive to package the highest risk / return loans into a structure that would still allow the residual to stay below the cutoff).
IID Assessment

While we agree that, all other factors held equal, risk of residual tranches is sensitive to tranche thickness, we do not believe it is reasonable to assume all other factors are being held equal. Using residual tranche thickness by itself relies on that assumption. The OW study appears to indicate this in Figure 19. Here, you can see two residual tranches, both with a next-most junior tranche rating of B that show similar degree of loss in the stress scenario. However, one of these tranches has a thickness of approximately 5% while the other has a thickness of approximately 25%.

This implies that the risk of the underlying collateral between these investments is significantly different, which tranche thickness cannot account for. Under the proposals utilizing tranche thickness, these investments would receive different RBC charges despite having similar risk of loss. Because of this shortcoming, the complication of application, and because a risk metric exists that does account for both residual thickness and collateral quality, the IID prefers not to use tranche thickness as a risk attribute for an interim charge.

Next-Most Junior Tranche Rating:

- Proposed to be used in conjunction with tranche thickness in certain “backup” options proposed by Athene and a coalition including MetLife, PacLife, Equitable, and Western and Southern.
- Next-most junior tranche rating of IG or above would qualify for 30% (with an additional thickness hurdle). All others would receive 45%.

Pros:

- It is the only attribute that incorporates all risk elements (collateral type and quality, structural characteristics, tranche thickness, etc).
- The OW study shows next-most junior tranche rating is correlated to risk of loss.
- Can be applied consistently across asset classes.
- Simplest to apply (other than a single factor).
Cons:

- Data to support the calibration of CRP ratings to an RBC factor remains limited.
- Tranche thickness may be more correlated to risk of loss than CRP ratings, particularly in deeper tail scenarios.
- May be susceptible to ratings shopping given dependency on CRP ratings. This concern is much broader than the issue at hand and is being addressed holistically at VOSTF and E Committee.

IID Assessment

The next-most junior tranche rating is the only risk attribute discussed to date that factors in all of the other risk attributes. For this reason, it could intuitively be expected that it would also be the most correlated with expected losses under stress. However, we recognize that it is reasonably possible that this intuition may not hold true in fact and would require significant analysis to prove. In deeper tail scenarios, in particular, it may be that tranche thickness is more correlated with risk of loss than CRP rating, as CRP ratings are not necessarily designed to measure tail risk. These are among the many key questions that will need to be answered via the long-term RBC project to determine which risk attributes are most appropriate to assign capital, and how capital factors should be calibrated to those attributes. In the meantime, we believe there is sufficient evidence in the OW study to support the use of the next-most junior tranche rating in distinguishing relatively lower risk residual tranches from relatively higher risk residuals.

Next-most junior tranche ratings are also the simplest to apply and do not rely on ill-defined asset definitions. It could be applied across all asset types. As it relies on the assessment of a third party, it is also the least susceptible to manipulation.

For all of these reasons, the IID proposes that all equity-backed residuals AND residuals with a next-most junior tranche rating of below investment grade receive a 45% RBC charge for the interim solution. All ABS residuals that are not backed by equity and for which the next most junior tranche is rated IG (BBB- or higher), would receive a 30% charge. Edits to Proposal 2024-19-I to reflect this are included in Appendix I with a clean markup of LR008 in Appendix II.

We believe that inclusion of any other risk attribute at this time is more likely to reduce the alignment of risk and capital than using the next-most junior tranche rating alone. However, if the use of tranche thickness is desired by the majority of the working group, we would suggest it be used in conjunction with the next-most junior tranche rating.
It is also worth noting what the results of this approach would be, based on the ACLI Survey:

<table>
<thead>
<tr>
<th></th>
<th>At 45% RBC</th>
<th>At 30% RBC</th>
</tr>
</thead>
<tbody>
<tr>
<td>MM CLO</td>
<td>80%</td>
<td>20%</td>
</tr>
<tr>
<td>Feeder Funds*</td>
<td>33%</td>
<td>67%</td>
</tr>
<tr>
<td>CFOs</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>BSL CLOs</td>
<td>94%</td>
<td>6%</td>
</tr>
<tr>
<td>Other ABS</td>
<td>70%</td>
<td>30%</td>
</tr>
<tr>
<td>Unsecured Consumer Loans</td>
<td>67%</td>
<td>33%</td>
</tr>
<tr>
<td>Aircraft Leases</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Equipment Lending/Leasing</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Student Loans</td>
<td>20%</td>
<td>80%</td>
</tr>
<tr>
<td>CRE CLO**</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>RMBS</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Credit Card ABS</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Prime Auto ABS</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>NAV Loans</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>CMBS**</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Subprime Auto</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>72%</td>
<td>28%</td>
</tr>
</tbody>
</table>

* Note that Feeder Funds are assumed to not include any equity-backed structures in this table. In the likely case that some are secured by equity investments, that would move more into the 45% bucket.

** A comment was noted on the previous call that commercial real estate may be of higher risk due to current market conditions. If the working group prefers, CRE-backed structures could be treated in line with equity-backed structures.

**Single Charge for All Residual Tranches**

- The currently adopted factor is a single 45% factor for all residual tranches.

**Pros:**

- Most conservative.
- Simplest to apply.

**Cons:**

- May be overly conservative for some residual tranche investments.
- Not risk sensitive.

**IID Assessment**

The IID recognizes that calibrating RBC factors involves trade-offs between the level of precision that can be achieved, conservatism and complexity of application. Factors should be data-driven to the greatest degree possible within reasonable practicality constraints. They should also be risk-sensitive when observable risk attributes exist that can be shown to be predictive of risk, and to the degree possible within...
reasonable practicality constraints. Based on our review of all data currently available, particularly the ACLI surveys around the holdings of insurers and the Oliver Wyman study, it is our view that it has been demonstrated that risk differs widely across different residuals held by insurers, that these differences can be reasonably predicted through the use of the next-most junior tranche rating, and that a 45% factor is likely too high for residual tranches with an investment grade next-lowest tranche rating. This can be observed in Figure 19 from the OW study included above where residual tranches with a next-most junior tranche rating below IG experience approximately 49.1% average reduction in NPV in the Mid-tail (GFC) scenario, while those with a next-most junior tranche that is IG average less than an 18.3% reduction in NPV. Lastly, it is a very practical approach requiring little or no judgment or effort to apply.

Thank you for your consideration,

Kevin Clark and Carrie Mears
Iowa Insurance Division
Basis of Factors

Recognizing the diverse nature of Schedule BA assets, the RBC is calculated by assigning different risk factors according to the different type of assets. Assets with underlying characteristics of bonds and preferred stocks designated by the NAIC Capital Markets and Investment Analysis Office have different factors according to the NAIC assigned classification. Unrated fixed-income securities will be treated the same as Other Schedule BA Assets and assessed a 30 percent pre-tax charge. Rated surplus and capital notes have the same factors applied as Schedule BA assets with the characteristics of preferred stock. Where it is not possible to determine the RBC classification of an asset, a 30 percent pre-tax factor is applied.

Specific Instructions for Application of the Formula

Line (49.1) Schedule BA affiliated common stock – all others should be included in C-1cs. Specifically this means that all subs with an affiliate code 13 in the current life-based framework and “holding company in excess of indirect subsidiaries” or subsidiaries with affiliate code 7 are to be included in C-1cs.

Line (49.2) New lines were added for yearend 2022 reporting to Schedule BA and the AVR Equity Component to capture amounts related to residual tranches or interest. For yearend 2022 life RBC reporting, AVR Equity Component, Column 1, Line 93 will be included in Line (49.2). For yearend 2024 Life RBC reporting, AVR Equity Component, Column 1, line 93 will be included in line (49.2) for only Exempted Residuals Tranches and Interests as described below. All other residuals tranches and interests will be captured in line (51).

Line (51) For yearend 2024 Life RBC reporting, reporting entities should report residual tranches (other than Exempted Residual Tranches and Interests) on Line 51. Reporting entities should add a footnote to indicate if their overall RBC changes by 10 percent or more from their 2023 RBC based on this reporting change.

Exempted Residual Tranches and Interests are:

- All residual tranches or interests, other than those secured by equity investments, with a Next-Most Junior Tranche rating of BBB- or higher.
- Residual tranches or interests secured by equity investments, including feeder funds for which the underlying collateral are equity investments, do not qualify for exemption regardless of Next-Most Senior Tranche rating.
- Residual tranches or interests with a Next-Most Junior Tranche rating lower than BBB- do not qualify for exemption.
- If the Next-Most Junior Tranche to a residual tranche is unrated, it does not qualify for exemption.

- Consumer Assets including but not limited to consumer loans, credit card receivables, student loans, auto loans and leases, solar loans and leases, home improvement loans, and other prime consumer assets;
- Cashflows from leases secured by, but not limited to data centers, fiber and wireless infrastructure, renewable energy projects backed by power purchase agreements, and loans and leases secured by physical assets, solar and other energy-related projects backed by power purchase agreements, transportation assets, such as railcars, containers and aircraft and engines, equipment; commercial and residential real estate;
- Other loans and fixed-income like cashflows including but not limited to residential and commercial PACE assets, insurance policy payments, commercial & industrial solar contracts, whole business securitizations, timeshares, royalties, intellectual property, tax liens, small business loans inventory, finance, supply chain finance and accounts receivable finance, and
and any other category of residual tranche or interest or specific residual investment identified by a domiciliary regulator as appropriately receiving a 30 percent charge demonstrated using a methodology acceptable to the domiciliary regulator.

Line (57)
Total Schedule BA assets [LR008 Other Long-Term Assets Column (1) Line (57) plus LR007 Real Estate Column (1) Line (14) plus Lines (17) through Line (21) plus LR009 Schedule BA Mortgages Column (1) Line (21)] should equal the total Schedule BA assets reported in the Annual Statement Page 2, Column 3, Line 8.
OTHER LONG-TERM ASSETS
LR008

Basis of Factors

Recognizing the diverse nature of Schedule BA assets, the RBC is calculated by assigning different risk factors according to the different type of assets. Assets with underlying characteristics of bonds and preferred stocks designated by the NAIC Capital Markets and Investment Analysis Office have different factors according to the NAIC assigned classification. Unrated fixed-income securities will be treated the same as Other Schedule BA Assets and assessed a 30 percent pre-tax charge. Rated surplus and capital notes have the same factors applied as Schedule BA assets with the characteristics of preferred stock. Where it is not possible to determine the RBC classification of an asset, a 30 percent pre-tax factor is applied.

Specific Instructions for Application of the Formula

Line (49.1)
Schedule BA affiliated common stock – all others should be included in C-1cs. Specifically this means that all subs with an affiliate code 13 in the current life-based framework and “holding company in excess of indirect subsidiaries” or subsidiaries with affiliate code 7 are to be included in C-1cs.

Line (49.2)
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- Residual tranches or interests secured by equity investments, including feeder funds for which the underlying collateral are equity investments, do not qualify for exemption regardless of Next-Most Junior Tranche rating.
- Residual tranches or interests with a Next-Most Junior Tranche rating lower than BBB- do not qualify for exemption.
- If the Next-Most Junior Tranche to a residual tranche is unrated, it does not qualify for exemption.

o Next-Most Junior Tranche is defined as the most subordinated debt tranche of an asset backed security, or in other words, the debt tranche most immediately senior to the residual tranche.

Line (57)
Total Schedule BA assets [LR008 Other Long-Term Assets Column (1) Line (57) plus LR007 Real Estate Column (1) Line (14) plus Lines (17) through Line (21) plus LR009 Schedule BA Mortgages Column (1) Line (21)] should equal the total Schedule BA assets reported in the Annual Statement Page 2, Column 3, Line 8.