Date: 4/17/23

Virtual Meeting

## RISK-BASED CAPITAL INVESTMENT RISK AND EVALUATION (E) WORKING GROUP

Thursday, April 20, 2023
12:00-1:00 p.m. ET / 11:00 a.m. - 12:00 p.m. CT / 10:00 - 11:00 a.m. MT / 9:00-10:00 a.m. PT

## ROLL CALL

| Philip Barlow, Chair | District of Columbia | William Leung/Debbie Doggett | Missouri |
| :--- | :--- | :--- | :--- |
| Thomas Reedy | California | Lindsay Crawford | Nebraska |
| Wanchin Chou | Connecticut | Bob Kasinow/Bill Carmello | New York |
| Ray Spudeck/Carolyn Morgan | Florida | Dale Bruggeman/Tom Botsko | Ohio |
| Vincent Tsang | Illinois | Rachel Hemphill | Texas |
| Roy Eft | Indiana | Doug Stolte | Virginia |
| Carrie Mears/Kevin Clark | Iowa | Steve Drutz/Tim Hays | Washington |
| Fred Andersen | Minnesota | Amy Malm | Wisconsin |

NAIC Support Staff: Dave Fleming/Julie Gann/Charles Therriault/Linda Phelps/Peter Kelly

## AGENDA

1. Discuss Comment Letters—Philip Barlow (DC)

Attachments 1\&2
2. Consider Adoption of the Residual Tranche Structure Change—Philip Barlow (DC)

Attachment 3
3. Consider Adoption of the Sensitivity Test—Philip Barlow (DC) Attachment 4
4. Discuss Any Other Matters Brought Before the Working Group—Philip Barlow (DC)
5. Adjournment

Submitted via email.

RBC Investment Risk \& Evaluation Working Group,

The proposed changes made available for comment are applicable to the Life/Fraternal RBC only, which is understandable since they were developed by the ACLI. However, residual tranche investments are not solely held by Life/Fraternal companies. Both Property/Casualty and Health companies may hold investments in residual tranches.

The changes adopted for both the accounting and statement reporting of residual tranches apply to all reporting entities, not just the Life/Fraternal companies. Shouldn't all of the RBC formulas address residual tranches?

The proposed changes are not valid for the Property/Casualty and Health formulas, as they have no AVR. Amounts for those formulas can be pulled from Schedule BA, as Schedule BA is a uniform schedule between the different statements. Therefore both a structural change and a sensitivity test could be developed for those formulas.

## Connie

Connie Jasper Woodroof
CJW Associates

Attached to this email, please find a copy of the company's submission on the RBC Investment Risk and Evaluation Working Group's Interim RBC Residual Factors Exposure. In addition, we would like to reiterate our position on sensitivity testing from our February 3, 2023 letter to the working group in relation to the sensitivity testing exposure:
"While sensitivity testing or impact analysis can provide regulators with valuable information on materiality and solvency of the residual tranches, sensitivity testing alone will not provide data on what appropriate RBC factors should be nor will it meet the regulators' goals of reducing RBC arbitrage while more refined charges are developed. As such, should the regulators decide to employ sensitivity testing, the companies believe a higher factor for residual traches is also needed."

Please let us know if you or the working group have any questions.

Thank you.

## Lauren Eardensohn Sarper

Vice President, U.S. Financial and Macroprudential Regulation Lead | External Affairs

April 12, 2023

Mr. Philip Barlow, Chair
RBC Investment Risk \& Evaluation (E) Working Group
National Association of Insurance Commissioners
1100 Walnut Street, Suite 1500
Kansas City, MO 64106-2197

Via email: dfleming@naic.org

RE: Structured securities - Interim RBC factor for residual tranches
Dear Mr. Barlow,
On behalf of the undersigned life insurance companies ("the companies"), we are writing to express our continued strong support for developing an interim RBC factor for the residual tranches of structured securities.

As we stated in our February 3, 2023 letter to the Working Group, aligning RBC with the underlying investment risk of the residual tranches is critical for achieving the broader objective of minimizing RBC arbitrage in securitized assets. The companies endorse the approach taken in the Revised Residuals Structure exposed by the Working Group of applying a single RBC factor to the residual tranches, and reaffirm our recommendation for that interim factor to be at least 45\%.

There is no theoretical foundation for the use of a 30\% capital charge on residual tranches of structured finance securities. The 30\% factor was developed in the 1990s based on public equity losses between 1960 and $1991^{1}$. Residual tranches were not contemplated in the development of this factor and no analysis has been exposed to equate the risk of this asset class to the established public equity asset class.

We believe that an interim factor of at least $45 \%$ is directionally supported by historical data and addresses regulatory objectives. Further support of these points is shared below.

## 1) Residual tranches and public equities have materially different risk profiles:

Residual tranches provide first-loss protection for bond tranches which have the risk of principal loss in stress scenarios used for Risk-Based Capital. Therefore, both theoretically and empirically, a portfolio of residual tranches can lose close to their full value in stress scenarios. ${ }^{2}$ In contrast, a portfolio of public equities (like the S\&P 500) simply represents equity ownership in those companies. If the S\&P 500 experienced loss close to $100 \%$, it would indicate a market worse than the Great Depression. There is no justification for treating these two asset classes as the same risk.

[^0]
## 2) Empirical data does not support a charge less than 45\%: details in appendix

Analysis of asset class losses for various collateral types demonstrates that even long-run average losses can have a material impact on the notional value of residual tranches. Stress losses have the potential to deplete most, if not all, of the notional value of a residual tranche. Much of the securitization market only covers the past 20-25 years across multiple collateral types, which is less robust than the 40 year history used to develop the corporate bond factors; many securitization markets may not have experienced a truly distressed scenario in this time. One recent example is a fund that primarily invests in CLO equity which experienced a loss of $60 \%$ while public equities experienced a loss of only $30 \% .{ }^{34}$

## 3) Conformance with RBC regulatory objectives:

An appropriate interim RBC charge allows regulators to ensure that insurers are appropriately capitalized. A 45\% interim RBC charge is consistent with the existing high-beta equity charge and directionally appropriate outcome demonstrated by the data. It would provide a rational step until a full solution is developed.

Respectfully Submitted,

## Equitable

MetLife
New York Life
Northwestern Mutual
Pacific Life
Prudential Financial, Inc.
Western \& Southern

[^1]
## Appendix: Empirical Experience

## Historical collateral losses across multiple securitization sectors compared:

A comparison of historical collateral losses to typical residual tranches thickness demonstrates the likelihood of a residual tranche loss in excess of $45 \%$ in stress events. Across multiple securitization sectors - mortgage, loan, auto - residual tranche losses are vulnerable to economic downturns and the magnitude of this vulnerability is high regardless of the sector analyzed. The magnitude of historically observed collateral losses relative to the tranche thickness of the residual tranche demonstrates that a $45 \%$ or higher RBC charge is entirely commensurate with the amount of capital prudently required to address potential credit losses on structured assets.

The following chart shows the relationship among average collateral losses across historical cohorts, collateral losses for the worst historical cohort, and the size of a typical residual tranche for different types of securitizations that together account for most of the market outstanding. This comparison can help inform expectations for the magnitude of the impact that collateral losses, in either a typical or distressed environment, can have on the face value of the residual tranche of a securitization.


Sources: BAML, LCD, Morgan Stanley, MIM
From this chart we can interpret that in a distressed economic environment collateral losses have the potential to deplete most, if not all, of the face value of a residual tranche. Equity tranches are priced to provide a reasonable expected-loss-adjusted yield (losses likely more akin to historical averages), but the tail losses are significantly greater (orange bars vs. blue bars in the chart). It's worth noting that the historical data on most securitization sectors only covers the last 20 to 25 years or so, and that many of these sectors are too young to have experienced a truly severe distressed scenario. It also will not fully incorporate trends in collateral quality.

The volatility and loss potential of structured security residuals is greater than public equities, as observed in CLO residuals in 2020 that experienced a loss of >60\%:
Total returns during the Covid-related stress provides an opportunity to compare the performance of public equities versus that of CLO residual tranches from current CLO structures in times of market stress. The public equity loss on the S\&P 500 in early 2020 was in line with the $30 \%$ capital charge used in RBC, while the available data for CLO equity would indicate an appropriate capital charge of more than 60\%.

2020 Cumulative Total Returns (Source: JP Morgan CLOIE, Bloomberg) 2020 Cumulative Total Returns


## Capital Adequacy (E) Task Force <br> RBC Proposal Form

Capital Adequacy (E) Task ForceCatastrophe Risk (E) SubgroupHealth RBC (E) Working GroupLife RBC (E) Working Group
P/C RBC (E) Working GroupLongevity Risk (A/E) Subgroup
マ RBC Investment Risk \& Evaluation
(E) Working Group (E/A) Subgroup

Economic Scenarios (E/A) Subgroup

| CONTACT PERSON: TELEPHONE: | Dave Fleming ${ }^{\text {DATE }}$ 3/23/23 | FOR NAIC USE ONLY |
| :---: | :---: | :---: |
|  |  | Agenda Item \# 2023-03-IRE Year 2023 |
|  | 816-783-8121 | DISPOSITION |
| EMAIL ADDRESS: | dfleming@naic.org | ADOPTED: <br> TASK FORCE (TF) |
| ON BEHALF OF: | RBC Inv. Risk \& Eval. (E) Working Group | $\square$ WORKING GROUP (WG) |
| NAME: | Philip Barlow | $\square$ SUBGROUP (SG) EXPOSED: |
| TITLE: | Associate Commissioner for Insurance | $\square$ TASK FORCE (TF) |
| AFFILIATION: | District of Columbia | WORKING GROUP (WG) SUBGROUP (SG) |
| ADDRESS: | 1050 First Street, NE Suite 801 | REJECTED: TF $\square$ WG SG |
|  | Washington, DC 20002 | OTHER: DEFERRED TO REFERRED TO OTHER NAIC GROUP (SPECIFY) $\qquad$ |

## IDENTIFICATION OF SOURCE AND FORM(S)/INSTRUCTIONS TO BE CHANGED

| $\square$ | Health RBC Blanks | $\square$ | Property/Casualty RBC Blanks | $\boxtimes$ | Life and Fraternal RBC Blanks |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\square$ | Health RBC Instructions | $\square$ | Property/Casualty RBC Instructions | $\square$ | Life and Fraternal RBC Instructions |
| $\square$ | Health RBC Formula | $\square$ | Property/Casualty RBC Formula | $\square$ | Life and Fraternal RBC Formula |
| $\square$ |  |  |  |  |  |

DESCRIPTION/REASON OR JUSTIFICATION OF CHANGE(S)

Add a line to isolate residual tranches reported on Schedule BA and the asset valuation reserve.

## Additional Staff Comments

## OTHER LONG-TERM ASSETS (CONTINUED)

Schedule BA - Unaffiliated Common Stock
(42) Schedule BA Unaffiliated Common Stock-Public
43) Schedule BA Unaffiliated Common Stock-Private
(44) Total Schedule BA Unaffiliated Common Stock (pre-MODCO/Funds Withheld)
(45) Reduction in RBC for MODCO/Funds Withheld Reinsurance Ceded Agreements
(46) Increase in RBC for MODCO/Funds Withheld Reinsurance Assumed Agreements
(47) Total Schedule BA Unaffiliated Common Stock (including MODCO/Funds Withheld.)

## Schedule BA - All Other

(48.1) BA Affiliated Common Stock - Life with AVR
(48.2) BA Affiliated Common Stock - Certain Other
(48.3) Total Schedule BA Affiliated Common Stock - C-1o
(49.1) BA Affiliated Common Stock - All Other
(49.2) Total Sch. BA Affiliated Common Stock - C-1cs
(50) Schedule BA Collateral Loans
(51) Total Residual Tranches or Insterests
(52.1) NAIC 01 Working Capital Finance Notes
(52.2) NAIC 02 Working Capital Finance Notes
(52.3) Total Admitted Working Capital Finance Notes
53.1) Other Schedule BA Assets
(53.2) Less NAIC 2 thru 6 Rated/Designated Surplus Notes and Capital Notes
53.3) Net Other Schedule BA Assets
(54) Total Schedule BA Assets C-1o (pre-MODCO/Funds Withheld)
(55) Reduction in RBC for MODCO/Funds Withheld Reinsurance Ceded Agreements
(56) Increase in RBC for MODCO/Funds Withheld Reinsurance Assumed Agreements
(57) Total Schedule BA Assets C-1o (including MODCO/Funds Withheld.)
(58) Total Schedule BA Assets Excluding Mortgages and Real Estate

## Annual Statement Source

AVR Equity Component Column 1 Line 65
AVR Equity Component Column 1 Line 66 Line (42) $+(43)$ $\qquad$
$\square$
(2)

Unrated Items $\ddagger$
$\qquad$ $\mathrm{x} \xlongequal{\S}=$
$\qquad$ X $0.3000=$ $\qquad$

Company Records (enter a pre-tax amount)

Company Records (enter a pre-tax amount)
Lines (44) - (45) + (46)

AVR Equity Component Column 1 Line 67 AVR Equity Component Column 1 Line 68 Line (48.1) $+(48.2)$ $\qquad$ X $0.3000=$ $\qquad$

Line (49.1) $\ddagger$ AVR Equity Component Column 1 Line 93
Schedule BA Part 1 Column 12 Line 2999999 + Line 3099999
AVR Equity Component Column 1 Line 93
AVR Equity Component Column 1 Line 94
AVR Equity Component Column 1 Line 95
Line (52.1) + (52.2)
AVR Equity Component Column 1 Line 96
Column (1) Lines (23) through (27) + Column (1)
Lines (33) through (37)
Line (53.1) less (53.2)
Lines $(11)+(21)+(31)+(41)+(48.3)+(50)+(52.3)+(53.3)$

Company Records (enter a pre-tax amount)
Company Records (enter a pre-tax amount)
Lines (54) - (55) $+(56)$
Line (47) $+(49.2)+(51)+(57)$
X $0.3000=$ X $0.0680=$
$\qquad$
$\qquad$ X TBD
$\qquad$
$\qquad$ $\begin{array}{ll}\mathrm{X} & 0.0050 \\ \\ \end{array}$ $\qquad$ X $0.0163=$
x $0.3000=$ $\qquad$

Fixed income instruments and surplus notes designated by the NAIC Capital Markets and Investment Analysis Office or considered exempt from filing as specified in the Purposes and Procedures Manual of the NAIC Investment Analysis Office should be reported in Column (3).
Column (2) is calculated as Column (1) less Column (3) for Lines (1) through (17). Column (2) equals Column (3) - Column (1) for Line (53.3).
§ The factor for Schedule BA publicly traded common stock should equal 30 percent adjusted up or down by the weighted average beta for the Schedule BA publicly traded common stock portfolio subject to a minimum of 22.5 percent and a maximum of 45 percent in the same manner that the similar 15.8 percent factor for Schedule BA publicly traded common stock in the Asset Valuation Reserve (AVR) calculation is adjusted up or down. The rules for calculating the beta adjustment are set forth in the AVR section of the annual statement instructions.

Denotes items that must be manually entered on the filing software.


Asset Risk - Unaffiliated Common Stock and Affiliated Non-Insurance Stock (C-1cs)
Asset Risk - Unaffiliated Common Stock
(13) Schedule BA Unaffiliated Common Stock
(14) Schedule BA Affiliated Common Stock - C-1cs
(15) Common Stock Concentration Factor
(16) Affiliated Preferred Stock and Common Stock - Holding Company in Exeess of Indirect Subsidiaries
(17) Affiliated Preferred Stock and Common Stock - All Other
(18) Total (C-1cs) - Pre-Ta
(19) (C-lcs) Tax Effect
(20) Net (C-lcs) - Post-Tax

Asset Risk - All Other (C-10)
(21) Bonds after Size Factor
(22) Mortgages (including past due and unpaid taxes)
(23) Unaffiliated Preferred Stock
(24) Affiliated Preferred Stock and Common Stock - Investment Subsidiaries
(25) Affiliated Preferred Stock and Common Stock - Parent
(25) Affiliated Preferred Stock and Common Stock - Parent
(26) Affiliated Preferred Stock and Common Stock - Property and Casualty Insurers not Subject to Risk-Based Capital
(27) $\begin{aligned} & \text { Affilia } \\ & \text { Capita }\end{aligned}$
(28) Affiliated Preferred Stock and Common Stock - Publicly Traded Insurers Held at Fair Value (excess of statement value over book value)
(29) Separate Accounts with Guarantees

Authorized Control Level Risk-Based Capital (After Covariance Adjustment and Shortfall)
(73) Total Risk-Based Capital After Covariance Times Fifty Percent

Tax Sensitivity Test
(74) $\frac{\text { Tax Sensitivity Test }}{\text { Tax Sensitivity Test: Total Risk-Based Capital After Covariance }}$
(75) Tax Sensitivity Test: Authorized Control Level Risk-Based Capital

Source

LR005 Unaffiliated Common Stock Column (5) Line (21) + LR018 Off-Balance Shee
Collateral Column (3) Line (16)
LR008 Other Long-Term Assets Column (5) line (47)
LR008 Other Long-Term Assets Column (5) lines (49.2) + (51)
LR011 Common Stock Concentration Factor Column (6) Line (6)
LR042 Summary for Affiliated Investments Column (4) Line (7)
LR042 Summary for Affiliated Investments Column (4) Line (13)
Sum of Lines (12) through (17)
LR030 Calculation of Tax Effect for Life and Fraternal Risk-Based Capital Column (2) Line (132) Line (18) - Line (19)

LR002 Bonds Column (2) Line (27) + LR018 Off-Balance Sheet Collateral
Column (3) Line (8)
LR004 Mortgages Column (6) Line (31)
LR005 Unaffiliated Preferred and Common Stock Column (5) Line (10)
LR018 Off-Balance Sheet Collateral Column (3) Line (15)
LR042 Summary for Affiliated Investments Column (4) Line (6)
R0042 Summary for Alfiled Investins Colum (4) Line (10)

LR042 Summary for Affiliated Investments Column (4) Line (12)
LR042 Summary for Affiliated Investments Column (4) Line (14)
LR006 Separate Accounts Column (3) Line (7)

Line (72) $\times 0.50$
$L(9)+L(61)+$ Square Root of $(L(40)+L(50))^{2}+(L(18)+L(56))^{2}+L(47)^{2}+L(53)^{2}$
$\left.+\mathrm{L}(64)^{2}\right]$
Line (74) 0.5

Requirement
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# Capital Adequacy (E) Task Force <br> RBC Proposal Form 

Capital Adequacy (E) Task Force$\square$ Catastrophe Risk (E) Subgroup
Variable Annuities Capital. \& Reserve (E/A) SubgroupHealth RBC (E) Working Group
$\square$ Life RBC (E) Working GroupP/C RBC (E) Working Group
Economic Scenarios (E/A) Subgroup
Longevity Risk (A/E) Subgroup

マ RBC Investment Risk \& Evaluation
(E) Working Group

|  | DATE: 3/23/23 | FOR NAIC USE ONLY |
| :---: | :---: | :---: |
| CONTACT PERSON: | Steve Clayburn | Agenda Item \# 2023-04-IRE <br> Year 2023 |
| TELEPHONE: | (202)624-2197 | DISPOSITION <br> ADOPTED: TASK FORCE (TF) WORKING GROUP (WG) $\qquad$ SUBGROUP (SG) $\qquad$ <br> EXPOSED: TASK FORCE (TF) WORKING GROUP (WG) $\qquad$ SUBGROUP (SG) $\qquad$ <br> REJECTED: TF $\square$ WG SG $\qquad$ <br> OTHER: DEFERRED TO REFERRED TO OTHER NAIC GROUP (SPECIFY) $\qquad$ |
| EMAIL ADDRESS: | steveclayburn@acli.com |  |
| ON BEHALF OF: | American Council of Life Insurers (ACLI) |  |
| NAME: | Steve Clayburn |  |
| TITLE: |  |  |
| AFFILIATION: |  |  |
| ADDRESS: |  |  |
|  |  |  |

## IDENTIFICATION OF SOURCE AND FORM(S)/INSTRUCTIONS TO BE CHANGED

| $\square$ | Health RBC Blanks | $\square$ | Property/Casualty RBC Blanks | $\boxtimes$ | Life and Fraternal RBC Blanks |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\square$ | Health RBC Instructions | $\square$ | Property/Casualty RBC Instructions | $\square$ | Life and Fraternal RBC Instructions |
| $\square$ | Health RBC Formula | $\square$ | Property/Casualty RBC Formula | $\square$ | Life and Fraternal RBC Formula |
| $\square$ |  |  |  |  |  |

DESCRIPTION/REASON OR JUSTIFICATION OF CHANGE(S)

The additional lines are to add residual tranches to the sensitivity testing exhibits for RBC.
As regulators develop designations for asset back securities to then be assigned appropriate $\mathrm{C}-1 \mathrm{RBC}$ factors, the updated sensitivity testing could be an additional tool to help regulators in reviewing companies and there investments in residual tranches.

Additional Staff Comments:
(1.2) Other Affiliates: Subsidiaries
(2.2) Noncontrolled Assets: Subsidiaries
(3.2) Guarantees for Affiliates: Subsidiaries
(4.2) Contingent Liabilities: Subsidiaries
(5.2) Long Term Leases: Subsidiaries
(7.11) Total Affiliated Investments: Company
(7.12) Less Affiliated Common Stock: Company
(7.13) Less Affiliated Preferred Stock: Company
(7.14) Net Affiliated Investments: Company
(7.2) Affiliated Investments: Subsidiaries
(9.1) Surplus Notes: Company
(9.2) Surplus Notes: Subsidiaries
(10.11) Capital Paid In: Company
(10.12) Surplus Paid In: Company
(10.13) Total Current Year's Capital Contributions: Company
(10.2) Current Year's Capital Contributions: Subsidiaries
| (11.1) Total Residual Tranches or Interests

## Source

Subsidiaries' Life and Fraternal Risk-Based Capital LR042 Summary for Affiliated Investments Column (1) Line (13); Property and Casualty Risk-Based Capital PR005 Summary For Subsidiary, Controlled and Affiliated Investments for Cross-Checking Statement Values Column (1) Line (8) and Line (17)
Subsidiaries' Life and Fraternal Risk-Based Capital LR017 Off-Balance Sheet and Other Items Column (1) Line (15); Property and Casualty PR014 Miscellaneous Off-Balance Sheet Items Column (1) Line (15)
Subsidiaries' Life Notes to Financial Statements \#14A3c1; Property and Casualty Notes to Financial Statements \#14A3c1
Subsidiaries' Life Notes to Financial Statements \#14A1; Property and Casualty Notes to Financial Statements \#14A1
Subsidiaries' Life Notes to Financial Statements \#15A2a1; Property and Casualty Notes to Financial Statements \#15A2a1
Company's Annual Statement Five-Year Historical Data Column 1 Line 50
Company's Annual Statement Five-Year Historical Data Column 1 Line 46
Company's Annual Statement Five-Year Historical Data Column 1 Line 45
Lines (7.11) - (7.12) - (7.13)
Subsidiaries' Life Annual Statement Five-Year Historical Data Column 1 Line 50 Less Lines 45 and 46; Property
and Casualty Annual Statement Five-Year Historical Data Column 1 Line 48 Less Lines 43 and 44
Company's Annual Statement Page 3 Column 1 Line 32
Subsidiaries' Life Annual Statement Page 3 Column 1 Line 32; Property and Casualty Annual Statement Page 3 Column 1 Line 33
Company's Annual Statement Page 4 Column 1 Line 50.1
Company's Annual Statement Page 4 Column 1 Line 51.1

Line (10.11) + Line (10.12)
Subsidiaries' Life Annual Statement Page 4 Column 1 Lines $50.1+51.1$; Property and Casualty Annual Statement Page 4
Column 1 Lines $32.1+33.1$
Company's Annual Statement Asset Valuation Reserve, Equity and Other Invested Asset Component, Column 1, Line 93

$\qquad$
$\qquad$

$\qquad$
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## SENSITIVITY TESTS - AUTHORIZED CONTROL LEVEL

|  |  |  | (1) |  | (2) | (3) | (4) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sensitivity Tests Affecting |  | Statement Value | Additional Sensitivity Factor | Additional RBC | Authorized Control Level Before Test | Authorized Control Level After Test |
|  | Authorized Control Level |  |  |  |  |  |  |
|  |  | Source |  |  |  |  |  |
| (1.1) | Other Affiliates: Company | LR042 Summary for Affiliated Investments Column |  | 0.700 |  |  |  |
|  |  | (1) Line (13) |  |  |  |  |  |
| (1.2) | Other Affiliates: Subsidiaries | LR038 Additional Information Required Column (1) |  | 0.700 |  |  |  |
|  |  | Line (1.2) |  |  |  |  |  |
| (1.99) | Total Other Affiliates |  |  | 0.700 |  |  |  |
| (2.1) | Noncontrolled Assets - Company | LR017 Off-Balance Sheet and Other Items Column |  | 0.020 |  |  |  |
|  |  | (1) Line (15) |  |  |  |  |  |
| (2.2) | Noncontrolled Assets - | LR038 Additional Information Required Column (1) |  | 0.020 |  |  |  |
|  | Subsidiaries | Line (2.2) |  |  |  |  |  |
| (2.99) | Total Noncontrolled Assets |  |  | 0.020 |  |  |  |
| (3.1) | Guarantees for Affiliates: Company | LR017 Off-Balance Sheet and Other Items Column |  | 0.020 |  |  |  |
|  |  | (1) Line (24) |  |  |  |  |  |
| (3.2) | Guarantees for Affiliates: | LR038 Additional Information Required Column (1) |  | 0.020 |  |  |  |
|  |  | Line (3.2) |  |  |  |  |  |
| (3.99) | Total Guarantees for Affiliates |  |  | 0.020 |  |  |  |
| (4.1) | Contingent Liabilities: Company | LR017 Off-Balance Sheet and Other Items Column |  | 0.020 |  |  |  |
|  |  | (1) Line (25) |  |  |  |  |  |
| (4.2) | Contingent Liabilities: Subsidiaries | LR038 Additional Information Required Column (1) |  | 0.020 |  |  |  |
|  |  | Line (4.2) |  |  |  |  |  |
| (4.99) | Total Contingent Liabilities |  |  | 0.020 |  |  |  |
| (5.1) | Long-Term Leases: Company | LR017 Off-Balance Sheet and Other Items Column |  | 0.030 |  |  |  |
|  |  | (1) Line (26) |  |  |  |  |  |
| (5.2) | Long-Term Leases: Subsidiaries | LR038 Additional Information Required Column (1) |  | 0.030 |  |  |  |
|  |  | Line (5.2) |  |  |  |  |  |
| (5.99) | Total Long-Term Leases |  |  | 0.030 |  |  |  |
| (7.1) | Affiliated Investments $\dagger$ : Company | LR038 Additional Information Required Column (1) |  | 0.100 |  |  |  |
|  |  | Line (7.14) |  |  |  |  |  |
| (7.2) | Affiliated Investments $\dagger$ : | LR038 Additional Information Required Column (1) |  | 0.100 |  |  |  |
|  | Subsidiaries | Line (7.2) |  |  |  |  |  |
| (7.99) | Total Affiliated Investments |  |  | 0.100 |  |  |  |
| (8.1) | Total Residual Tranches or Interests | LR038 Additional Information Required Column (1) |  | 0.100 |  |  |  |
|  |  | Line (11.1) |  |  |  |  |  |

$\dagger$ Excluding affiliated preferred and common stock
Denotes items that must be manually entered on the filing software.

## SENSITIVITY TESTS - TOTAL ADJUSTED CAPITAL

|  | Sensitivity Tests Affecting <br> Total Adjusted Capital | Source | Statement Value | Sensitivity <br> Factor | Change to Total Adjusted Capital | Total Adjusted Capital Before Test | Total Adjusted Capital After Test |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (9.1) | Dividend Liability: Company | LR033 Calculation of Total Adjusted Capital Column (1) Line (3) + Line (4) |  | -0.250 |  |  |  |
| (9.2) | Dividend Liability: Subsidiaries | LR033 Calculation of Total Adjusted Capital Column (1) Line (7) |  | -0.250 |  |  |  |
| (9.99) | Total Dividend Liability |  |  | -0.250 |  |  |  |
| (10.1) | Surplus Notes: Company | LR038 Additional Information Required Column (1) Line (9.1) |  | -1.000 |  |  |  |
| (10.2) | Surplus Notes: Subsidiaries | LR038 Additional Information Required Column (1) Line (9.2) |  | -1.000 |  |  |  |
| (10.99) | Total Surplus Notes |  |  | -1.000 |  |  |  |
| (11.1) | Current Year Capital Contribution: Company | LR038 Additional Information Required Column (1) Line (10.13) |  | -1.000 |  |  |  |
| (11.2) | Current Year Capital Contribution: <br> Subsidiaries | LR038 Additional Information Required Column (1) Line (10.2) |  | -1.000 |  |  |  |
| (11.99) | Total Current Year Capital Contributions |  |  | -1.000 |  |  |  |

[^2]
[^0]:    ${ }^{1}$ For each month from 1960-1991, calculated as the worst cumulative monthly loss over the next two years.
    ${ }^{2}$ Losses to the bond tranches require close to a total loss to the residual tranche. A framework that assumes only $30 \%$ capital for residual tranches implies that the first-loss protection is typically not depleted in a capital level shock and all debt tranches are essentially risk-free.

[^1]:    ${ }^{3}$ Since equity securities are held at fair market value, capital charges are calibrated to market value shocks. In contrast, Bond tranches are held at book value and capital charges are calibrated based on permanent impairments and losses in default.
    ${ }^{4}$ C1 Bond Factors also support these empirical results. Current factors imply leveraged loan collateral losses over $14 \%$ in a capital-level stress. This collateral loss would indicate close to $100 \%$ loss on the residual tranche. A simple expansion of the annual SVO CLO stress test to include residual tranches would generate similar results.

[^2]:    Denotes items that must be manually entered on the filing software.

