



# NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS

**NAIC 2021** | **SPRING NATIONAL MEETING VIRTUAL**

Date: 6/30/21

## FINANCIAL CONDITION (E) COMMITTEE

Thursday, July 8, 2021

11:00 a.m. – 12:00 p.m. ET / 10:00 – 11:00 a.m. CT / 9:00 – 10:00 a.m. MT / 8:00 – 9:00 a.m. PT

### ROLL CALL

Scott A. White, Chair	Virginia	Russell Toal	New Mexico
Michael Conway, Vice Chair	Colorado	Linda A. Lacewell	New York
Dana Popish Severinghaus	Illinois	Judith L. French	Ohio
Amy L. Beard	Indiana	Raymond G. Farmer	South Carolina
Eric A. Cioppa	Maine	Doug Slape	Texas
Mike Chaney	Mississippi	Mark Afable	Wisconsin
Chlora Lindley-Myers	Missouri	Jeff Rude	Wyoming
Marlene Caride	New Jersey		

NAIC Support Staff: Dan Daveline/Julie Gann/Bruce Jenson

### AGENDA

1. Consider Adoption of Changes to the *Insurance Holding Company System Model Act (#440) & Insurance Holding Company System Model Regulation with Reporting Forms and Instructions (#450)* Attachment A  
—James Kennedy (TX)
2. Consider Adoption of Life RBC Bond Factors (2021-1L) Attachment B  
—Tom Botsko (OH)
3. Adjournment

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*Adopted by the Executive (EX) Committee and Plenary, [REDACTED],*  
*Adopted by the Financial Condition (E) Committee [REDACTED],*  
*Adopted by the Receivership and Insolvency (E) Task Force May 20, 2021*  
*Adopted by the Receivership Law (E) Working Group May 4, 2021*

## INSURANCE HOLDING COMPANY SYSTEM REGULATORY ACT

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### Section 5. Standards and Management of an Insurer Within an Insurance Holding Company System

- A. Transactions Within an Insurance Holding Company System
- (1) Transactions within an insurance holding company system to which an insurer subject to registration is a party shall be subject to the following standards:
- (a) The terms shall be fair and reasonable;
  - (b) Agreements for cost sharing services and management shall include such provisions as required by rule and regulation issued by the commissioner;
  - (c) Charges or fees for services performed shall be reasonable;
  - (d) Expenses incurred and payment received shall be allocated to the insurer in conformity with customary insurance accounting practices consistently applied;
  - (e) The books, accounts and records of each party to all such transactions shall be so maintained as to clearly and accurately disclose the nature and details of the transactions including such accounting information as is necessary to support the reasonableness of the charges or fees to the respective parties; ~~and~~
  - (f) The insurer's surplus as regards policyholders following any dividends or distributions to shareholder affiliates shall be reasonable in relation to the insurer's outstanding liabilities and adequate to meet its financial needs; ~~;~~

- (g) If an insurer subject to this Act is deemed by the commissioner to be in a hazardous financial condition as defined by [insert citation for Model Regulation to Define Standards and Commissioner’s Authority for Companies Deemed to be in Hazardous Financial Condition] or a condition that would be grounds for supervision, conservation or a delinquency proceeding, then the commissioner may require the insurer to secure and maintain either a deposit, held by the commissioner, or a bond, as determined by the insurer at the insurer’s discretion, for the protection of the insurer for the duration of the contract(s) or agreement(s), or the existence of the condition for which the commissioner required the deposit or the bond.

In determining whether a deposit or a bond is required, the commissioner should consider whether concerns exist with respect to the affiliated person’s ability to fulfill the contract(s) or agreement(s) if the insurer were to be put into liquidation. Once the insurer is deemed to be in a hazardous financial condition or a condition that would be grounds for supervision, conservation or a delinquency proceeding, and a deposit or bond is necessary, the commissioner has discretion to determine the amount of the deposit or bond, not to exceed the value of the contract(s) or agreement(s) in any one year, and whether such deposit or bond should be required for a single contract, multiple contracts or a contract only with a specific person(s);

**Drafting Note:** This section is intended to apply to a broad range of affiliate managerial and support service contracts including, for example, general managerial services, financial accounting and actuarial services, data management, investment portfolio management and support and policy and policyholder services. (Performance collateralization for reinsurance and other risk transfer or financial contracts with affiliates is typically addressed in the underlying contractual agreements and is beyond the scope of these deposit/bond requirements). The intent of the deposit or bond is to ensure the affiliated services provided under the contract(s) are fulfilled. In determining appropriate circumstances when a commissioner may require a deposit or bond, (deposit vs. bond to be determined by the insurer) and in specifying an amount, the commissioner should evaluate and consider whether an insurer subject to this act is in a hazardous financial condition or a condition that would be grounds for substantial regulatory action, including supervision, conservation or a delinquency proceeding. If it is, the deposit or bond requirement would be available as an additional regulatory remedy at the discretion of the commissioner. Note, the commissioner should consider whether the affiliated person is already required to post a deposit or bond under applicable laws regulating third-party administrators.

- (h) All records and data of the insurer held by an affiliate are and remain the property of the insurer, are subject to control of the insurer, are identifiable, and are segregated or readily capable of segregation, at no additional cost to the insurer, from all other persons’ records and data. This includes all records and data that are otherwise the property of the insurer, in whatever form maintained, including, but not limited to, claims and claim files, policyholder lists, application files, litigation files, premium records, rate books, underwriting manuals, personnel records, financial records or similar records within the possession, custody or control of the affiliate. At the request of the insurer, the affiliate shall provide that the receiver can obtain a complete set of all records of any type that pertain to the insurer’s business; obtain access to the operating systems on which the data is maintained; obtain the software that runs those systems either through assumption of licensing agreements or otherwise; and restrict the use of the data by the affiliate if it is not operating the insurer’s business. The affiliate shall provide a waiver of any landlord lien or other encumbrance to give the insurer access to all records and data in the event of the affiliate’s default under a lease or other agreement; and,

**Drafting Note:** The “at no additional cost to the insurer” language is not intended to prohibit recovery of the fair and reasonable cost associated with transferring records and data to the insurer. Since records and data of the insurer are the property of the insurer, the insurer should not pay a cost to segregate commingled records and data from other data of the affiliate.

- (i) Premiums or other funds belonging to the insurer that are collected by or held by an affiliate are the exclusive property of the insurer and are subject to the control of the insurer. Any right of offset in the event an insurer is placed into receivership shall be subject to [the receivership act of the state].

- (2) The following transactions involving a domestic insurer and any person in its insurance holding company system, including amendments or modifications of affiliate agreements previously filed pursuant to this section, which are subject to any materiality standards contained in subparagraphs (a) through (g), may not be entered into unless the insurer has notified the commissioner in writing of its intention to enter into the transaction at least thirty (30) days prior thereto, or such shorter period as the commissioner may permit, and the commissioner has not disapproved it within that period. The notice for amendments or modifications shall include the reasons for the change and the financial impact on the domestic insurer. Informal notice shall be reported, within thirty (30) days after a termination of a previously filed agreement, to the commissioner for determination of the type of filing required, if any.
- (a) Sales, purchases, exchanges, loans, extensions of credit, or investments, provided the transactions are equal to or exceed:
    - (i) With respect to nonlife insurers, the lesser of three percent (3%) of the insurer's admitted assets or twenty-five percent (25%) of surplus as regards policyholders as of the 31st day of December next preceding;
    - (ii) With respect to life insurers, three percent (3%) of the insurer's admitted assets as of the 31st day of December next preceding;
  - (b) Loans or extensions of credit to any person who is not an affiliate, where the insurer makes loans or extensions of credit with the agreement or understanding that the proceeds of the transactions, in whole or in substantial part, are to be used to make loans or extensions of credit to, to purchase assets of, or to make investments in, any affiliate of the insurer making the loans or extensions of credit provided the transactions are equal to or exceed:
    - (i) With respect to nonlife insurers, the lesser of three percent (3%) of the insurer's admitted assets or twenty-five percent (25%) of surplus as regards policyholders as of the 31st day of December next preceding;
    - (ii) With respect to life insurers, three percent (3%) of the insurer's admitted assets as of the 31st day of December next preceding;
  - (c) Reinsurance agreements or modifications thereto, including:
    - (i) All reinsurance pooling agreements;
    - (ii) Agreements in which the reinsurance premium or a change in the insurer's liabilities, or the projected reinsurance premium or a change in the insurer's liabilities in any of the next three years, equals or exceeds five percent (5%) of the insurer's surplus as regards policyholders, as of the 31st day of December next preceding, including those agreements which may require as consideration the transfer of assets from an insurer to a non-affiliate, if an agreement or understanding exists between the insurer and non-affiliate that any portion of the assets will be transferred to one or more affiliates of the insurer;
  - (d) All management agreements, service contracts, tax allocation agreements, guarantees and all cost-sharing arrangements;
  - (e) Guarantees when made by a domestic insurer; provided, however, that a guarantee which is quantifiable as to amount is not subject to the notice requirements of this paragraph unless it exceeds the lesser of one-half of one percent (.5%) of the insurer's admitted assets or ten percent (10%) of surplus as regards policyholders as of the 31st day of December next preceding. Further, all guarantees which are not quantifiable as to amount are subject to the notice requirements of this paragraph;

- (f) Direct or indirect acquisitions or investments in a person that controls the insurer or in an affiliate of the insurer in an amount which, together with its present holdings in such investments, exceeds two and one-half percent (2.5%) of the insurer's surplus to policyholders. Direct or indirect acquisitions or investments in subsidiaries acquired pursuant to Section 2 of this Act (or authorized under any other section of this Chapter), or in non-subsidiary insurance affiliates that are subject to the provisions of this Act, are exempt from this requirement; and

**Drafting Note:** When reviewing the notification required to be submitted pursuant to Section 5A(2)(f), the commissioner should examine prior and existing investments of this type to establish that these investments separately or together with other transactions, are not being made to contravene the dividend limitations set forth in Section 5B. However, an investment in a controlling person or in an affiliate shall not be considered a dividend or distribution to shareholders when applying Section 5B of this Act.

- (g) Any material transactions, specified by regulation, which the commissioner determines may adversely affect the interests of the insurer's policyholders.

Nothing in this paragraph shall be deemed to authorize or permit any transactions which, in the case of an insurer not a member of the same insurance holding company system, would be otherwise contrary to law.

- (3) A domestic insurer may not enter into transactions which are part of a plan or series of like transactions with persons within the insurance holding company system if the purpose of those separate transactions is to avoid the statutory threshold amount and thus avoid the review that would occur otherwise. If the commissioner determines that separate transactions were entered into over any twelve-month period for that purpose, the commissioner may exercise his or her authority under Section 11.
- (4) The commissioner, in reviewing transactions pursuant to Subsection A(2), shall consider whether the transactions comply with the standards set forth in Subsection A(1) and whether they may adversely affect the interests of policyholders.
- (5) The commissioner shall be notified within thirty (30) days of any investment of the domestic insurer in any one corporation if the total investment in the corporation by the insurance holding company system exceeds ten percent (10%) of the corporation's voting securities.

(6) Supervision, seizure, conservatorship or receivership proceedings.

(a) Any affiliate that is party to an agreement or contract with a domestic insurer that is subject to Subsection 5A(2)(d) shall be subject to the jurisdiction of any supervision, seizure, conservatorship or receivership proceedings against the insurer and to the authority of any supervisor, conservator, rehabilitator or liquidator for the insurer appointed pursuant to [supervision and receivership acts] for the purpose of interpreting, enforcing and overseeing the affiliate's obligations under the agreement or contract to perform services for the insurer that:

(i) Are an integral part of the insurer's operations, including, but not limited to management, administrative, accounting, data processing, marketing, underwriting, claims handling, investment or any other similar functions; or

(ii) Are essential to the insurer's ability to fulfil its obligations under insurance policies.

(b) The commissioner may require that an agreement or contract pursuant to Subsection 5A(2)(d) for the provision of services described in (i) and (ii) above specify that the affiliate consents to the jurisdiction as set forth in this Subsection 5A(6).

**Drafting Note:** Subsection 5A(6) is not intended to subject affiliates, in particular those that may be subject to regulation in other jurisdictions, to the general jurisdiction of pending supervision, seizure, conservation or receivership court proceedings in this state or the general authority of a supervisor, conservator or receiver for a domestic insurer. Rather, the jurisdiction and authority conferred by this provision is limited to ensuring that a domestic insurer continues to receive essential services

from an affiliate that it has contracted with to provide such services, in accordance with the terms of the contract and applicable law, during the aforementioned proceedings. Subsection 5A(6)(b) gives the commissioner discretion to require documentation of an affiliate's consent to this jurisdiction in the agreement or contract. In determining appropriate circumstances when a commissioner may require such provision, the commissioner should consider the scope and materiality to the domestic insurer of the contract, the nature of the holding company system, and whether examination or investigation of the domestic insurer warrants requirement of such a provision.

#### B. Dividends and other Distributions

No domestic insurer shall pay any extraordinary dividend or make any other extraordinary distribution to its shareholders until thirty (30) days after the commissioner has received notice of the declaration thereof and has not within that period disapproved the payment, or until the commissioner has approved the payment within the thirty-day period.

For purposes of this section, an extraordinary dividend or distribution includes any dividend or distribution of cash or other property, whose fair market value together with that of other dividends or distributions made within the preceding twelve (12) months exceeds the lesser of:

- (1) Ten percent (10%) of the insurer's surplus as regards policyholders as of the 31st day of December next preceding; or
- (2) The net gain from operations of the insurer, if the insurer is a life insurer, or the net income, if the insurer is not a life insurer, not including realized capital gains, for the twelve-month period ending the 31st day of December next preceding, but shall not include pro rata distributions of any class of the insurer's own securities.

In determining whether a dividend or distribution is extraordinary, an insurer other than a life insurer may carry forward net income from the previous two (2) calendar years that has not already been paid out as dividends. This carry-forward shall be computed by taking the net income from the second and third preceding calendar years, not including realized capital gains, less dividends paid in the second and immediate preceding calendar years.

Notwithstanding any other provision of law, an insurer may declare an extraordinary dividend or distribution which is conditional upon the commissioner's approval, and the declaration shall confer no rights upon shareholders until (1) the commissioner has approved the payment of the dividend or distribution or (2) the commissioner has not disapproved payment within the thirty-day period referred to above.

**Drafting Note:** The following Subsection C entitled "Management of Domestic Insurers Subject to Registration" is optional and is to be adopted according to the needs of the individual jurisdiction.

#### C. Management of Domestic Insurers Subject To Registration.

- (1) Notwithstanding the control of a domestic insurer by any person, the officers and directors of the insurer shall not thereby be relieved of any obligation or liability to which they would otherwise be subject by law, and the insurer shall be managed so as to assure its separate operating identity consistent with this Act.
- (2) Nothing in this section shall preclude a domestic insurer from having or sharing a common management or cooperative or joint use of personnel, property or services with one or more other persons under arrangements meeting the standards of Section 5A(1).
- (3) Not less than one-third of the directors of a domestic insurer, and not less than one-third of the members of each committee of the board of directors of any domestic insurer shall be persons who are not officers or employees of the insurer or of any entity controlling, controlled by, or under common control with the insurer and who are not beneficial owners of a controlling interest in the voting stock of the insurer or entity. At least one such person must be included in any quorum for the transaction of business at any meeting of the board of directors or any committee thereof.

- (4) The board of directors of a domestic insurer shall establish one or more committees comprised solely of directors who are not officers or employees of the insurer or of any entity controlling, controlled by, or under common control with the insurer and who are not beneficial owners of a controlling interest in the voting stock of the insurer or any such entity. The committee or committees shall have responsibility for nominating candidates for director for election by shareholders or policyholders, evaluating the performance of officers deemed to be principal officers of the insurer and recommending to the board of directors the selection and compensation of the principal officers.
  - (5) The provisions of Paragraphs (3) and (4) shall not apply to a domestic insurer if the person controlling the insurer, such as an insurer, a mutual insurance holding company, or a publicly held corporation, has a board of directors and committees thereof that meet the requirements of Paragraphs (3) and (4) with respect to such controlling entity.
  - (6) An insurer may make application to the commissioner for a waiver from the requirements of this subsection, if the insurer's annual direct written and assumed premium, excluding premiums reinsured with the Federal Crop Insurance Corporation and Federal Flood Program, is less than \$300,000,000. An insurer may also make application to the commissioner for a waiver from the requirements of this subsection based upon unique circumstances. The commissioner may consider various factors including, but not limited to, the type of business entity, volume of business written, availability of qualified board members, or the ownership or organizational structure of the entity.
- D. Adequacy of Surplus. For purposes of this Act, in determining whether an insurer's surplus as regards policyholders is reasonable in relation to the insurer's outstanding liabilities and adequate to meet its financial needs, the following factors, among others, shall be considered:
- (1) The size of the insurer as measured by its assets, capital and surplus, reserves, premium writings, insurance in force and other appropriate criteria;
  - (2) The extent to which the insurer's business is diversified among several lines of insurance;
  - (3) The number and size of risks insured in each line of business;
  - (4) The extent of the geographical dispersion of the insurer's insured risks;
  - (5) The nature and extent of the insurer's reinsurance program;
  - (6) The quality, diversification and liquidity of the insurer's investment portfolio;
  - (7) The recent past and projected future trend in the size of the insurer's investment portfolio;
  - (8) The surplus as regards policyholders maintained by other comparable insurers;
  - (9) The adequacy of the insurer's reserves; and
  - (10) The quality and liquidity of investments in affiliates. The commissioner may treat any such investment as a disallowed asset for purposes of determining the adequacy of surplus as regards policyholders whenever in the judgment of the commissioner the investment so warrants.
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*Adopted by the Executive (EX) Committee and Plenary, [REDACTED],*  
*Adopted by the Financial Condition (E) Committee [REDACTED],*  
*Adopted by the Receivership and Insolvency (E) Task Force May 20, 2021*  
*Adopted by the Receivership Law (E) Working Group May 4, 2021*

## **INSURANCE HOLDING COMPANY SYSTEM MODEL REGULATION WITH REPORTING FORMS AND INSTRUCTIONS**

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Form F	Enterprise Risk Report

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### **Section 19. Transactions Subject to Prior Notice - Notice Filing**

- A. An insurer required to give notice of a proposed transaction pursuant to Section 5 of the Act shall furnish the required information on Form D, hereby made a part of these regulations.
- B. Agreements for cost sharing services and management services shall at a minimum and as applicable:
- (1) Identify the person providing services and the nature of such services;
  - (2) Set forth the methods to allocate costs;
  - (3) Require timely settlement, not less frequently than on a quarterly basis, and compliance with the requirements in the Accounting Practices and Procedures Manual;

- (4) Prohibit advancement of funds by the insurer to the affiliate except to pay for services defined in the agreement;
- (5) State that the insurer will maintain oversight for functions provided to the insurer by the affiliate and that the insurer will monitor services annually for quality assurance;
- (6) Define ~~books and records~~ and data of the insurer to include all ~~books and records~~ and data developed or maintained under or related to the agreement that are otherwise the property of the insurer, in whatever form maintained, including, but not limited to, claims and claim files, policyholder lists, application files, litigation files, premium records, rate books, underwriting manuals, personnel records, financial records or similar records within the possession, custody or control of the affiliate;
- (7) Specify that all ~~books and records~~ and data of the insurer are and remain the property of the insurer, and:
- (a) Are subject to control of the insurer;
- (b) Are identifiable; and
- (c) Are segregated from all other persons' records and data, or are readily capable of segregation at no additional cost to the insurer;

**Drafting Note:** The “at no additional cost to the insurer” language is not intended to prohibit recovery of the fair and reasonable cost associated with transferring records and data to the insurer. Since records and data of the insurer are the property of the insurer, the insurer should not pay a cost to segregate commingled records and data from other data of the affiliate.

- (8) State that all funds and invested assets of the insurer are the exclusive property of the insurer, held for the benefit of the insurer and are subject to the control of the insurer;
- (9) Include standards for termination of the agreement with and without cause;
- (10) Include provisions for indemnification of the insurer in the event of gross negligence or willful misconduct on the part of the affiliate providing the services and for any actions by the affiliate that violate provisions of the agreement required in Subsections 19B(11), 19B(12), 19B(13), 19B(14) and 19B(15) of this regulation;
- (11) Specify that, if the insurer is placed in supervision, seizure, conservatorship or receivership pursuant to [supervision and receivership acts]~~receivership or seized by the commissioner under the State Receivership Act:~~
- (a) All of the rights of the insurer under the agreement extend to the receiver or commissioner to the extent permitted by [law of the state]; and,
- (b) All records and data of the insurer shall be identifiable, and segregated from all other persons' records and data or readily capable of segregation at no additional cost to the receiver or the commissioner;

**Drafting Note:** The “at no additional cost to the receiver or the commissioner” language is not intended to prohibit recovery of the fair and reasonable cost associated with transferring records and data to the receiver or the commissioner. Since records and data of the insurer are the property of the insurer, the receiver or commissioner should not pay a cost to segregate commingled records and data from other data of the affiliate.

- (c) A complete set of ~~all books and records~~ and data of the insurer will immediately be made available to the receiver or the commissioner, shall be made available in a usable format, and shall be turned over to the receiver or commissioner immediately upon the receiver or the commissioner's request, and the cost to transfer data to the receiver or the commissioner shall be fair and reasonable; and,

**Drafting Note:** The fair and reasonable cost to transfer data to the receiver or commissioner refers to the cost associated with physically or electronically transferring records and data files to the receiver or commissioner. This cost does not include costs to separate comingled data and records that should have been segregated or readily capable of segregation.

- (d) The affiliated person(s) will make available all employees essential to the operations of the insurer and the services associated therewith for the immediate continued performance of the essential services ordered or directed by the receiver or commissioner;
- (12) Specify that the affiliate has no automatic right to terminate the agreement if the insurer is placed into supervision, seizure, conservatorship or receivership pursuant to [supervision and receivership acts]~~the State Receivership Act; and~~
- (13) Specify that the affiliate will provide the essential services for a minimum period of time [specified in the agreement] after termination of the agreement, if the insurer is placed into supervision, seizure, conservatorship or receivership pursuant to [supervision and receivership acts], as ordered or directed by the receiver or commissioner. Performance of the essential services will continue to be provided without regard to pre-receivership unpaid fees, so long as the affiliate continues to receive timely payment for post-receivership services rendered, and unless released by the receiver, commissioner or supervising court;
- (134) Specify that the affiliate will continue to maintain any systems, programs, or other infrastructure, notwithstanding supervision, seizure, conservatorship or receivership pursuant to [supervision and receivership acts]~~a seizure by the commissioner under the State Receivership Act, and will make them available to the receiver or commissioner as ordered or directed by the receiver or commissioner; for so long as the affiliate continues to receive timely payment for post-receivership services rendered, and unless released by the receiver, commissioner or supervising court; and;~~
- (15) Specify that, in furtherance of the cooperation between the receiver and the affected guaranty association(s) and subject to the receiver's authority over the insurer, if the insurer is placed into supervision, seizure, conservatorship or receivership pursuant to [supervision and receivership acts], and portions of the insurer's policies or contracts are eligible for coverage by one or more guaranty associations, the affiliate's commitments under Subsections 19B(11), 19B(12), 19B(13) and 19B(14) of this regulation will extend to such guaranty association(s).
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Draft: 6/22/21

## PROJECT HISTORY

### REVISIONS TO *INSURANCE HOLDING COMPANY SYSTEM MODEL ACT (#440)* AND *INSURANCE HOLDING COMPANY SYSTEM MODEL REGULATION WITH REPORTING FORMS AND INSTRUCTIONS (#450)* RECEIVERSHIP

#### 1. Description of the Project, Issues Addressed, etc.

In 2020, the NAIC Plenary adopted a new charge for the Receivership Law (E) Working Group. The charge is still active and reads as follows:

*“Review and provide recommendations for remedies to ensure the continuity of essential services and functions to an insurer in receivership by affiliated entities, including nonregulated entities. Among other solutions, this will encompass a review of the Insurance Holding Company System Regulatory Act (#440) and the Insurance Holding Company System Model Regulation with Reporting Forms and Instructions (#450) to provide proposed revisions to address the continuation of essential services through affiliated intercompany agreements in a receivership.”*

Prior to, and prompting the need for, the adoption of this charge, the Receivership and Insolvency (E) Task Force performed a macroprudential analysis of the U.S. system of insurance regulation with respect to receivership laws compared to international standards under the Financial Stability Board (FSB) and under the Common Framework for the Supervision of Internationally Active Insurance Groups (ComFrame). At the 2019 Summer National Meeting, the Receivership and Insolvency (E) Task Force adopted a report including recommendations to address receivership powers that are implicit in state laws, rather than explicit. One such area is the power to ensure the continuity of essential services and functions within a holding company group once an insurer is placed into receivership.

The Task Force identified the following authority and remedies available within the U.S. regime related to these international standards:

- Model #440 requires approval of affiliated transactions, allowing a state insurance regulator to identify agreements that could create obstacles in a receivership. Model #450, Section 19, provides that cost sharing and management agreements specify if the insurer is placed in receivership that an affiliate has no automatic right to terminate the agreement.
- The receiver can take action against a provider that refuses to continue services under a contract or seek an order requiring it to turn over records. If an affiliate providing services is inextricably intertwined with the insurer, the receiver could also seek to place the affiliate into receivership.

However, it was noted that some of these authorities and remedies may not address the immediate need to continue services in some receiverships. Despite these available remedies, receivers continue to be challenged by this issue in receivership, often resulting in significant additional legal and administrative expenses to the receivership estate.

In 2020, the Receivership Law (E) Working Group was given the charge to provide recommendations for remedies to ensure the continuity of essential services and functions to an insurer in receivership by affiliated entities, including nonregulated entities and specifically for agreements with affiliated entities whose sole business purpose is to provide services to the insurance company.

#### 2. Name of Group Responsible for Drafting the Model and States Participating.

The Receivership Law (E) Working Group of the Receivership and Insolvency (E) Task Force drafted the initial revisions to Model #440 and Model #450. The 2020 and 2021 members of the Subgroup were: Illinois (Co-Chair); Pennsylvania (Co-Chair); Arkansas; California; Colorado; Connecticut; Florida; Iowa; Louisiana (2021); Maine; Massachusetts; Michigan; Missouri; Nebraska; Texas; and Washington.

A drafting group was formed to draft the revisions. Members included: Florida; Illinois; Maine; Michigan; Oklahoma; Pennsylvania; and Texas.

#### 3. Project Authorized by What Charge and Date First Given to the Group.

As described in paragraph 1 above, the initial charge prompting a review of Model #440 and Model #450 was given to the Receivership Law (E) Working Group for 2020. The Request for NAIC Model Law Development to open Model #440 and Model #450 for revision was adopted by the Executive (EX) Committee at the 2020 Summer National Meeting.

**4. A General Description of the Drafting Process (e.g., drafted by a subgroup, interested parties, the full group, etc.). Include any parties outside the members that participated.**

In August 2020, the Receivership Law (E) Working Group began its work to address its charge by conducting a survey of state insurance regulators and interested parties to gather feedback on possible provisions to be addressed and goals of those revisions to Model #440 and Model #450. Survey responses were received from state insurance regulators and interested parties identifying specific sections of the models and topics to be considered.

**5. A General Description of the Due Process (e.g., exposure periods, public hearings, or any other means by which widespread input from industry, consumers and legislators was solicited).**

On Dec. 17, 2020, the Receivership Law (E) Working Group met in open session to expose proposed amendments to Section 5A and Section 11 of Model #440 and Section 19 of #450 for a 42-day public comment period ending Jan. 29, 2021. Comments were received from Florida; the American Council of Life Insurers (ACLI); America's Health Insurance Plans (AHIP) and the Blue Cross and Blue Shield Association (BCBSA); Arbor Strategies LLC; Morgan, Lewis & Bockius LLP and the National Organization of Life and Health Insurance Guaranty Associations (NOLHGA); and the National Conference of Insurance Guaranty Funds (NCIGF).

On Feb. 4, 2021, the Receivership Law (E) Working Group met in open session to discuss comments received. Subsequent edits were drafted by the drafting group as discussed during the meeting. The Working Group exposed proposed revised amendments to Section 5A and Section 11 of Model #440 and Section 19 of #450 for a 14-day public comment period ending Feb. 4, 2021. Comments were received from AHIP and the BCBSA; the American Property Casualty Insurance Association (APCIA); Arbor Strategies LLC; and NOLHGA and the NCIGF.

On March 4, 2021, the Receivership Law (E) Working Group met in open session to discuss comments received. Subsequent edits were drafted as discussed during the meeting by the drafting group in coordination with the interested parties that had provided comments. The Working Group co-chairs released proposed revised amendments to Section 5A(1)(g) of Model #440 for a 30-day public comment period ending April 9, 2021. One comment letter was received from the ACLI. The ACLI's proposed edit was accepted.

All exposures were distributed by email to members, interested state insurance regulators and interested parties of both the Receivership Law (E) Working Group and the Receivership and Insolvency (E) Task Force and posted to the NAIC website.

All issues raised by members, interested state insurance regulators and interested parties were explained or addressed in the revisions to the original amendments.

The amendments were adopted by the Receivership Law (E) Working Group on May 4, 2021.

The amendments were adopted by the Receivership and Insolvency (E) Task Force on May 20, 2021.

**6. A Discussion of the Significant Issues (items of some controversy raised during the due process and the group's response).**

There were no unresolved issues of real significance raised during the exposure periods. However, the following issue was considered and addressed by the Receivership Law (E) Working Group. Interested parties requested and provided draft revisions to the amendments in Section 5.A.(1)(g) regarding the requirement for a bond or deposit that limits the provision to insurers found to be in a condition of hazardous financial condition or a condition that would be grounds for supervision, conservation or a delinquency proceeding. Interested parties also provided revisions to the subsection and the accompanying drafting note that would further define and clarify the circumstances and the agreements to which the subsection could be applied. The Working Group was agreeable to these changes and accepted interested parties' revisions.

**7. List the key provisions of the model (sections considered most essential to state adoption).**

The amendments to Model #440 are within Section 5, Standards and Management of an Insurer Within an Insurance Holding Company System, and within Model #450 Section 19, Transactions Subject to Prior Notice.

- Section 5A(1) of Model #440
  - Books and records of the insurer are updated to specifically include data of the insurer, being the property of the insurer. The data and records should be identifiable and capable of segregation. Essentially the data and records should be available to the receiver in the event of insolvency, including the systems necessary to access them.
  - If the commissioner deems the insurer to be in a statutorily defined hazardous financial condition, the commissioner may require a bond or deposit, limited in amount, after consideration of whether there are concerns about the affiliated party's ability to fulfill the contract in the event of a liquidation.
  - Premiums are the property of the insurer, with any right of offset subject to receivership law.
- Section 5A(6) of Model #440
  - The affiliated entity is subject to jurisdiction of receivership court, and in certain circumstances the commissioner may require the affiliate to agree to this in writing.
- Section 19 of Model #450
  - Books and records of the insurer are updated to specifically include data of the insurer, being the property of the insurer. The data and records should be identifiable and capable of segregation. Essentially the data and records should be available to the receiver in the event of insolvency, including the systems necessary to access them. The data is specifically defined in Model #450.
  - Model #450 includes a provision relating to indemnification of the insurer in the event of gross negligence or willful misconduct by the affiliate.
  - In the event of receivership (now including supervision and conservatorship):
    - The rights of the insurer extend to the receiver or guaranty fund.
    - The affiliate will make available essential personnel.
    - The affiliate will continue the services for a minimum period of time as specified in the agreement with timely payment for post-receivership work.
    - The affiliate will maintain necessary systems, programs or infrastructure and make them available to the receiver or commissioner for as long as the affiliate receives timely post-receivership payment unless released by the receiver, commissioner or receivership court.

## **8. Any Other Important Information (e.g., amending an accreditation standard).**

The Receivership and Insolvency (E) Task Force has not had formal discussions with respect to whether the current Insurance Holding Company Systems accreditation standard under the NAIC Financial Regulation Standards and Accreditation Program should be amended to include the current revisions to Model #440 and Model #450. The Task Force will consider this and make appropriate referrals prior to the 2022 Spring National Meeting.

## Capital Adequacy (E) Task Force RBC Proposal Form

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Capital Adequacy (E) Task Force  | <input type="checkbox"/> Health RBC (E) Working Group     | <input checked="" type="checkbox"/> Life RBC (E) Working Group |
| <input type="checkbox"/> Catastrophe Risk (E) Subgroup    | <input type="checkbox"/> Investment RBC (E) Working Group | <input type="checkbox"/> Operational Risk (E) Subgroup         |
| <input type="checkbox"/> C3 Phase II/ AG43 (E/A) Subgroup | <input type="checkbox"/> P/C RBC (E) Working Group        | <input type="checkbox"/> Longevity Risk (A/E) Subgroup         |

<b>DATE:</b> <u>4/22/21</u>	<b><u>FOR NAIC USE ONLY</u></b>
<b>CONTACT PERSON:</b> <u>Dave Fleming</u> <b>TELEPHONE:</b> <u>816-783-8121</u> <b>EMAIL ADDRESS:</b> <u>d Fleming@naic.org</u> <b>ON BEHALF OF:</b> <u>Life Risk-Based Capital (E) Working Group</u> <b>NAME:</b> <u>Philip Barlow, Chair</u> <b>TITLE:</b> <u>Associate Commissioner of Insurance</u> <b>AFFILIATION:</b> <u>District of Columbia</u> <b>ADDRESS:</b> <u>1050 First Street, NE Suite 801</u> <u>Washington, DC 20002</u>	Agenda Item # <u>2021-11-L</u> Year <u>2021</u>  <b style="text-align: center;"><u>DISPOSITION</u></b> <input type="checkbox"/> ADOPTED <u>6/11/21</u> <input type="checkbox"/> REJECTED _____ <input type="checkbox"/> DEFERRED TO _____ <input type="checkbox"/> REFERRED TO OTHER NAIC GROUP _____ <input checked="" type="checkbox"/> EXPOSED <u>4/22/21</u> <input type="checkbox"/> OTHER (SPECIFY) _____

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

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Health RBC Blanks       | <input type="checkbox"/> Property/Casualty RBC Blanks       | <input checked="" type="checkbox"/> Life and Fraternal RBC Instructions |
| <input type="checkbox"/> Health RBC Instructions | <input type="checkbox"/> Property/Casualty RBC Instructions | <input checked="" type="checkbox"/> Life and Fraternal RBC Blanks       |
| <input type="checkbox"/> OTHER _____             |   |   |

### DESCRIPTION OF CHANGE(S)

This proposal incorporates bond factors proposed by the American Council of Life Insurers (ACLI) which are based on the work of Moody’s Analytics for the expanded presentation of bond designation categories in the annual statement and risk-based capital (RBC) schedules.

### REASON OR JUSTIFICATION FOR CHANGE \*\*

The expanded presentation of bonds is a result of the work of the Investment Risk-Based Capital (E) Working Group. This proposal presents alternative factors to those proposed by the American Academy of Actuaries (Academy).

### Additional Staff Comments:

- 4-22-21: Proposal was exposed for comments (DBF)
- 6-11-21 Proposal was adopted with the base factors as presented in the April 2021 report, the inclusion of the adjusted tax factors for LR030 and Moody’s Analytics’ revised bond size factors as presented in the June 2021 report (DBF)

\*\* This section must be completed on all forms.

Revised 2-2019

Company Name

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Attachment B  
NAIC Company Code

BONDS

SVO Bond			(1)	(2)
Designation Category		Annual Statement Source	Book / Adjusted	RBC
Long Term Bonds			Carrying Value	Requirement
(1)	Exempt Obligations	AVR Default Component Column 1 Line 1	X 0.00000	=
(2.1)	NAIC Designation Category 1.A	AVR Default Component Column 1 Line 2.1	X 0.00158	=
(2.2)	NAIC Designation Category 1.B	AVR Default Component Column 1 Line 2.2	X 0.00271	=
(2.3)	NAIC Designation Category 1.C	AVR Default Component Column 1 Line 2.3	X 0.00419	=
(2.4)	NAIC Designation Category 1.D	AVR Default Component Column 1 Line 2.4	X 0.00523	=
(2.5)	NAIC Designation Category 1.E	AVR Default Component Column 1 Line 2.5	X 0.00657	=
(2.6)	NAIC Designation Category 1.F	AVR Default Component Column 1 Line 2.6	X 0.00816	=
(2.7)	NAIC Designation Category 1.G	AVR Default Component Column 1 Line 2.7	X 0.01016	=
(2.8)	Subtotal NAIC 1	Sum of Lines (2.1) through (2.7)		
(3.1)	NAIC Designation Category 2.A	AVR Default Component Column 1 Line 3.1	X 0.01261	=
(3.2)	NAIC Designation Category 2.B	AVR Default Component Column 1 Line 3.2	X 0.01523	=
(3.3)	NAIC Designation Category 2.C	AVR Default Component Column 1 Line 3.3	X 0.02168	=
(3.4)	Subtotal NAIC 2	Sum of Lines (3.1) through (3.3)		
(4.1)	NAIC Designation Category 3.A	AVR Default Component Column 1 Line 4.1	X 0.03151	=
(4.2)	NAIC Designation Category 3.B	AVR Default Component Column 1 Line 4.2	X 0.04537	=
(4.3)	NAIC Designation Category 3.C	AVR Default Component Column 1 Line 4.3	X 0.06017	=
(4.4)	Subtotal NAIC 3	Sum of Lines (4.1) through (4.3)		
(5.1)	NAIC Designation Category 4.A	AVR Default Component Column 1 Line 5.1	X 0.07386	=
(5.2)	NAIC Designation Category 4.B	AVR Default Component Column 1 Line 5.2	X 0.09535	=
(5.3)	NAIC Designation Category 4.C	AVR Default Component Column 1 Line 5.3	X 0.12428	=
(5.4)	Subtotal NAIC 4	Sum of Lines (5.1) through (5.3)		
(6.1)	NAIC Designation Category 5.A	AVR Default Component Column 1 Line 6.1	X 0.16942	=
(6.2)	NAIC Designation Category 5.B	AVR Default Component Column 1 Line 6.2	X 0.23798	=
(6.3)	NAIC Designation Category 5.C	AVR Default Component Column 1 Line 6.3	X 0.30000	=
(6.4)	Subtotal NAIC 5	Sum of Lines (6.1) through (6.3)		
(7)	NAIC 6	AVR Default Component Column 1 Line 7	X 0.30000	=
(8)	Total Long-Term Bonds	Sum of Lines (1) + (2.8) + (3.4) + (4.4) + (5.4) + (6.4) + (7)		

(Column 1) should equal Page 2 Column 3 Line 1 + Schedule DL Part 1 Column 6 Line 7099999



Short Term Bonds				
(9)	Exempt Obligations	AVR Default Component Column 1 Line 18	X 0.0000	=
(10.1)	NAIC Designation Category 1.A	AVR Default Component Column 1 Line 19.1	X 0.00158	=
(10.2)	NAIC Designation Category 1.B	AVR Default Component Column 1 Line 19.2	X 0.00271	=
(10.3)	NAIC Designation Category 1.C	AVR Default Component Column 1 Line 19.3	X 0.00419	=
(10.4)	NAIC Designation Category 1.D	AVR Default Component Column 1 Line 19.4	X 0.00523	=
(10.5)	NAIC Designation Category 1.E	AVR Default Component Column 1 Line 19.5	X 0.00657	=
(10.6)	NAIC Designation Category 1.F	AVR Default Component Column 1 Line 19.6	X 0.00816	=
(10.7)	NAIC Designation Category 1.G	AVR Default Component Column 1 Line 19.7	X 0.01016	=
(10.8)	Subtotal NAIC 1	Sum of Lines (10.1) through (10.7)		
(11.1)	NAIC Designation Category 2.A	AVR Default Component Column 1 Line 20.1	X 0.01261	=
(11.2)	NAIC Designation Category 2.B	AVR Default Component Column 1 Line 20.2	X 0.01523	=
(11.3)	NAIC Designation Category 2.C	AVR Default Component Column 1 Line 20.3	X 0.02168	=
(11.4)	Subtotal NAIC 2	Sum of Lines (11.1) through (11.3)		
(12.1)	NAIC Designation Category 3.A	AVR Default Component Column 1 Line 21.1	X 0.03151	=
(12.2)	NAIC Designation Category 3.B	AVR Default Component Column 1 Line 21.2	X 0.04537	=
(12.3)	NAIC Designation Category 3.C	AVR Default Component Column 1 Line 21.3	X 0.06017	=
(12.4)	Subtotal NAIC 3	Sum of Lines (12.1) through (12.3)		
(13.1)	NAIC Designation Category 4.A	AVR Default Component Column 1 Line 22.1	X 0.07386	=
(13.2)	NAIC Designation Category 4.B	AVR Default Component Column 1 Line 22.2	X 0.09535	=
(13.3)	NAIC Designation Category 4.C	AVR Default Component Column 1 Line 22.3	X 0.12428	=
(13.4)	Subtotal NAIC 4	Sum of Lines (13.1) through (13.3)		
(14.1)	NAIC Designation Category 5.A	AVR Default Component Column 1 Line 23.1	X 0.16942	=
(14.2)	NAIC Designation Category 5.B	AVR Default Component Column 1 Line 23.2	X 0.23798	=
(14.3)	NAIC Designation Category 5.C	AVR Default Component Column 1 Line 23.3	X 0.30000	=
(14.4)	Subtotal NAIC 5	Sum of Lines (14.1) through (14.3)		
(15)	NAIC 6	AVR Default Component Column 1 Line 24	X 0.30000	=
(16)	Total Short-Term Bonds	Sum of Lines (9) + (10.8) + (11.4) + (12.4) + (13.4) + (14.4) + (15)		
		(Column 1) should equal Schedule DA Part 1 Column 7 Line 8399999 +		
		Schedule DL Part 1 Column 6 Line 8999999 + LR012 Miscellaneous Assets Column (1) Line (2.2)		
(17)	Total Long-Term and Short-Term Bonds	Line (8) + (16)		
		(pre-MODCO/Funds Withheld)		
(18)	Credit for Hedging	LR014 Hedged Asset Bond Schedule Column 13 Line 0399999		
(19)	Reduction in RBC for MODCO/Funds Withheld Reinsurance Ceded Agreements	LR045 Modco or Funds Withheld Reinsurance Ceded - Bonds C-1o Column (4) Line (9999999)		
(20)	Increase in RBC for MODCO/Funds Withheld Reinsurance Assumed Agreements	LR046 Modco or Funds Withheld Reinsurance Assumed - Bonds C-1o Column (4) Line (9999999)		
(21)	Total Long-Term and Short-Term Bonds	Lines (17) - (18) - (19) + (20)		
		(including MODCO/Funds Withheld and Credit for Hedging adjustments.)		
(22)	Non-exempt U.S. Government Agency Bonds	Schedule D Part 1 and Schedule DA Part 1, in part†	X 0.00158	=
(23)	Bonds Subject to Size Factor	Line (21) - Line (1) - Line (9) - Line (22)		
(24)	Number of Issuers	Company Records		
(25)	Size Factor for Bonds			
(26)	Bonds Subject to Size Factor after the Size Factor is Applied	Line (23) x Line (25)		
(27)	Total Bonds	Line (22) + Line (26)		

† Only investments in U.S. Government agency bonds previously reported in Lines (2.8) and (10.8), net of those included on Line (19), plus the portion of Line (20) attributable to ceding companies' Lines (2.8) and (10.8) should be included on Line (22). No other bonds should be included on this line. Exempt U.S. Government bonds shown on Lines (1) and (9) should not be included on Line (22). Refer to the bond section of the risk-based capital instructions for more clarification.

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

ASSET CONCENTRATION FACTOR

	(1)	(2)	(3)	(4)	(5)	(6)
Asset Type		Book / Adjusted	Factor	Additional	Adjustment/	RBC
Issuer Name:		Carrying Value		RBC	Subsidiary RBC	Requirement
(1.1) Bond NAIC Designation Category 2.A			X 0.01261	=		
(1.2) Bond NAIC Designation Category 2.B			X 0.01523	=		
(1.3) Bond NAIC Designation Category 2.C			X 0.02168	=		
(2.1) Bond NAIC Designation Category 3.A			X 0.03151	=		
(2.2) Bond NAIC Designation Category 3.B			X 0.04537	=		
(2.3) Bond NAIC Designation Category 3.C			X 0.06017	=		
(3.1) Bond NAIC Designation Category 4.A			X 0.07386	=		
(3.2) Bond NAIC Designation Category 4.B			X 0.09535	=		
(3.3) Bond NAIC Designation Category 4.C			X 0.12428	=		
(4.1) Bond NAIC Designation Category 5.A			X 0.16942	=		
(4.2) Bond NAIC Designation Category 5.B			X 0.21202	=		
(4.3) Bond NAIC Designation Category 5.C			X 0.15000	=		
(5) Bond NAIC 6			X 0.15000	=		
(6.1) Bond NAIC Designation Category 1.A †			X 0.00158	=		
(6.2) Bond NAIC Designation Category 1.B †			X 0.00271	=		
(6.3) Bond NAIC Designation Category 1.C †			X 0.00419	=		
(6.4) Bond NAIC Designation Category 1.D †			X 0.00523	=		
(6.5) Bond NAIC Designation Category 1.E †			X 0.00657	=		
(6.6) Bond NAIC Designation Category 1.F †			X 0.00816	=		
(6.7) Bond NAIC Designation Category 1.G †			X 0.01016	=		
(7) Unaffiliated Preferred Stock NAIC 2			X 0.01260	=		
(8) Unaffiliated Preferred Stock NAIC 3			X 0.04460	=		
(9) Unaffiliated Preferred Stock NAIC 4			X 0.09700	=		
(10) Unaffiliated Preferred Stock NAIC 5			X 0.22310	=		
(11) Unaffiliated Preferred Stock NAIC 6			X 0.15000	=		
(12) Unaffiliated Preferred Stock NAIC 1 †			X 0.00390	=		
(13) Collateral Loans			X 0.06800	=		
(14) Receivable for Securities			X 0.01400	=		
(15) Write-ins for Invested Assets			X 0.06800	=		
(16) Premium Notes			X 0.06800	=		
(17) Real Estate - Foreclosed				=		
(18) Real Estate - Foreclosed Encumbrances			X ‡	=		
(19) Real Estate - Investments				=		
(20) Real Estate - Investment Encumbrances			X ‡	=		
(21) Real Estate - Schedule BA				=		
(22) Real Estate - Schedule BA Encumbrances			X ‡	=		
(23) Farm Mortgages - Category CM2			X 0.01750	=		
(24) Farm Mortgages - Category CM3			X 0.03000	=		
(25) Farm Mortgages - Category CM4			X 0.05000	=		
(26) Farm Mortgages - Category CM5			X 0.07500	=		
(27) Commercial Mortgages - Category CM2			X 0.01750	=		
(28) Commercial Mortgages - Category CM3			X 0.03000	=		
(29) Commercial Mortgages - Category CM4			X 0.05000	=		
(30) Commercial Mortgages - Category CM5			X 0.07500	=		

† After the ten largest issuer exposures are chosen, any NAIC 1 bonds or preferred stocks from any of these issuers should be included.

‡ Refer to the instructions for the Asset Concentration Factor for details of this calculation.

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

Company Name

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ASSET CONCENTRATION FACTOR (CONTINUED)

(1)	(2)	(3)	(4)	(5)	(6)
Asset Type	Book / Adjusted Carrying Value	Factor	Additional RBC	Adjustment/ Subsidiary RBC	RBC Requirement
(31) Farm Mortgages - 90 Days Overdue					
(32) Farm Mortgages - 90 Days Overdue - Cumulative Writedowns		X ‡ =			
(33) Residential Mortgages - 90 Days Overdue					
(34) Residential Mortgages - 90 Days Overdue - Cumulative Writedowns		X ‡ =			
(35) Commercial Mortgages - 90 Days Overdue					
(36) Commercial Mortgages - 90 Days Overdue - Cumulative Writedowns		X ‡ =			
(37) Farm Mortgages in Foreclosure					
(38) Farm Mortgages in Foreclosure - Cumulative Writedowns		X ‡ =			
(39) Residential Mortgages in Foreclosure					
(40) Residential Mortgages in Foreclosure - Cumulative Writedowns		X ‡ =			
(41) Commercial Mortgages in Foreclosure					
(42) Commercial Mortgages in Foreclosure - Cumulative Writedowns		X ‡ =			
(43) Unaffiliated Mortgages with Covenants		X ‡ =			
(44) Unaffiliated Mortgages - Defeased with Government Securities		X 0.00900 =			
(45) Unaffiliated Mortgages - Primarily Senior		X 0.01750 =			
(46) Unaffiliated Mortgages - All Other		X 0.03000 =			
(47) Affiliated Mortgages - Category CM2		X 0.01750 =			
(48) Affiliated Mortgages - Category CM3		X 0.03000 =			
(49) Affiliated Mortgages - Category CM4		X 0.05000 =			
(50) Affiliated Mortgages - Category CM5		X 0.07500 =			
(51) Schedule BA Mortgages 90 Days Overdue					
(52) Schedule BA Mortgages 90 Days Overdue - Cumulative Writedowns		X ‡ =			
(53) Schedule BA Mortgages in Process of Foreclosure					
(54) Schedule BA Mortgages Foreclosed - Cumulative Writedowns		X ‡ =			
(55) Federal Guaranteed Low Income Housing Tax Credits		X 0.00140 =			
(56) Federal Non-Guaranteed Low Income Housing Tax Credits		X 0.02600 =			
(57) State Guaranteed Low Income Housing Tax Credits		X 0.00140 =			
(58) State Non-Guaranteed Low Income Housing Tax Credits		X 0.02600 =			
(59) All Other Low Income Housing Tax Credits		X 0.15000 =			
(60) NAIC 02 Working Capital Finance Notes		X 0.01630 =			
(61) Other Schedule BA Assets		X 0.15000 =			
(62) Total of Issuer = Sum of Lines (1) through (61)					

NOTE: Ten issuer sections and a grand total page will be available on the filing software. The grand total page is calculated as the sum of issuers 1-10 by asset type.

‡ Refer to the instructions for the Asset Concentration Factor for details of this calculation.

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

Company Name

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HEDGED ASSET BOND SCHEDULE

As of:

Type of Hedged Asset	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Hedging Instruments				Hedged Asset - Bonds								RBC Credit	
	Description	Notional Amount	Relationship Type of the Hedging Instrument and Hedged Asset	Maturity Date	Description	CUSIP	Book / Adjusted Carrying Value	Overlap with Insurer's Bond Portfolio	Maturity Date	NAIC Designation Category	RBC Factor	Gross RBC Charge	RBC Credit for Hedging Instruments	Net RBC Charge
Bonds	†	†		†	†	†	†	‡	†	†	§	*	£	**
(0100001)														
(0100002)														
(0100003)														
(0100004)														
(0100005)														
(0100006)														
(0100007)														
(0100008)														
(0100009)														
(0100010)														
(0100011)														
(0100012)														
(0100013)														
(0100014)														
(0100015)														
(0100016)														
(0100017)														
(0100018)														
(0100019)														
(0100020)														
(0100021)														
(0100022)														
(0100023)														
(0100024)														
(0100025)														
(0100026)														
(0100027)														
(0100028)														
(0100029)														
(0100030)														
(0199999)	Subtotal - NAIC 1 Through 5 Bonds		XXXX	XXXX	Subtotal	XXXX			XXXX	XXXX	XXXX			
(0299999)	Subtotal - NAIC 6 Bonds		XXXX	XXXX	Subtotal	XXXX			XXXX	XXXX	XXXX			
(0399999)	Total		XXXX	XXXX	Total	XXXX			XXXX	XXXX	XXXX			

Note: For the intermediate category of hedging, we recommend that the risk mitigation and resulting RBC credit be determined as if each specific security common to both the index/basket hedge and the portfolio is a basic hedge with the entire basic hedge methodology applied to each matching name. This includes the application of the maturity mismatch formula and the maximum RBC credit of 94% of the C-1 asset charge for fixed income hedges.

- † Columns are derived from Investment schedules.
- ‡ The portion of Column (2) Notional Amount of the Hedging Instrument that hedges Column (7) Book / Adjusted Carrying Value. This amount cannot exceed Column (7) Book / Adjusted Carrying Value.
- § Factor based on Column (10) NAIC Designation and NAIC C-1 RBC factors table.
- \* Column (7) Book Adjusted Carrying Value multiplied by Column (11) RBC Factor.
- £ Column (13) is calculated according to the risk-based capital instructions.
- \*\* Column (12) Gross RBC Charge minus Column (13) RBC Credit for Hedging Instruments.

Denotes manual entry items that do not come directly from the annual statement.

**OFF-BALANCE SHEET COLLATERAL**

(Including any Schedule DL, Part 1 Assets not Included in the Asset Valuation Reserve)

		(1) Book / Adjusted Carrying Value	2.00000 Factor	(3) RBC Requirement
		<u>Annual Statement Source</u>		
<u>Fixed Income - Bonds</u>				
(1)	Exempt Obligations	Company Records	X 0.00000	=
(2.1)	NAIC Designation Category 1.A	Company Records	X 0.00158	=
(2.2)	NAIC Designation Category 1.B	Company Records	X 0.00271	=
(2.3)	NAIC Designation Category 1.C	Company Records	X 0.00419	=
(2.4)	NAIC Designation Category 1.D	Company Records	X 0.00523	=
(2.5)	NAIC Designation Category 1.E	Company Records	X 0.00657	=
(2.6)	NAIC Designation Category 1.F	Company Records	X 0.00816	=
(2.7)	NAIC Designation Category 1.G	Company Records	X 0.01016	=
(2.8)	Subtotal NAIC 1	Sum of Lines (2.1) through (2.7)		
(3.1)	NAIC Designation Category 2.A	Company Records	X 0.01261	=
(3.2)	NAIC Designation Category 2.B	Company Records	X 0.01523	=
(3.3)	NAIC Designation Category 2.C	Company Records	X 0.02168	=
(3.4)	Subtotal NAIC 2	Sum of Lines (3.1) through (3.3)		
(4.1)	NAIC Designation Category 3.A	Company Records	X 0.03151	=
(4.2)	NAIC Designation Category 3.B	Company Records	X 0.04537	=
(4.3)	NAIC Designation Category 3.C	Company Records	X 0.06017	=
(4.4)	Subtotal NAIC 3	Sum of Lines (4.1) through (4.3)		
(5.1)	NAIC Designation Category 4.A	Company Records	X 0.07386	=
(5.2)	NAIC Designation Category 4.B	Company Records	X 0.09535	=
(5.3)	NAIC Designation Category 4.C	Company Records	X 0.12428	=
(5.4)	Subtotal NAIC 4	Sum of Lines (5.1) through (5.3)		
(6.1)	NAIC Designation Category 5.A	Company Records	X 0.16942	=
(6.2)	NAIC Designation Category 5.B	Company Records	X 0.23798	=
(6.3)	NAIC Designation Category 5.C	Company Records	X 0.30000	=
(6.4)	Subtotal NAIC 5	Sum of Lines (6.1) through (6.3)		
(7)	NAIC 6	Company Records	X 0.30000	=
(8)	Total Bonds	Sum of Lines (1) + (2.8) + (3.4) + (4.4) + (5.4) + (6.4) + (7)		
<u>Fixed Income - Preferred Stock</u>				
(9)	Asset NAIC 1	Company Records	X 0.00390	=
(10)	Asset NAIC 2	Company Records	X 0.01260	=
(11)	Asset NAIC 3	Company Records	X 0.04460	=
(12)	Asset NAIC 4	Company Records	X 0.09700	=
(13)	Asset NAIC 5	Company Records	X 0.22310	=
(14)	Asset NAIC 6	Company Records	X 0.30000	=
(15)	Total Preferred Stock	Sum of Lines (9) through (14)		
(16)	Common Stock	Company Records	X 0.45000 †	=
(17)	Schedule BA - Other Invested Assets	Company Records	X 0.30000	=
(18)	Other Invested Assets	Company Records	X 0.30000	=
(19)	Total Off-Balance Sheet Collateral	Lines (8) + (15) + (16) + (17) + (18)		

† The factor for common stock can vary depending on the type of stock. The factor would be subject to a minimum of 22.5 percent and a maximum of 45 percent.

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

#REF!

CALCULATION OF TAX EFFECT FOR LIFE AND FRATERNAL RISK-BASED CAPITAL

	<u>Source</u>	(1) <u>RBC Amount</u>	<u>Tax Factor</u>	(2) <u>RBC Tax Effect</u>
<u>ASSET RISKS</u>				
<u>Bonds</u>				
(001)	Long-term Bonds – NAIC 1 LR002 Bonds Column (2) Line (2.8) + LR018 Off-Balance Sheet Collateral Column (3) Line (2.8)	_____	X 0.1680	= _____
(002)	Long-term Bonds – NAIC 2 LR002 Bonds Column (2) Line (3.4) + LR018 Off-Balance Sheet Collateral Column (3) Line (3.4)	_____	X 0.1680	= _____
(003)	Long-term Bonds – NAIC 3 LR002 Bonds Column (2) Line (4.4) + LR018 Off-Balance Sheet Collateral Column (3) Line (4.4)	_____	X 0.1680	= _____
(004)	Long-term Bonds – NAIC 4 LR002 Bonds Column (2) Line (5.4) + LR018 Off-Balance Sheet Collateral Column (3) Line (5.4)	_____	X 0.1680	= _____
(005)	Long-term Bonds – NAIC 5 LR002 Bonds Column (2) Line (6.4) + LR018 Off-Balance Sheet Collateral Column (3) Line (6.4)	_____	X 0.1680	= _____
(006)	Long-term Bonds – NAIC 6 LR002 Bonds Column (2) Line (7) + LR018 Off-Balance Sheet Collateral Column (3) Line (7)	_____	X 0.2100	= _____
(007)	Short-term Bonds – NAIC 1 LR002 Bonds Column (2) Line (10.8)	_____	X 0.1680	= _____
(008)	Short-term Bonds – NAIC 2 LR002 Bonds Column (2) Line (11.4)	_____	X 0.1680	= _____
(009)	Short-term Bonds – NAIC 3 LR002 Bonds Column (2) Line (12.4)	_____	X 0.1680	= _____
(010)	Short-term Bonds – NAIC 4 LR002 Bonds Column (2) Line (13.4)	_____	X 0.1680	= _____
(011)	Short-term Bonds – NAIC 5 LR002 Bonds Column (2) Line (14.4)	_____	X 0.1680	= _____
(012)	Short-term Bonds – NAIC 6 LR002 Bonds Column (2) Line (15)	_____	X 0.2100	= _____
(013)	Credit for Hedging - NAIC 1 Through 5 Bonds LR014 Hedged Asset Bond Schedule Column (13) Line (0199999)	_____	X 0.1680	= _____ †
(014)	Credit for Hedging - NAIC 6 Bonds LR014 Hedged Asset Bond Schedule Column (13) Line (0299999)	_____	X 0.2100	= _____ †
(015)	Bond Reduction - Reinsurance LR002 Bonds Column (2) Line (19)	_____	X 0.2100	= _____ †
(016)	Bond Increase - Reinsurance LR002 Bonds Column (2) Line (20)	_____	X 0.2100	= _____
(017)	Non-Exempt NAIC 1 U.S. Government Agency LR002 Bonds Column (2) Line (22)	_____	X 0.1680	= _____
(018)	Bonds Size Factor LR002 Bonds Column (2) Line (26) - LR002 Bonds Column (2) Line (21)	_____	X 0.1680	= _____
<u>Mortgages</u>				
<u>In Good Standing</u>				
(019)	Residential Mortgages - Insured LR004 Mortgages Column (6) Line (1)	_____	X 0.1575	= _____
(020)	Residential Mortgages - Other LR004 Mortgages Column (6) Line (2)	_____	X 0.1575	= _____
(021)	Commercial Mortgages - Insured LR004 Mortgages Column (6) Line (3)	_____	X 0.1575	= _____
(022)	Total Commercial Mortgages - All Other LR004 Mortgages Column (6) Line (9)	_____	X 0.1575	= _____
(023)	Total Farm Mortgages LR004 Mortgages Column (6) Line (15)	_____	X 0.1575	= _____
<u>90 Days Overdue</u>				
(024)	Farm Mortgages LR004 Mortgages Column (6) Line (16)	_____	X 0.1575	= _____
(025)	Residential Mortgages - Insured LR004 Mortgages Column (6) Line (17)	_____	X 0.1575	= _____
(026)	Residential Mortgages - Other LR004 Mortgages Column (6) Line (18)	_____	X 0.1575	= _____
(027)	Commercial Mortgages - Insured LR004 Mortgages Column (6) Line (19)	_____	X 0.1575	= _____
(028)	Commercial Mortgages - Other LR004 Mortgages Column (6) Line (20)	_____	X 0.1575	= _____
<u>In Process of Foreclosure</u>				
(029)	Farm Mortgages LR004 Mortgages Column (6) Line (21)	_____	X 0.1575	= _____

† Denotes lines that are deducted from the total rather than added.

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

CALCULATION OF TAX EFFECT FOR LIFE AND FRATERNAL RISK-BASED CAPITAL (CONTINUED)

	<u>Source</u>	(1) <u>RBC Amount</u>	<u>Tax Factor</u>	(2) <u>RBC Tax Effect</u>
(030)	Residential Mortgages - Insured LR004 Mortgages Column (6) Line (22)	_____	X 0.1575	= _____
(031)	Residential Mortgages - Other LR004 Mortgages Column (6) Line (23)	_____	X 0.1575	= _____
(032)	Commercial Mortgages - Insured LR004 Mortgages Column (6) Line (24)	_____	X 0.1575	= _____
(033)	Commercial Mortgages - Other LR004 Mortgages Column (6) Line (25)	_____	X 0.1575	= _____
(034)	Due & Unpaid Taxes Mortgages LR004 Mortgages Column (6) Line (26)	_____	X 0.1575	= _____
(035)	Due & Unpaid Taxes - Foreclosures LR004 Mortgages Column (6) Line (27)	_____	X 0.1575	= _____
(036)	Mortgage Reduction - Reinsurance LR004 Mortgages Column (6) Line (29)	_____	X 0.2100	= _____ †
(037)	Mortgage Increase - Reinsurance LR004 Mortgages Column (6) Line (30)	_____	X 0.2100	= _____
<u>Preferred Stock</u>				
(038)	Unaffiliated Preferred Stock NAIC 1 LR005 Unaffiliated Preferred and Common Stock Column (5) Line (1) + LR018 Off-Balance Sheet Collateral Column (3) Line (9)	_____	X 0.1575	= _____
(039)	Unaffiliated Preferred Stock NAIC 2 LR005 Unaffiliated Preferred and Common Stock Column (5) Line (2) + LR018 Off-Balance Sheet Collateral Column (3) Line (10)	_____	X 0.1575	= _____
(040)	Unaffiliated Preferred Stock NAIC 3 LR005 Unaffiliated Preferred and Common Stock Column (5) Line (3)	_____	X 0.1575	= _____

(041)	Unaffiliated Preferred Stock NAIC 4	+ LR018 Off-Balance Sheet Collateral Column (3) Line (11) LR005 Unaffiliated Preferred and Common Stock Column (5) Line (4)	_____ X	0.1575	= _____	
(042)	Unaffiliated Preferred Stock NAIC 5	+ LR018 Off-Balance Sheet Collateral Column (3) Line (12) LR005 Unaffiliated Preferred and Common Stock Column (5) Line (5)	_____ X	0.1575	= _____	
(043)	Unaffiliated Preferred Stock NAIC 6	+ LR018 Off-Balance Sheet Collateral Column (3) Line (13) LR005 Unaffiliated Preferred and Common Stock Column (5) Line (6)	_____ X	0.2100	= _____	
(044)	Preferred Stock Reduction-Reinsurance	+ LR018 Off-Balance Sheet Collateral Column (3) Line (14) LR005 Unaffiliated Preferred and Common Stock Column (5) Line (8)	_____ X	0.2100	= _____	†
(045)	Preferred Stock Increase-Reinsurance	LR005 Unaffiliated Preferred and Common Stock Column (5) Line (9)	_____ X	0.2100	= _____	
	<u>Separate Accounts</u>					
(046)	Guaranteed Index	LR006 Separate Accounts Column (3) Line (1)	_____ X	0.1575	= _____	
(047)	Nonindex-Book Reserve	LR006 Separate Accounts Column (3) Line (2)	_____ X	0.1575	= _____	
(048)	Separate Accounts Nonindex-Market Reserve	LR006 Separate Accounts Column (3) Line (3)	_____ X	0.1575	= _____	
(049)	Separate Accounts Reduction-Reinsurance	LR006 Separate Accounts Column (3) Line (5)	_____ X	0.2100	= _____	†
(050)	Separate Accounts Increase-Reinsurance	LR006 Separate Accounts Column (3) Line (6)	_____ X	0.2100	= _____	
(051)	Synthetic GICs	LR006 Separate Accounts Column (3) Line (8)	_____ X	0.1575	= _____	
(052)	Separate Account Surplus	LR006 Separate Accounts Column (3) Line (13)	_____ X	0.1575	= _____	
	<u>Real Estate</u>					
(053)	Company Occupied Real Estate	LR007 Real Estate Column (3) Line (3)	_____ X	0.2100	= _____	
(054)	Foreclosed Real Estate	LR007 Real Estate Column (3) Line (6)	_____ X	0.2100	= _____	
(055)	Investment Real Estate	LR007 Real Estate Column (3) Line (9)	_____ X	0.2100	= _____	
(056)	Real Estate Reduction - Reinsurance	LR007 Real Estate Column (3) Line (11)	_____ X	0.2100	= _____	†
(057)	Real Estate Increase - Reinsurance	LR007 Real Estate Column (3) Line (12)	_____ X	0.2100	= _____	
	<u>Schedule BA</u>					
(058)	Sch BA Real Estate Excluding Low Income Housing Tax Credits	LR007 Real Estate Column (3) Line (16)	_____ X	0.2100	= _____	
(059)	Guaranteed Low Income Housing Tax Credits	LR007 Real Estate Column (3) Line (17) + Line (19)	_____ X	0.0000	= _____	
(060)	Non-Guaranteed and All Other Low Income Housing Tax Credits	LR007 Real Estate Column (3) Line (18) + Line (20) + Line (21)	_____ X	0.0000	= _____	
(061)	Sch BA Real Estate Reduction - Reinsurance	LR007 Real Estate Column (3) Line (23)	_____ X	0.2100	= _____	†
(062)	Sch BA Real Estate Increase - Reinsurance	LR007 Real Estate Column (3) Line (24)	_____ X	0.2100	= _____	

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

**CALCULATION OF TAX EFFECT FOR LIFE AND FRATERNAL RISK-BASED CAPITAL (CONTINUED)**

			(1)		(2)	
		<u>Source</u>	<u>RBC Amount</u>	<u>Tax Factor</u>	<u>RBC Tax Effect</u>	
(063)	Sch BA Bond NAIC 1	LR008 Other Long-Term Assets Column (5) Line (2)	_____ X	0.1575	= _____	
(064)	Sch BA Bond NAIC 2	LR008 Other Long-Term Assets Column (5) Line (3)	_____ X	0.1575	= _____	
(065)	Sch BA Bond NAIC 3	LR008 Other Long-Term Assets Column (5) Line (4)	_____ X	0.1575	= _____	
(066)	Sch BA Bond NAIC 4	LR008 Other Long-Term Assets Column (5) Line (5)	_____ X	0.1575	= _____	
(067)	Sch BA Bond NAIC 5	LR008 Other Long-Term Assets Column (5) Line (6)	_____ X	0.1575	= _____	
(068)	Sch BA Bond NAIC 6	LR008 Other Long-Term Assets Column (5) Line (7)	_____ X	0.2100	= _____	
(069)	BA Bond Reduction - Reinsurance	LR008 Other Long-Term Assets Column (5) Line (9)	_____ X	0.2100	= _____	†
(070)	BA Bond Increase - Reinsurance	LR008 Other Long-Term Assets Column (5) Line (10)	_____ X	0.2100	= _____	
(071)	BA Preferred Stock NAIC 1	LR008 Other Long-Term Assets Column (5) Line (12.3)	_____ X	0.1575	= _____	
(072)	BA Preferred Stock NAIC 2	LR008 Other Long-Term Assets Column (5) Line (13)	_____ X	0.1575	= _____	
(073)	BA Preferred Stock NAIC 3	LR008 Other Long-Term Assets Column (5) Line (14)	_____ X	0.1575	= _____	
(074)	BA Preferred Stock NAIC 4	LR008 Other Long-Term Assets Column (5) Line (15)	_____ X	0.1575	= _____	
(075)	BA Preferred Stock NAIC 5	LR008 Other Long-Term Assets Column (5) Line (16)	_____ X	0.1575	= _____	
(076)	BA Preferred Stock NAIC 6	LR008 Other Long-Term Assets Column (5) Line (17)	_____ X	0.2100	= _____	
(077)	BA Preferred Stock Reduction-Reinsurance	LR008 Other Long-Term Assets Column (5) Line (19)	_____ X	0.2100	= _____	†
(078)	BA Preferred Stock Increase - Reinsurance	LR008 Other Long-Term Assets Column (5) Line (20)	_____ X	0.2100	= _____	
(079)	Rated Surplus Notes	LR008 Other Long-Term Assets Column (5) Line (31)	_____ X	0.1575	= _____	
(080)	Rated Capital Notes	LR008 Other Long-Term Assets Column (5) Line (41)	_____ X	0.1575	= _____	
(081)	BA Common Stock Affiliated	LR008 Other Long-Term Assets Column (5) Line (48.3)	_____ X	0.2100	= _____	
(082)	BA Collateral Loans	LR008 Other Long-Term Assets Column (5) Line (50)	_____ X	0.1575	= _____	
(083)	Other BA Assets	LR008 Other Long-Term Assets Column (5) Line (52.3) + LR018 Off-Balance Sheet Collateral Column (3) Line (17) + Line (18)	_____ X	0.2100	= _____	
(084)	Other BA Assets Reduction-Reinsurance	LR008 Other Long-Term Assets Column (5) Line (54)	_____ X	0.2100	= _____	†
(085)	Other BA Assets Increase - Reinsurance	LR008 Other Long-Term Assets Column (5) Line (55)	_____ X	0.2100	= _____	
(086)	BA Mortgages - In Good Standing	LR009 Schedule BA Mortgages Column (6) Line (11)	_____ X	0.1575	= _____	
(087)	BA Mortgages - 90 Days Overdue	LR009 Schedule BA Mortgages Column (6) Line (15)	_____ X	0.1575	= _____	
(088)	BA Mortgages - In Process of Foreclosure	LR009 Schedule BA Mortgages Column (6) Line (19)	_____ X	0.1575	= _____	
(089)	Reduction - Reinsurance	LR009 Schedule BA Mortgages Column (6) Line (21)	_____ X	0.2100	= _____	†
(090)	Increase - Reinsurance	LR009 Schedule BA Mortgages Column (6) Line (22)	_____ X	0.2100	= _____	
	<u>Miscellaneous</u>					
(091)	Asset Concentration Factor	LR010 Asset Concentration Factor Column (6) Line (62) Grand Total Page	_____ X	0.1575	= _____	
(092)	Miscellaneous Assets	LR012 Miscellaneous Assets Column (2) Line (7)	_____ X	0.1575	= _____	
(093)	Derivatives - Collateral and Exchange Traded	LR012 Miscellaneous Assets Column (2) Lines (8) + (9) + (10)	_____ X	0.1575	= _____	

(094)	Derivatives NAIC 1	LR012 Miscellaneous Assets Column (2) Line (11)	_____	X	0.1575	=	_____
(095)	Derivatives NAIC 2	LR012 Miscellaneous Assets Column (2) Line (12)	_____	X	0.1575	=	_____
(096)	Derivatives NAIC 3	LR012 Miscellaneous Assets Column (2) Line (13)	_____	X	0.1575	=	_____
(097)	Derivatives NAIC 4	LR012 Miscellaneous Assets Column (2) Line (14)	_____	X	0.1575	=	_____
(098)	Derivatives NAIC 5	LR012 Miscellaneous Assets Column (2) Line (15)	_____	X	0.1575	=	_____
(099)	Derivatives NAIC 6	LR012 Miscellaneous Assets Column (2) Line (16)	_____	X	0.2100	=	_____
(100)	Miscellaneous Assets Reduction-Reinsurance	LR012 Miscellaneous Assets Column (2) Line (19)	_____	X	0.2100	=	_____ †
(101)	Miscellaneous Assets Increase-Reinsurance	LR012 Miscellaneous Assets Column (2) Line (20)	_____	X	0.2100	=	_____

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

**CALCULATION OF TAX EFFECT FOR LIFE AND FRATERNAL RISK-BASED CAPITAL (CONTINUED)**

			(1)		(2)		
		<u>Source</u>	<u>RBC Amount</u>	<u>Tax Factor</u>	<u>RBC Tax Effect</u>		
(102)	Replications	LR013 Replication (Synthetic Asset) Transactions and Mandatory Convertible Securities Column (7) Line (9999999)	_____	X	0.1575	=	_____
(103)	Reinsurance	LR016 Reinsurance Column (4) Line (17)	_____	X	0.2100	=	_____
(104)	Investment Affiliates	LR042 Summary for Affiliated Investments Column (4) Line (6)	_____	X	0.2100	=	_____
(105)	Investment in Parent	LR042 Summary for Affiliated Investments Column (4) Line (10)	_____	X	0.2100	=	_____
(106)	Other Affiliate: Property and Casualty Insurers not Subject to Risk-Based Capital	LR042 Summary for Affiliated Investments Column (4) Line (11)	_____	X	0.2100	=	_____
(107)	Other Affiliate: Life Insurers not Subject to Risk-Based Capital	LR042 Summary for Affiliated Investments Column (4) Line (12)	_____	X	0.2100	=	_____
(108)	Publicly Traded Insurance Affiliates	LR042 Summary for Affiliated Investments Column (4) Line (14)	_____	X	0.2100	=	_____
(109)	Subtotal for C-1o Assets	Sum of Lines (001) through (108), Recognizing the Deduction of Lines (013), (014), (015), (036), (044), (049), (056), (061), (069), (077), (084), (089) and (100)	=====			=	=====
	<u>C-0 Affiliated Common Stock</u>						
(110)	Off-Balance Sheet and Other Items	LR017 Off-Balance Sheet and Other Items Column (5) Line (27)	_____	X	0.1575	=	_____
(111)	Off-Balance Sheet Items Reduction - Reinsurance	LR017 Off-Balance Sheet and Other Items Column (5) Line (28)	_____	X	0.2100	=	_____ †
(112)	Off-Balance Sheet Items Increase - Reinsurance	LR017 Off-Balance Sheet and Other Items Column (5) Line (29)	_____	X	0.2100	=	_____
(113)	Affiliated US Property - Casualty Insurers Directly Owned	LR042 Summary for Affiliated Investments Column (4) Line (1)	_____	X	0.2100	=	_____
(114)	Affiliated US Life Insurers Directly Owned	LR042 Summary for Affiliated Investments Column (4) Line (2)	_____	X	0.2100	=	_____
(115)	Affiliated US Health Insurers Directly and Indirectly Owned	LR042 Summary for Affiliated Investments Column (4) Line (3)	_____	X	0.2100	=	_____
(116)	Affiliated US Property - Casualty Insurers Indirectly Owned	LR042 Summary for Affiliated Investments Column (4) Line (4)	_____	X	0.2100	=	_____
(117)	Affiliated US Life Insurers Indirectly Owned	LR042 Summary for Affiliated Investments Column (4) Line (5)	_____	X	0.2100	=	_____
(118)	Affiliated Alien Life Insurers - Canadian	LR042 Summary for Affiliated Investments Column (4) Line (8)	_____	X	0.2100	=	_____
(119)	Affiliated Alien Life Insurers - All Others	LR042 Summary for Affiliated Investments Column (4) Line (9)	_____	X	0.0000	=	_____
(120)	Subtotal for C-0 Affiliated Common Stock	Lines (110)-(111)+(112)+(113)+(114)+(115)+(116)+(117)+(118)+(119)	=====			=	=====
	<u>Common Stock</u>						
(121)	Unaffiliated Common Stock	LR005 Unaffiliated Preferred and Common Stock Column (5) Line (7) + LR018 Off-Balance Sheet Collateral Column (3) Line (16)	_____	X	0.2100	=	_____
(122)	Credit for Hedging - Common Stock	LR015 Hedged Asset Common Stock Schedule Column (10) Line (0299999)	_____	X	0.2100	=	_____ †
(123)	Stock Reduction - Reinsurance	LR005 Unaffiliated Preferred and Common Stock Column (5) Line (19)	_____	X	0.2100	=	_____ †
(124)	Stock Increase - Reinsurance	LR005 Unaffiliated Preferred and Common Stock Column (5) Line (20)	_____	X	0.2100	=	_____
(125)	BA Common Stock Unaffiliated	LR008 Other Long-Term Assets Column (5) Line (47)	_____	X	0.2100	=	_____
(126)	BA Common Stock Affiliated - C-1cs	LR008 Other Long-Term Assets Column (5) Line (49.2)	_____	X	0.2100	=	_____
(127)	Common Stock Concentration Factor	LR011 Common Stock Concentration Factor Column (6) Line (6)	_____	X	0.2100	=	_____
(128)	NAIC 01 Working Capital Finance Notes	LR008 Other Long-Term Assets Column (5) Line (51.1)	_____	X	0.1575	=	_____
(129)	NAIC 02 Working Capital Finance Notes	LR008 Other Long-Term Assets Column (5) Line (51.2)	_____	X	0.1575	=	_____
(130)	Affiliated Preferred Stock and Common Stock - Holding Company in Excess of Indirect Subs	LR042 Summary for Affiliated Investments Column (4) Line (7)	_____	X	0.2100	=	_____
(131)	Affiliated Preferred Stock and Common Stock - All Other	LR042 Summary for Affiliated Investments Column (4) Line (13)	_____	X	0.2100	=	_____
(132)	Total for C-1cs Assets	Lines (121)-(122)-(123)+(124)+(125)+(126)+(127)+(128)+(129)+(130)+(131)	=====			=	=====
	<u>Insurance Risk</u>						
(133)	Disability Income Premium	LR019 Health Premiums Column (2) Lines (21) through (27)	_____	X	0.2100	=	_____

† Denotes lines that are deducted from the total rather than added.

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

**CALCULATION OF TAX EFFECT FOR LIFE AND FRATERNAL RISK-BASED CAPITAL (CONTINUED)**

	<u>Source</u>	(1)		(2)
		<u>RBC Amount</u>	<u>Tax Factor</u>	<u>RBC Tax Effect</u>



(134)	Long-Term Care	LR019 Health Premiums Column (2) Line (28) + LR023 Long-Term Care Column (4) Line (7)	_____	X	0.2100	=	_____
(135)	Life Insurance C-2 Risk	LR025 Life Insurance Column (2) Line (8)	_____	X	0.2100	=	_____
(136)	Group Insurance C-2 Risk	LR025 Life Insurance Column (2) Lines (20) and (21)	_____	X	0.2100	=	_____
(136b)	Longevity C-2 Risk	LR025-A Longevity Risk Column (2) Line (5)	_____	X	0.2100	=	_____
(137)	Disability and Long-Term Care Health Claim Reserves	LR024 Health Claim Reserves Column (4) Line (9) + Line (15)	_____	X	0.2100	=	_____
(138)	Premium Stabilization Credit	LR026 Premium Stabilization Reserves Column (2) Line (10)	_____	X	0.0000	=	_____
(139)	Total C-2 Risk	L(133) + L(134) + L(137) + L(138) + Greatest of [Guardrail Factor * (L(135)+L(136)), Guardrail Factor * L(136b), Square Root of [ (L(135) + L(136)) <sup>2</sup> + L(136b) <sup>2</sup> + 2 * (TBD Correlation Factor) * (L(135) + L(136)) * L(136b) ]]	=====			=	=====
(140)	Interest Rate Risk	LR027 Interest Rate Risk Column (3) Line (36)	_____	X	0.2100	=	_____
(141)	Health Credit Risk	LR028 Health Credit Risk Column (2) Line (7)	_____	X	0.0000	=	_____
(142)	Market Risk	LR027 Interest Rate Risk Column (3) Line (37)	_____	X	0.2100	=	_____
(143)	Business Risk	LR029 Business Risk Column (2) Line (40)	_____	X	0.2100	=	_____
(144)	Health Administrative Expenses	LR029 Business Risk Column (2) Line (57)	_____	X	0.0000	=	_____
(145)	Total Tax Effect	Lines (109) + (120) + (132) + (139) + (140) + (141) + (142) + (143) + (144)	=====			=	=====

† Denotes lines that are deducted from the total rather than added.

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

## BONDS

### LR002

#### *Basis of Factors*

The bond factors are based on cash flow modeling using historically adjusted default rates for each bond category. For each of 2,000 trials, annual economic conditions were generated for the 10-year modeling period. Each bond of a 400-bond portfolio was annually tested for default (based on a “roll of the dice”) where the default probability varies by designation category and that year’s economic environment. When a default takes place, the actual loss considers the expected principal loss by category, the time until the sale actually occurs and the assumed tax consequences.

Actual surplus needs are reduced by incorporating anticipated annual contributions to the asset valuation reserve (AVR) as offsetting cash flow. Required surplus for a given trial is calculated as the amount of initial surplus funds needed so that the accumulation with interest of this initial amount and subsequent cash flows will not become negative at any point throughout the modeling period. The factors chosen for the proposed formula produce a level of surplus at least as much as needed in 92 percent of the trials by category and a 96 percent level for the entire bond portfolio.

The factor for NAIC 6 bonds recognizes that the book/adjusted carrying value of these bonds reflects a loss of value upon default by being marked to market.

#### *Specific Instructions for Application of the Formula*

##### Lines (1) through (7)

The book/adjusted carrying value of all bonds and related fixed-income investments should be reported in Column (1). The bonds are split into seven different risk classifications. For long-term bonds, these classifications are found on Lines 1 through 7 of the Asset Valuation Reserve Default Component, Page 30 of the annual statement.

##### Line (8)

The total should equal long-term bonds and other fixed-income instruments reported on Page 2, Column 3, Line 1 plus Schedule DL Part 1, Column 6, Line 7099999 ~~minus Schedule D, Part 1A, Section 1, Column 7, Line 7.7 of the annual statement.~~

##### Lines (9) through (15)

The book/adjusted carrying value of all bonds and related fixed-income investments should be reported in Column (1). The bonds are split into seven different risk classifications. For short-term bonds, these classifications are found on Lines 18 through 24 of the Asset Valuation Reserve Default Component, Page 30 of the annual statement.

##### Line (16)

The total should equal short-term bonds reported on Schedule DA, Part 1, Line 8399999 plus Schedule DL Part 1, Column 6, Line 8999999 plus LR012 Miscellaneous Assets Column (1) Line (2.2).

##### Line (22)

Class 1 bonds (highest quality) issued by a U.S. government agency that are not backed by the full faith and credit of the U.S. government should be reported on this line. The loan-backed securities of the Federal National Mortgage Association (FNMA) and the Federal Home Loan Mortgage Corporation (FHLMC) would be examples of the securities reported on this line. Line (22) should not be larger than the sum of Lines (2) and (10). Exempt obligations should not be included on this line.

##### Line (24)

Bonds should be aggregated by issuer (the first six digits of the CUSIP number can be used). Exempt U.S. government bonds and bonds reported on Line (22) are not counted in determining the size factor. The RBC for those bonds will not be included in the base to which the size factor is applied. If this field is left blank, the maximum size factor adjustment of ~~2.52.40~~ will be used.

Line (25)

The size factor reflects the higher risk of a bond portfolio that contains relatively fewer bonds. The overall factor decreases as the portfolio size increases. Portfolios with more than 1,300 issuers will receive a discount. The size factor is based on the weighted number of issuers. (The calculation shown below will not appear on the RBC filing software but will be calculated automatically.)

		<u>(a)</u>			<u>(b)</u>	
	<u>Source</u>	<u>Number of Issuers</u>			<u>Weighted Issuers</u>	
<u>Line (25)</u>						
<u>First 50</u>	<u>Company Records</u>	<u>_____</u>	<u>X 2.40</u>	<u>=</u>	<u>_____</u>	
<u>Next 50</u>	<u>Company Records</u>	<u>_____</u>	<u>X 1.53</u>	<u>=</u>	<u>_____</u>	
<u>Next 100</u>	<u>Company Records</u>	<u>_____</u>	<u>X 0.85</u>	<u>=</u>	<u>_____</u>	
<u>Next 300</u>	<u>Company Records</u>	<u>_____</u>	<u>XX 0.85</u>	<u>=</u>	<u>_____</u>	
<u>Over 500</u>	<u>Company Records</u>	<u>_____</u>	<u>X 0.82</u>	<u>=</u>	<u>_____</u>	
<u>Total Number of Issuers from Line (23)</u>		<u>_____</u>			<u>_____</u>	
<u>Total Weighted Issuers</u>					<u>_____</u>	
<u>Size Factor = Total Weighted Issuers divided by Total Number of Issuers</u>					<u>_____</u>	

		<u>(a)</u>			<u>(b)</u>	
	<u>Source</u>	<u>Number of Issuers</u>			<u>Weighted Issuers</u>	
<u>Line (25)</u>						
<u>First 50</u>	<u>Company Records</u>	<u>_____</u>	<u>X 2.5</u>	<u>=</u>	<u>_____</u>	
<u>Next 50</u>	<u>Company Records</u>	<u>_____</u>	<u>X 1.3</u>	<u>=</u>	<u>_____</u>	
<u>Next 300</u>	<u>Company Records</u>	<u>_____</u>	<u>X 1.0</u>	<u>=</u>	<u>_____</u>	
<u>Over 400</u>	<u>Company Records</u>	<u>_____</u>	<u>X 0.9</u>	<u>=</u>	<u>_____</u>	
<u>Total Number of Issuers from Line (23)</u>		<u>_____</u>			<u>_____</u>	
<u>Total Weighted Issuers</u>					<u>_____</u>	
<u>Size Factor = Total Weighted Issuers divided by Total Number of Issuers</u>					<u>_____</u>	

## ASSET CONCENTRATION FACTOR

LR010

### *Basis of Factors*

The purpose of the concentration factor is to reflect the additional risk of high concentrations in single exposures (represented by an individual issuer of a security or a holder of a mortgage, etc.) The concentration factor doubles the risk-based capital pre-tax factor (with a maximum of 45 percent pre-tax) of the 10 largest asset exposures excluding various low-risk categories or categories that already have a maximum factor. Since the risk-based capital of the assets included in the concentration factor has already been counted once in the basic formula, the asset concentration factor only serves to add in the additional risk-based capital required. The calculation is completed on a consolidated basis; however, the concentration factor is reduced by amounts already included in the concentration factors of subsidiaries to avoid double-counting.

### *Specific Instructions for Application of the Formula*

The 10 largest asset exposures should be developed by consolidating the assets of the parent with the assets of the company's insurance and investment subsidiaries. The concentration factor component on any asset already reflected in the subsidiary's RBC for the concentration factor should be deducted from Column (4). This consolidation process affects higher tiered companies only. Companies on the lowest tier of the organizational chart will prepare the asset concentration on a "stand alone" basis.

The 10 largest exposures should exclude the following: affiliated and non-affiliated common stock, affiliated preferred stock, home office properties, policy loans, bonds for which AVR and RBC are zero, NAIC 1 bonds, NAIC 1 unaffiliated preferred stock, NAIC 1 Hybrids, CM 1 Commercial and Farm Mortgages and any other asset categories with RBC factors less than 0.8 percent post-tax (this includes residential mortgages in good standing, insured or guaranteed mortgages, and cash and short-term investments).

In determining the assets subject to the concentration factor for both C-1o and C-1cs, the ceding company should exclude any asset whose performance inures primarily (>50 percent) to one reinsurer under modified coinsurance or funds withheld arrangements. The reinsurer should include 100 percent of such asset. Any asset where no one reinsurer receives more than 50 percent of its performance should remain with the ceding company.

Assets should be aggregated by issuer before determining the 10 largest exposures. Aggregations should be done separately for bonds and preferred stock (the first six digits of the CUSIP number can be used as a starting point) (please note that the same issuer may have more than one unique series of the first six digits of the CUSIP), mortgages and real estate. Securities held within Schedule BA partnerships should be aggregated by issuer as if the securities are held directly. Likewise, where joint venture real estate is mortgaged by the insurer, both the mortgage and the joint venture real estate should be considered as part of a single exposure. Tenant exposure is not included. For bonds and unaffiliated preferred stock, aggregations should be done first for classes 2 through 6. After the 10 largest issuer exposures are chosen, any NAIC 1 bonds, NAIC 1 unaffiliated preferred stock or NAIC 1 hybrids from any of these issuers should be included before doubling the risk-based capital. For some companies, following the above steps may generate less than 10 "issuer" exposures. These companies should list all available exposures.

Replicated assets other than synthetically created indices should be included in the asset concentration calculation in the same manner as other assets.

The book/adjusted carrying value of each asset is listed in Column (2).

The RBC factor will correspond to the risk-based capital category of the asset reported previously in the formula before application of the size factor for bonds. The RBC filing software automatically allows for an overall 45 percent RBC cap.

Lines (17) through (22)

The Asset Concentration RBC Requirement for a particular property plus the Real Estate RBC Requirement for a particular property cannot exceed the book/adjusted carrying value of the property. Any properties exceeding the book/adjusted carrying value must be adjusted down to the book/adjusted carrying value in Column (6) of the Asset Concentration.

Line (18), Column (4) is calculated as Line (17), Column (2) multiplied by 0.2300 plus Line (18), Column (2) multiplied by 0.2000, but not greater than Line (17), Column (2).

Line (20), Column (4) is calculated as Line (19), Column (2) multiplied by 0.1500 plus Line (20), Column (2) multiplied by 0.1200, but not greater than Line (19), Column (2).

Line (22), Column (4) is calculated as Line (21), Column (2) multiplied by 0.2300 plus Line (22), Column (2) multiplied by 0.2000, but not greater than Line (21), Column (2).

Lines (23) through (54)

The Asset Concentration RBC Requirement for a particular mortgage plus the LR004 Mortgages RBC Requirement or LR009 Schedule BA Mortgages RBC Requirement for a particular mortgage cannot exceed 45 percent of the book/adjusted carrying value of the mortgage. Any mortgages exceeding 45 percent of the book/adjusted carrying value must be adjusted down in Column (6) of the Asset Concentration.

Line (32), Column (4) is calculated as the greater of 0.1800 multiplied by [(Line (31) plus Line (32))] less Line (32) or Line (31) multiplied by the appropriate factor for the CM class to which the loan is assigned.

Line (34), Column (4) is calculated as the greater of 0.0140 multiplied by [(Line (33) plus Line (34))] less Line (34) or Line (33) multiplied by 0.0068.

Line (36), Column (4) is calculated as the greater of 0.1800 multiplied by [(Line (35) plus Line (36))] less Line (36) or Line (35) multiplied by the appropriate factor for the CM class to which the loan is assigned.

Line (38), Column (4) is calculated as the greater of 0.2200 multiplied by [(Line (37) plus Line (38))] less Line (38) or Line (37) multiplied by the appropriate factor for the CM class to which the loan is assigned.

Line (40), Column (4) is calculated as the greater of 0.0270 multiplied by [(Line (39) plus Line (40))] less Line (40) or Line (39) multiplied by 0.0068.

Line (42), Column (4) is calculated as the greater of 0.2200 multiplied by [(Line (41) plus Line (42))] less Line (42) or Line (41) multiplied by the appropriate factor for the CM class to which the loan is assigned.

Line (43), Column (4) is calculated as Line (43) multiplied by the appropriate factor for the CM class to which the loan is assigned.

Line (52), Column (4) is calculated as the greater of 0.1800 multiplied by [(Line (51) plus Line (52))] less Line (52) or Line (51) multiplied by the appropriate factor for the CM class to which the loan is assigned.

Line (54), Column (4) is calculated as the greater of 0.2200 multiplied by [(Line (53) plus Line (54))] less Line (54) or Line (53) multiplied by the appropriate factor for the CM class to which the loan is assigned.

## HEDGED ASSET BOND AND COMMON STOCK SCHEDULES

LR014 and LR015

*(Instructions related to intermediate hedges are in italics.)*

### Hedging

The concept of hedging credit, equity and other risks is widely accepted and understood among insurers and their regulators. In order for regulators to distinguish between insurers that have effectively reduced their risks from those insurers that have not, the risk based capital computation should be sensitive to such differences. Increasing or decreasing exposure to different asset classes in relation to a benchmark asset allocation tailored to meet the long term obligations to policy owners is critical to successfully managing an insurance company. Hedging is the process of using derivative instruments to most efficiently limit risk associated with a particular asset in a manner consistent with the insurer's long term objectives. The relative advantage of using cash market transactions versus derivative market transactions depends upon market conditions.

The NAIC model investment laws and regulations establish specific constraints on the use of derivatives. Governance of derivative use starts with approved and documented authorities from the insurer's Board of Directors to management. These authorities are coordinated with and enhanced by limits established by the insurer's domiciliary state.

Hedging strategies currently employed by insurers range from straightforward relationships between the hedged asset and the derivative instrument (the hedge) to more complex relationships. The purpose of this section of the RBC calculation is to measure and reflect in RBC the risk reduction achieved by an insurer's use of the most straightforward types of hedges involving credit default and equity C-1 risks.

To avoid the possible double counting of RBC credits, excluded from this section are any RBC credits arising from hedges that are part of the Clearly Defined Hedging Strategy (CDHS) required for C-3 cash flow testing or other risk mitigation techniques (e.g. reinsurance) which produce reduced levels of RBC by operation of other parts of the RBC formula.

### RBC and Measuring the Risk Reduced by Hedging

To measure the risks reduced by hedging and reflect the effects in RBC it is important to understand the characteristics and purpose of the hedge. A portfolio manager seeking to hedge a particular asset or portfolio risk must determine if the derivative instruments available will do a suitable job of risk mitigation.

Default risk - A portfolio manager may determine that the default risk of a particular debt security which matures in 8 years needs to be hedged because of a near term credit concern which may resolve before the debt matures. A credit default swap (CDS) would be the most effective hedging instrument. In some circumstances the manager may purchase a CDS with 8 years to maturity which fully mitigates the default risk and shall result in an RBC credit which fully offsets the C-1 default risk charge on the debt security. However, seeking the most liquid and cost efficient market for the purchase of such an instrument may lead to the purchase of a 5 year CDS which the manager plans to renew (roll) as the credit circumstances evolve in the coming years. In this case there is a 3 year maturity mismatch between the debt security and the hedging instrument. To account for the difference between insurers that have hedged the debt security to full maturity versus those with a mismatched position, the determination of the RBC credit shall be made in accordance with the following formula which limits the results to a fraction of the C-1 charge for the hedged asset.

$$\text{RBC Credit As \% of C1 Asset Charge} = \text{Min} \left( 1, \frac{\text{Time to Maturity of CDS}}{\text{Time to Maturity of Bond}} \right) \times (94\% - 10\%) + 10\%$$

This accounts for mismatched maturities and provides a regulatory margin of safety within a range of 94%-10% of the C-1 asset charge.

*There may also be circumstances where default risk is reduced by hedging specific portfolios using a basket or index-based derivative (e.g. CDX family of derivatives) with the same or very similar components as the portfolio. For these hedges the risk reduction shall be measured based on the number of issuers common to both the insurer's portfolio and the index/basket CDS. A minimum of 50% overlap of the derivative instrument notional amount and the book/adjusted carrying value of the hedged bonds shall be required to qualify for any RBC credit. Additionally, if the insurer hedges an index, each bond must be listed (e. g. if the insurer acquires a CDX that hedges 125 names equally, then the insurer must list all 125 names on the schedule), regardless if the insurer owns all the bonds in the index.*

As RBC is currently measured and reported annually and to an extent provides a regulator with an indicator of capital sufficiency for the near term future; default risk protection as provided by CDS (based on a specific security or an index of securities) shall have more than 1 year remaining to maturity in order to receive any RBC credit, provided that the remaining maturity of the hedged debt security or average maturity of the hedged portfolio is greater than 1 year. When both the default risk protection and the hedged debt security have less than one year to maturity, full RBC credit shall be allowed provided that the maturity of the protection is later than the maturity of the debt security; otherwise no RBC credit is allowed.

Equity market risk - A portfolio manager may determine that the market risk of holding a particular common stock needs to be reduced. Because an outright sale at that point in time might be disadvantageous to the insurer and/or policy owners, a short futures contract may be purchased to eliminate the current market risk by establishing a sale price in the future. The C-1 RBC equity risk credit shall be limited to 94%.

*There may also be circumstances where equity market risk is reduced by hedging equity portfolios using derivatives based on equity market indices (e.g. S&P 500 futures contracts). Unless the equity portfolio is exactly matched to the index, the hedge will not provide precise one-to-one protection from fluctuations in value. The insurer must list all positions in the equity index individually (e. g. all 500 common stocks that are part of the S&P 500), regardless if the insurer owns all the stocks in the index.*

#### Definitions and Instructions for the Spreadsheet Computation of Risk Reduction

(Numeric references represent spreadsheet columns)

##### Bonds

- (1) Description - Reported on Schedule DB.
- (2) Notional Amount - Amount reported on Schedule DB.
- (3) Relationship Type of the Hedging Instrument and Hedged Asset. There are two categories; Basic and Intermediate relationships. Basic relationship = Single issuer credit default swap on a single issuer name to hedge the credit risk of a specific hedged asset. *Intermediate relationship = A portfolio of insurer assets paired with a basket or index based hedging instrument with the same or very similar components as the portfolio. For intermediate relationships, a minimum of 50% overlap of the derivative instrument notional amount and the book adjusted carrying value of the hedged bonds shall be required to qualify for any RBC credit.*
- (4) Maturity Date - Date reported on Schedule DB.

- (5) Description - Bond description found in Schedule D. *For intermediate relationships, each bond must be listed (e. g. if the insurer acquires a credit default index that hedges 125 names equally, then the insurer must list all 125 names on the schedule.)*
- (6) CUSIP Identification - Bond unique identifier found in Schedule D.
- (7) Book Adjusted Carrying Value - Value found on Schedule D.
- (8) Overlap with Insurer's Bond Portfolio – The portion of Column (2) Notional Amount of the Hedging Instrument that hedges Column (7) Book Adjusted Carrying Value. This amount cannot exceed Column (7) Book Adjusted Carrying Value.
- (9) Maturity Date - The date is found in Schedule D.
- (10) NAIC Designation - Designation found in Schedule D. Necessary to determine correct RBC Factor for the Bonds.
- (11) RBC Factor - Factor based on Column (10) NAIC Designation and NAIC C-1 RBC factors table.
- (12) Gross RBC Charge – This is the C-1 RBC charge based on holdings at the end of the year. Calculation: Columns (7) Book Adjusted Carrying Value multiplied by (11) RBC Factor.
- (13) RBC Credit for Hedging Instruments – If Column (8) Overlap with Insurer's Bond Portfolio is zero; the RBC Credit would also be zero. The Hedging Instrument must have more than 1 year remaining to maturity in order to receive any RBC credit provided that the remaining time to maturity of the Hedged Asset - Bonds is greater than 1 year. If both the Hedging Instrument and the Hedged Asset - Bonds maturity dates are less than 1 year, the maximum RBC credit determined using the formula below shall be allowed provided that the maturity of the hedging instrument is equal to or later than the maturity of the bond. Calculation is Column (8) Overlap with Insurer's Bond Portfolio multiplied by RBC Credit as % of C-1 Asset Charge formula (formula listed below) multiplied by Column (11) RBC Factor.

$$\text{RBC Credit as \% of C1 Asset Charge} = \text{Min} \left( 1, \frac{\text{Time to Maturity of Hedging Instrument}}{\text{Time to Maturity of Bond}} \right) \times (94\% - 10\%) + 10\%$$

Time to Maturity of Hedging Instrument divided by Time to Maturity of Bond cannot exceed 1.

- (14) Net RBC Charge – Column (12) Gross RBC Charge minus (13) RBC Credit for Hedging Instruments.

#### Common Stocks

- (1) Description - Reported on Schedule DB.
- (2) Notional Amount - Amount reported on Schedule DB.
- (3) Relationship Type of the Hedging Instrument and Hedged Asset. There are two categories; Basic relationships or Intermediate relationships. Basic relationship = Single name equity Hedging Instrument paired with a specific common stock. *Intermediate relationship = A portfolio of common stocks paired with a basket or index based Hedging Instrument with the same or very similar components as the portfolio. For intermediate relationships, a minimum of 50% overlap of the derivative instrument notional amount and the book adjusted carrying value of the hedged common stocks shall be required to qualify for any RBC credit.*



- (4) Description - Common Stock description found in Schedule D Part 2 Section 2. *For intermediate relationships, each common stock must be listed (e. g. if the insurer acquires a short futures contract that hedges the S&P 500, then the insurer must list all 500 stocks on the schedule).*
- (5) CUSIP Identification - Common Stock unique identifier found in Schedule D Part 2 Section 2.
- (6) Book Adjusted Carrying Value - Value found on Schedule D Part 2 Section 2.
- (7) Overlap with Insurer's Stock Portfolio – The portion of Column (2) Notional Amount of the Hedging Instrument that hedges Column (6) Book/Adjusted Carrying Value. This amount cannot exceed the Column (6) Book Adjusted Carrying Value.
- (8) RBC Factor - Factor based on NAIC C-1 RBC factors table.
- (9) Gross RBC Charge - The C-1 RBC charge based on holdings at the end of the year. Calculation: Columns (6) Book Adjusted Carrying Value multiplied by (8) RBC Factor.
- (10) RBC Credit for Hedging Instruments - RBC credit for equity market risk reduction is limited to 94% of the C-1 Asset charge. Calculation: Column (7) Overlap with Insurer's Stock Portfolio multiplied by (8) RBC Factor multiplied by 94%.
- (11) Net RBC Charge - Column (9) Gross RBC Charge minus (10) RBC Credit for Hedging Instruments.

Factors Table  
As determined by the NAIC

NAIC Designation	Factor
	0.00000
1	0.00158
1.A	0.00158
1.B	0.00271
1.C	0.00419
1.D	0.00523
1.E	0.00657
1.F	0.00816
1.G	0.01016
2.A	0.01261
2.B	0.01523
2.C	0.02168
3.A	0.03151
3.B	0.04537
3.C	0.06017
4.A	0.07386
4.B	0.09535
4.C	0.12428
5.A	0.16942
5.B	0.23798
5.C	0.30000
6	0.30000
<b>Common Stock Type</b>	
Other Unaffiliated Public Common Stock	0.4500 †
Money Market Mutual Funds	0.0040
Federal Home Loan Bank Common Stock	0.0110
Unaffiliated Private Common Stock	0.3000
† - 30 percent adjusted up or down by the weighted average beta for the publicly traded common stock portfolio subject to a minimum of 22.5 percent and a maximum of 45 percent.	

## OFF-BALANCE SHEET COLLATERAL

(Including any Schedule DL, Part 1 Assets not Included in the Asset Valuation Reserve)  
LR018

### *Basis of Factors*

Security lending programs are required to maintain collateral. Some entities post the collateral supporting security lending programs on their financial statements, and incur C-1 risk charges on those assets. Other entities have collateral that is not recorded on their financial statements. While not recorded on the financial statements of the company, such collateral has risks that are not otherwise captured in the RBC formula.

Annual Statement Schedule DL, Part 1, Securities Lending Collateral Assets reported on the balance sheet (Assets Page, Line 10) should be included on the schedule with the Off-Balance Sheet Collateral if they are not already reflected in the Asset Valuation Reserve and are reflected in another portion of the Life RBC formula.

The collateral in these accounts is maintained by a third-party (typically a bank or other agent). The collateral agent maintains on behalf of the company detail asset listings of the collateral assets, and this data is the source for preparation of this schedule. The company should maintain such asset listings, at a minimum CUSIP, market value, book/carrying value, and maturity date. The asset risk charges are derived from existing RBC factors for bonds, preferred and common stocks, other invested assets, and invested assets not otherwise classified (aggregate write-ins).

### *Specific Instructions for Application of the Formula*

Off-balance sheet collateral included in General Interrogatories, Part 1, Lines 24.05 and 24.06 of the annual statement should agree with Line (19).

#### Lines (1) through (8) – Bonds

Bond factors are described on page LR002 Bonds.

#### Line (9) through (15) – Preferred Stocks

Preferred stock factors are described on page LR005 Unaffiliated Preferred and Common Stock.

#### Line (16) – Common Stock

Common stock factors are described on page LR005 Unaffiliated Preferred and Common Stock.

#### Line (17) – Schedule BA – Other Invested Assets

Other invested assets factors are described on page LR008 Other Long Term Assets.

#### Line (18) – Aggregate Write-ins for Other Invested Assets

Aggregate write-ins for other invested assets factors are described on page LR012 Miscellaneous Assets.

Preliminary Proposed Updates to RBC C1 Bond Factors  
For Discussion with Life Risk-Based Capital (E) Working Group

April 22, 2021

Moody's (NYSE:MCO) is a global integrated risk assessment firm that empowers organizations to make better decisions. Its data, analytical solutions and insights help decision-makers identify opportunities and manage the risks of doing business with others. We believe that greater transparency, more informed decisions, and fair access to information open the door to shared progress. With over 11,400 employees in more than 40 countries, Moody's combines an international presence with local expertise and more than a century of experience in financial markets. Learn more at [moody's.com/about](https://www.moody's.com/about).

Moody's Corporation is comprised of two separate companies: Moody's Investors Service (MIS) and Moody's Analytics (MA).

Moody's Investors Service (MIS) provides investors with a comprehensive view of global debt markets through credit ratings and research. Moody's Analytics (MA) provides data, analytics, and insights to equip leaders of financial, non-financial, and government organizations with effective tools to understand a range of risks.

Throughout this document, "MIS rating" refers to a MIS credit rating. And while references to MIS are made, the views and opinions in this document are solely of MA.

## Scope

What We're Doing

**Proposing RBC C1 bond factors using data and methodologies that better reflect economic risks to better assess insolvency risk and help identify potentially weakly capitalized life insurers; the C1 factors should not incentivize poor business decisions that can adversely impact solvency.**

- Methodologies and data rely entirely on public sources that are accessible and reproducible by NAIC and industry
- Articulated limitations
- NAIC to use at its discretion in setting the final C1 factors, although MA cautions isolated modifications to modeling features and parameters without considerations of the interconnected elements of the C1 modeling framework and limitations
- While the ACLI, the industry, the NAIC, and commissioners have been engaged extensively, the views are solely those of MA and based on an objective assessment of supporting documentation, and data and modeling approaches that in MA's experience viewed as best practice

## Heuristic Performance Criteria

How We're Doing It

### Proposing C1 factors that

- Better represent the historical experience of life insurers' holdings
- More accurately reflect empirically observed default correlations and issuer diversification benefits

### Challenges:

- C1 factors are cardinal, and a function of MA's default rates estimated using MIS corporate default rates that reflect the historical experience of life insurance corporate holdings for each MIS rating, which are opinions of ordinal, horizon-free credit risk, rather than cardinal
- C1 factors are static while risks and spreads change over time, across ratings and asset classes, resulting in a potential misalignment between the C1 factors and the underlying risks of varied holdings in insurers' portfolios.
- Applied to range of credit assets, based on their NAIC designations (i.e., the second lowest nationally recognized statistical rating organization (NRSRO) rating) with statistical properties that can be different from those estimated using MIS corporate default rates

## References

### Past presentation to the Life Risk-Based Capital (E) Working Group

- [Assessment of Proposed Revisions to the RBC C1 Bond Factors](#) (February 2021)
- [MA's Update on Proposed C1 Bond Factors](#) (March 2021)
- [MA's Preliminary Proposed Updates to RBC C1 Bond Factors](#) (April 15, 2021)

# Agenda

1. Overview of Impactful Targeted Improvements
2. Economic State Model and the MA Proposed Correlation Model
3. Default Rates
4. Risk Premium
5. Discount Rate and Tax Rate
6. Recap

1

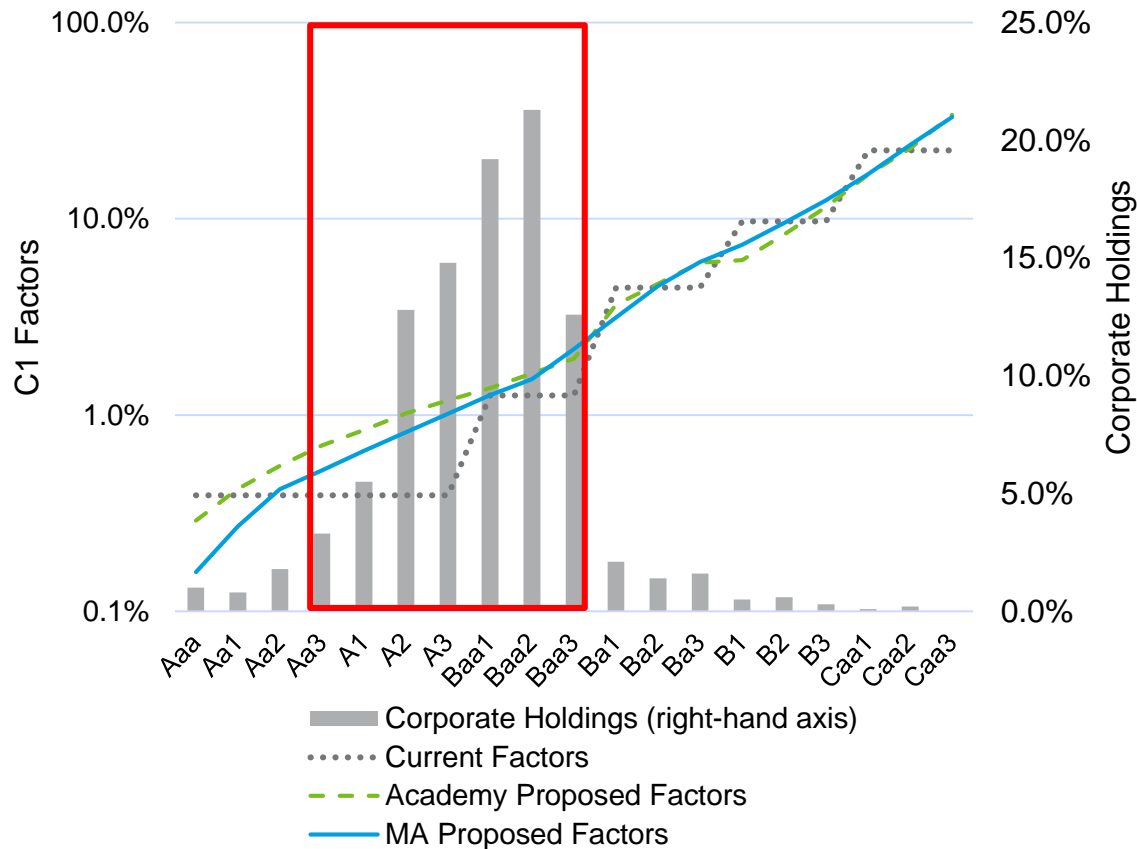
Overview of Impactful  
Targeted Improvements



# MA's Proposed C1 Factors

Targeted improvements with largest impact

C1 Base Factors (log scale) and Corporate Holdings



**Economic state model**, initially outside scope, limitations sufficiently material that MA recommends replacement Attachment B

- » Economic state model understates default correlations and overstates diversification across issuers relative to that observed empirically, resulting in:
  - C1 base factors that potentially understate credit losses
  - PAFs that are overly punitive (lenient) to portfolios with a smaller (larger) number of issuers
- » Economic Scalars result in counterfactual increases and decreases to the C1 base factors across the NAIC designation categories. They lead to an overall flattening of high yield C1 base factors relative to investment grade, and under certain parameterizations C1 base factors that are non-monotonic.
- » MA proposed correlation model is calibrated to default correlations and diversification across issuers observed empirically. Resulting C1 base factors are more conservative and differentiated across MIS ratings compared with economic state model.

**Corporate default rate term structures** estimated to historical experience of life company holdings

- » Life company holdings differ from overall issuance; e.g., life company holdings have less weight on financial institutions that tend to issue shorter term debt.
- » MA proposed default rates tend to have a steeper slope (more differentiated across MIS ratings) than those proposed by the Academy, with differentiation more closely aligning with benchmarks.

**Risk Premium** set at expected loss plus 0.5 standard deviation recognizing variation in industry reserving standards and to closer align with PBR and reserving standards generally aiming to cover moderately adverse conditions. A higher Risk Premium lowers the C1 base factors and mildly increases the cross-sectional variation (or slope) and should be set to better identify of weakly capitalized firms identify and mitigate risk shifting incentives with new bond purchases.

**Discount Rate & Tax rate** set at 3.47% (2000-2020 window) and 21% under guidance of NAIC during the Life Risk-Based Capital (E) Working Group meeting on April 22, 2021. While an alternative window start date can be justified, the discount rate enters the RBC C1 framework as a single static rate and not as impactful as some other targeted improvements, reinforced by updated tax rate offset. Potentially important term structure dynamics that interplay with credit risk are not captured within the current framework.

# 2

## Economic State Model and the MA Proposed Correlation Model

# Economic State Model Initially Outside Scope

## Two material limitations

Economic state model is calibrated to default rates across contraction and expansion states, but it implies default correlations of ~0% for IG issuers, overstating diversification across issuers relative to that observed empirically, resulting in:

- » C1 base factors that potentially understate credit losses
- » PAFs that are overly punitive (lenient) to portfolios with a smaller (larger) number of issuers

Economic Scalars, that are applied to the default rate term structure in each simulated state (expansion and contraction) exhibit counterfactual increases and decreases across the NAIC designation categories.

- » They lead to an overall flattening of C1 base factors for high yield relative to those of investment grade
  - › Contraction Economic Scalars average **2.56** for investment grade and **1.75** for high yield (1)
- » Under certain parameterizations C1 base factors are non-monotonic, e.g., contraction scalar going from 1.9421 (Ba3) to 1.4958 (B1) (2).

Economic Scalars	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3		
Continued Expansion	NA	NA	NA	NA	NA	NA	NA	0.7381	0.7380	0.7392	0.8189	0.8192	0.8189	0.8617	0.8620	0.8617	0.8549	0.8542	0.8536		
Expansion	0.7365	0.7342	0.7361	0.7334	0.7309	0.7290	0.7300	1.1301	1.1299	1.1318	0.8381	0.8384	0.8381	1.1901	1.1905	1.1901	0.9100	0.9093	0.9087		
Contraction	(1)	2.7495	2.7409	2.7482	2.7378	2.7287	2.7214	2.7252	2.1479	2.1475	2.1511	(1)	1.9422	1.9429	1.9421	1.4958	1.4964	1.4958	1.8042	1.8028	1.8016
Continued Contraction	NA	NA	NA	NA	NA	NA	NA	3.2231	3.2224	3.2279	2.9728	2.9738	2.9727	2.2114	2.2122	2.2114	2.2388	2.2371	2.2356		

# MA Proposed Correlation Model

Calibrated to default correlations observed empirically

The Academy's 10-year simulation model was adapted

- » Default rate Economic Scalars set to 1 (this effectively disables the economic state model)
- » Default correlations calibrated to empirically observed default correlations and issuer diversification benefits

Several benchmarks for default correlation

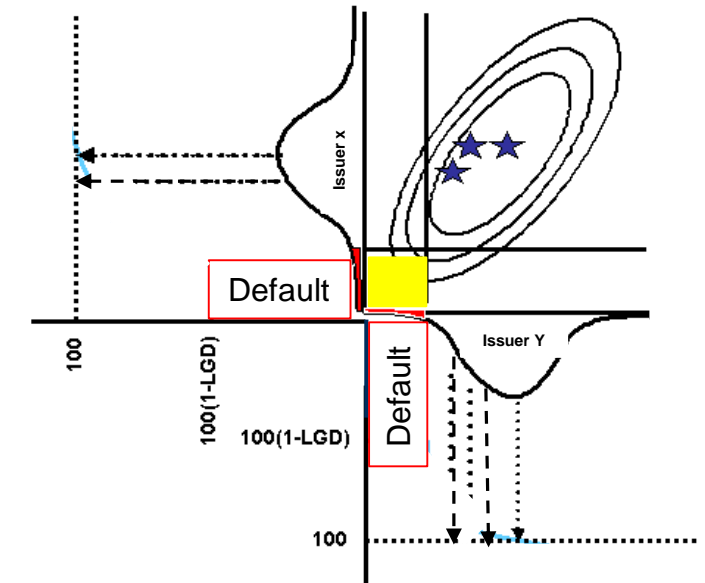
- » Joint default events
- » CDS implied
- » MIS ratings implied
- » Equity market and financial statement

MA proposed correlation model results in

- » C1 base factors that reflect empirical default correlations and are more conservative and more differentiated across MIS ratings than those implied by the economic state model; and
- » PAFs that more accurately reflect issuer diversification benefits, and that are less punitive (lenient) to portfolios with a smaller (larger) number of holdings, relative to those from Academy's proposal

MA proposed correlation model is calibrated to reflect empirically observed joint default events across MIS rating categories

- » In each period the likelihood of issuer x and y defaulting is determined by their default rates as depicted by the visualized distribution in red
- » The likelihood of a joint default, captured through a single factor model, is depicted in yellow and determined by the joint distribution represented by concentric circles
- » The model is continuous and not tied to 2 (or 4) discrete economic states, and generally results in higher 96 percentile loss



# Proposed C1 Base Factors

Incremental effects of replacing the economic state model with MA's proposed correlation model

- » MA's proposed correlation model generally increases C1 base factors
- » **(1)** As part of the economic state model, Economic Scalars lead to overall flattening of high yield C1 base factors relative to investment grade. MA's proposed correlation model
  - increases high yield factors by 28%
  - Increases investment grade factors by 24%
- » **(2)** Economic Scalars lead to non-monotonic C1 base factors under some parameterizations, e.g., 4.952% for Ba3 to 4.920% for B1
- » **(3)** Economic Scalars lead to more differentiation (22%) between A3 and Baa1 C1 base factors, compared to the correlation model (11%)

MIS Rating	Current Factors	Academy's Proposed Factors [March 2021]	MA's Preliminary Proposed Base Factors with Economic State Model & Academy's Default Rates	MA's Preliminary Proposed Base Factors with Correlation Model & Academy's Default Rates
Aaa	0.390%	0.290%	<b>(1)</b> 0.254%	0.289%
Aa1	0.390%	0.420%	0.373%	0.412%
Aa2	0.390%	0.550%	0.476%	0.550%
Aa3	0.390%	0.700%	0.593%	0.715%
A1	0.390%	0.840%	0.694%	0.896%
A2	0.390%	1.020%	0.817%	1.046%
A3	0.390%	1.190%	<b>(3)</b> 0.921%	1.254%
Baa1	1.260%	1.370%	1.128%	1.388%
Baa2	1.260%	1.630%	1.287%	1.633%
Baa3	1.260%	1.940%	1.542%	1.956%
Ba1	4.460%	3.650%	<b>(1)</b> 2.848%	3.955%
Ba2	4.460%	4.660%	3.739%	4.840%
Ba3	4.460%	5.970%	<b>(2)</b> 4.952%	5.995%
B1	9.700%	6.150%	4.920%	7.854%
B2	9.700%	8.320%	6.614%	9.901%
B3	9.700%	11.480%	9.319%	12.679%
Caa1	22.310%	16.830%	13.364%	16.044%
Caa2	22.310%	22.800%	18.788%	19.870%
Caa3	22.310%	33.860%	31.359%	28.933%

# Proposed PAF – MA’s Findings

## Implications of MA’s proposed correlation model

- » PAFs calibrated to the economic state model overstate issuer diversification benefits.
- » MA’s proposed correlation model is calibrated to default correlations and issuer diversification benefits observed empirically.

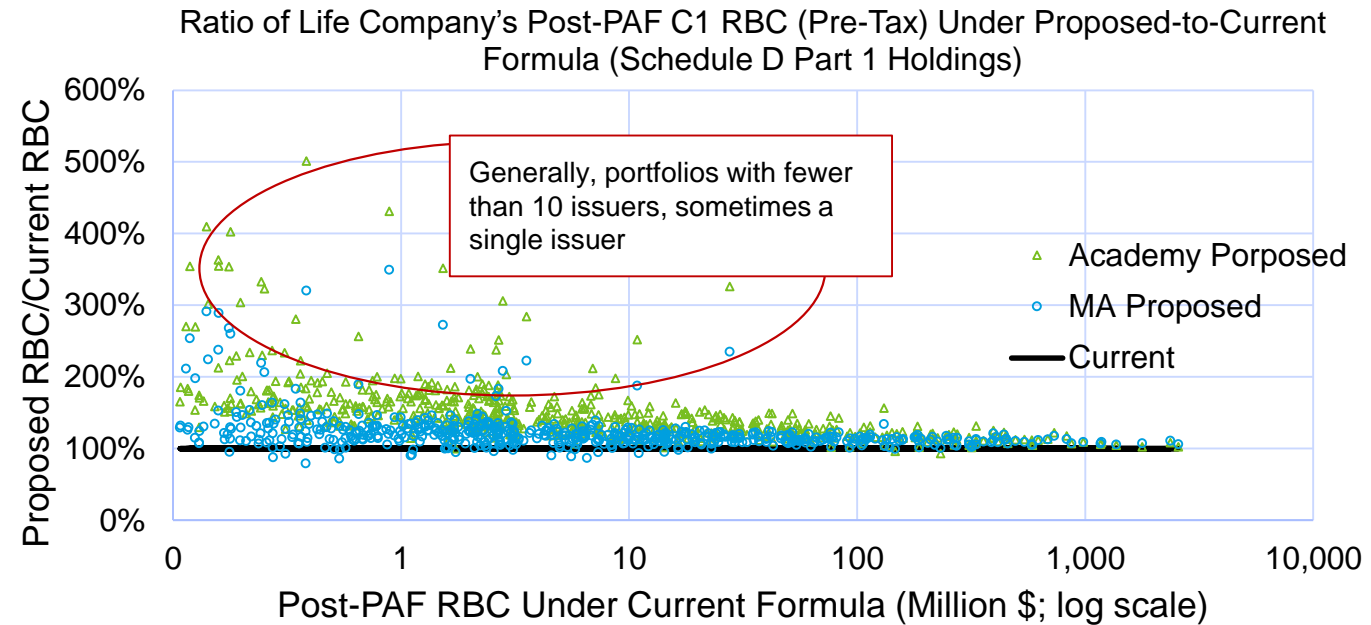
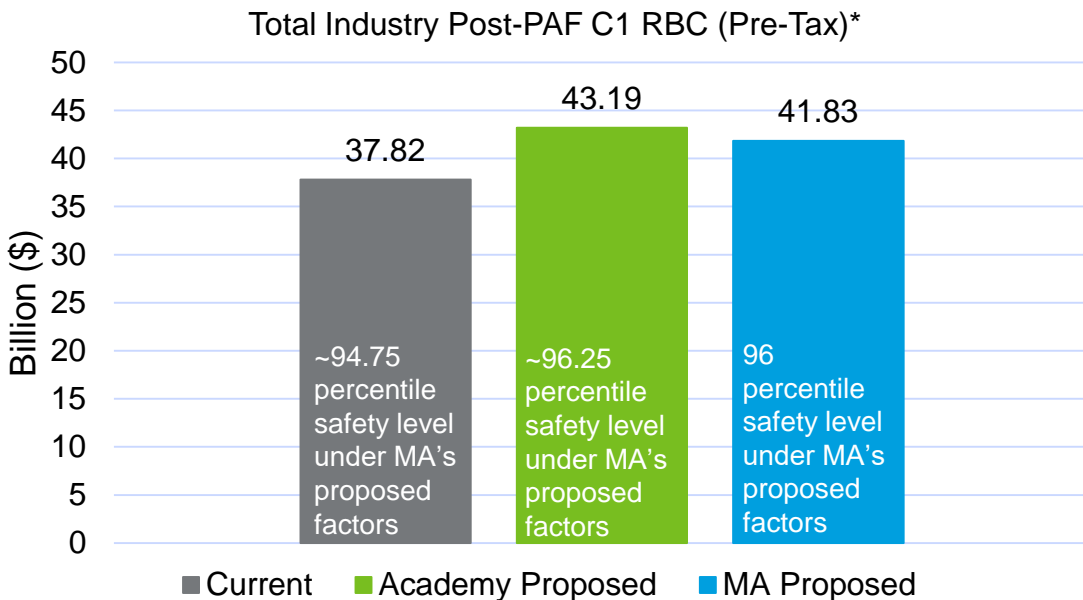
Thresholds*	Current*	Academy Proposed [March 2021]	MA Preliminary Proposed PAF
(Up to) 10	2.50	7.50	5.87
(Next) 90	1.83	1.75	1.53
(Next) 100	1.00	0.90	0.85
(Next) 300	0.97	0.85	0.85
(Above) 500	0.90	0.75	0.82

\*Current PAF converted to Academy’s proposed thresholds for better comparison.

# MA's Proposed Factors

## Impact on Post-PAF C1 RBC

- » Resulting RBC under MA's proposal are generally more conservative than under the current formula, with an increase across life companies of different sizes.
- » Under the Academy's proposal, a disproportionate share of the C1 RBC increase is attributed to life companies with portfolios that have a small and medium number of issuers, driven largely by the economic state model implying more issuer diversification benefits (i.e., lower default correlations).



# 3

## Default Rates



# MA Proposed 10-Year Cumulative Default Rates

More closely reflect historical experience of life companies' corporate holdings

Raw default rates and benchmarks are subject to data challenges:

- » Non-monotonicity (1)
- » Few defaults in upper end of MIS ratings spectrum (2). 3 Aaa defaults in the US since 1970; 2 were debatable and experienced near full recovery (Texaco and Getty Oil).

Historical experience of life companies' corporate holdings differs from overall issuance (3), the resulting default rates tend to have a steeper slope (more differentiated across MIS ratings) than those proposed by the Academy.

MA proposed baseline default rates combine empirical data, anchoring, and smoothing to address data paucity and ensure conformity to economic logic.

- » **Anchoring:**
  - 10-year cumulative default rates for **Aa2, A2, Baa2, Ba2, B2, Caa** are anchored to Aa, A, Baa, Ba, B, Ca sector-weighted US corporate CDRs at 1- and 10-year, with curvature adjustment.
- » **Interpolation:**
  - Other alphanumeric ratings were interpolated geometrically between anchored ratings.

MIS Rating	Proposed by Academy	MIS IDR Rating Symbols and Definitions	MIS Annual Default Study (2021)		MA Empirical Results Based on MIS Historical Data	MA Specification
			Global Sample	Global Sample	US Sample (Sector weighted)	
			Aaa-B3 (1983-2020)	Coarse MIS Ratings	Coarse MIS ratings	
			Caa1-Caa3 (1998-2020)	(1983-2020)	Value	
Aaa	0.226%	0.010%	(2) 0.127%	0.127%	0.503%	0.079%
Aa1	0.430%	0.100%	0.201%	(3) 0.729%	0.602%	0.203%
Aa2	0.723%	0.200%	0.833%		0.763%	
Aa3	1.144%	0.400%	0.907%		1.122%	
A1	1.710%	0.700%	1.584%	2.065%	1.751%	1.650%
A2	2.347%	1.200%	(1) 2.339%		2.272%	
A3	3.052%	1.800%	2.211%		3.129%	
Baa1	3.855%	2.600%	2.261%	3.362%	4.482%	4.309%
Baa2	4.827%	3.600%	3.059%		6.850%	
Baa3	6.076%	6.100%	5.059%		10.889%	
Ba1	14.226%	9.400%	8.860%	14.943%	18.679%	17.310%
Ba2	18.472%	13.500%	12.219%		22.191%	
Ba3	24.342%	17.660%	23.090%		28.448%	
B1	32.298%	22.200%	28.593%	34.134%	38.536%	36.471%
B2	42.574%	27.200%	33.436%		44.981%	
B3	54.703%	34.900%	41.262%		55.478%	
Caa1	66.851%	47.700%	44.220%	50.219%	51.363%	68.424%
Caa2	75.403%	65.000%	54.609%		84.391%	
Caa3	75.750%	80.700%	64.710%			

# Holdings Composition Differ from Overall Issuance

## Aligning parameters with Historical Experience

- » Institutional features drive life insurers towards holdings with characteristics different from overall issuance
- » Certain sectors are more suitable for life insurers across the ratings scale
  - Financial sector issued debt tends to exhibit shorter duration (3.9 average remaining maturity), with insurers holding longer dated financial sectors issues (11.1 average remaining maturity) (1)
  - Insurers hold a varying proportion of debt across the rating scale (2)
- » Relevant in the estimation of
  - Default rates
  - LGD

MIS Rating	U.S. Utility		U.S. Industrial		U.S. Financial	
	Sector as a Percentage of Life Corporate Holdings	Proportion of Corporate Issuers Attributed to Sector	Sector as a Percentage of Life Corporate Holdings	Proportion of Corporate Issuers Attributed to Sector	Sector as a Percentage of Life Corporate Holdings	Proportion of Corporate Issuers Attributed to Sector
Aaa	0.5%	5.9%	93.2%	42.9%	6.3%	51.2%
Aa	6.2%	8.3%	73.3%	36.5%	(2) 20.5%	55.2%
A	26.5%	17.8%	49.9%	46.0%	23.6%	36.2%
Baa	9.6%	21.2%	71.4%	58.1%	19.0%	20.7%
Ba	5.0%	5.9%	86.4%	81.5%	8.6%	12.6%
B	0.1%	1.0%	96.9%	92.8%	3.0%	6.2%
Caa	0.1%	0.6%	96.1%	95.6%	3.8%	3.9%
Ca	0.0%	1.1%	100.0%	90.4%	0.0%	8.5%
Overall	14.9%	10.4%	65.3%	68.1%	(1) 19.8%	21.5%

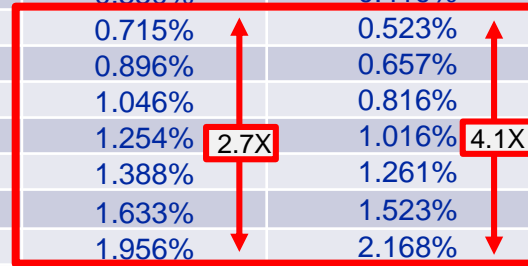
U.S. Corporate Sector	Average Time to Maturity for life insurers' US corporate holdings (notional weighted)	Average Time to Maturity for US corporate issues	Proportion of Issuers Attributed to Sector
Financial	(1) 11.1	3.9	21.5%
Industrial	12.8	7.7	68.1%
Utility	15.9	11.0	10.4%

# Proposed C1 Base Factors

## Incremental effects of MA proposed default rates

- » Default rate term structures representing experience of life insurance holdings tend to be more differentiated across MIS ratings than Academy proposed, and closer aligned to benchmarks
- » The resulting C1 base factors under MA's proposed default rates are generally more differentiated across the Aa3 to Baa3 range
- » The ratio of the Baa3 factor to the Aa3 factor is
  - 2.7 under MA's proposal with the Academy's default rates
  - 4.1 under MA's proposal
- » The Academy's proposed default rates result in C1 base factors being approximately 15% larger on average than under MA's proposed default rates.

MIS Rating	Current Factors	MA's Preliminary Proposed Base Factors with Academy's Default Rates	MA's Preliminary Proposed Base Factors
Aaa	0.390%	0.289%	0.158%
Aa1	0.390%	0.412%	0.271%
Aa2	0.390%	0.550%	0.419%
Aa3	0.390%	0.715%	0.523%
A1	0.390%	0.896%	0.657%
A2	0.390%	1.046%	0.816%
A3	0.390%	1.254%	1.016%
Baa1	1.260%	1.388%	1.261%
Baa2	1.260%	1.633%	1.523%
Baa3	1.260%	1.956%	2.168%
Ba1	4.460%	3.955%	3.151%
Ba2	4.460%	4.840%	4.537%
Ba3	4.460%	5.995%	6.017%
B1	9.700%	7.854%	7.386%
B2	9.700%	9.901%	9.535%
B3	9.700%	12.679%	12.428%
Caa1	22.310%	16.044%	16.942%
Caa2	22.310%	19.870%	23.798%
Caa3	22.310%	28.933%	32.975%



4

Risk Premium

# Risk Premium Updates

## Aligning with reserves

- » C1 RBC is the minimum required capital above statutory reserves to buffer against a tail loss
  - Risk Premium acts as an offset to C1 RBC; it is the part of statutory reserves provisioned against default loss
- » Variation in industry reserving standards
  - Both VM-20 and VM-21 explicitly require that reserves cover CTE 70, or approximately 88th percentile, default loss
  - VM-20 only applies to new life products after 2017. Most existing policies follow industry reserving standards that are commonly understood to cover moderately adverse conditions.
- » Recognizing variation in industry reserving standards and to closer align with PBR and reserving standards generally aim to cover moderately adverse conditions, Risk Premium is proposed to be set at **expected loss plus 0.5 standard deviation**
  - A higher Risk Premium lowers the C1 base factors and mildly increases their differentiation across MIS ratings and should better identify weakly capitalized firms and mitigate risk shifting incentives with new bond purchases
  - On average, as we decrease (increase) the risk premium by 0.5 standard deviation from MA's proposed level, the C1 base factors increase (decrease) around 20% for investment grade and around 15% for high yield factors
- » A transition to expected loss plus one standard deviation once
  - VM-20 become more widely applicable
  - VM-22 is formally updated and widely applicable

# 5

## Discount Rate and Tax Rate

# Discount and Tax Rate

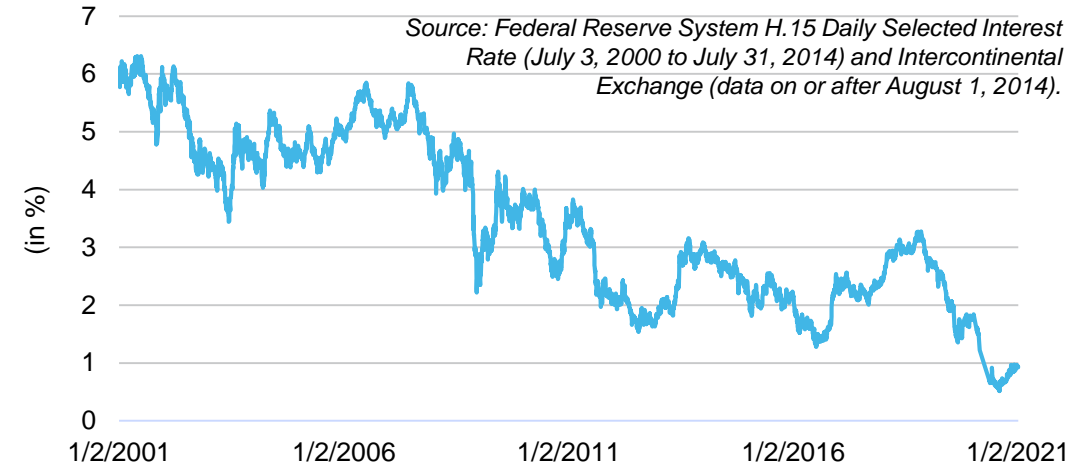
## Possible candidates

Tax rate was updated from 35% to 21%

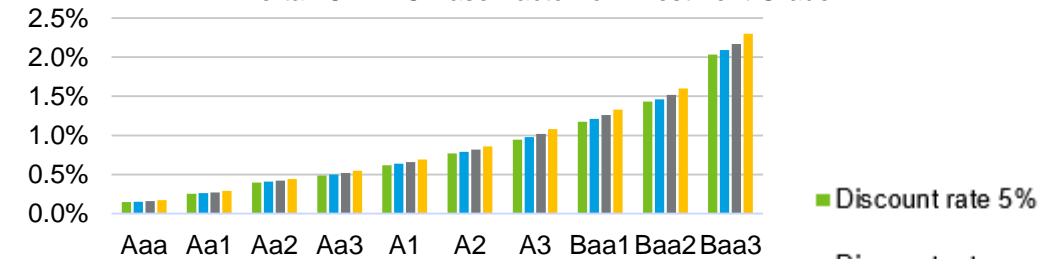
## Discount rate

- » Used to calculate the net present value of projected cash flows.
- » MA recognizes the need to parameterize the discount rate with a long-term perspective of long-term interest rates, and the desire for this parameter to be relatively stable while also allowing a closer reflection of the current, low-rate, environment
  - 2000–2020 (3.47%) used in developing MA proposed C1 base factors under guidance of NAIC during the Life Risk-Based Capital (E) Working Group meeting on April 22, 2021
- » Compared with the discount rate of 3.47%
  - 1993–2013 used by the Academy (5%) decreases C1 base factors by
    - › 6-7% for investment grade
    - › 3-6% for high-yield
  - 1993–2020 (4.32%) decreases C1 base factors by
    - › 2-6% for investment grade
    - › 2-3% for high-yield
  - 2010-2020 (2.25%) increases C1 base factors by
    - › 5-7% for investment grade
    - › 3-5% for high-yield

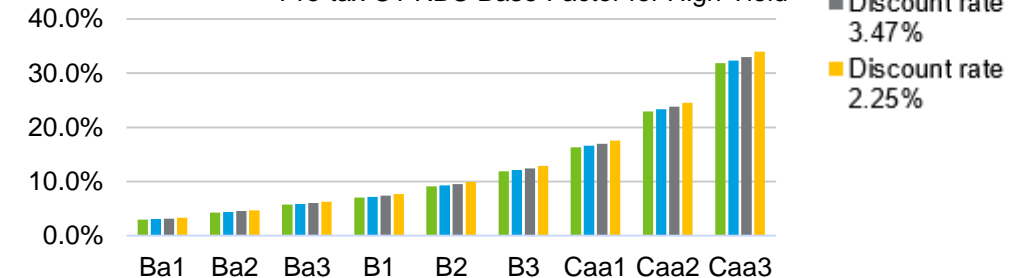
10-year USD Swap Rate



Pre-tax C1 RBC Base Factor for Investment Grade



Pre-tax C1 RBC Base Factor for High Yield



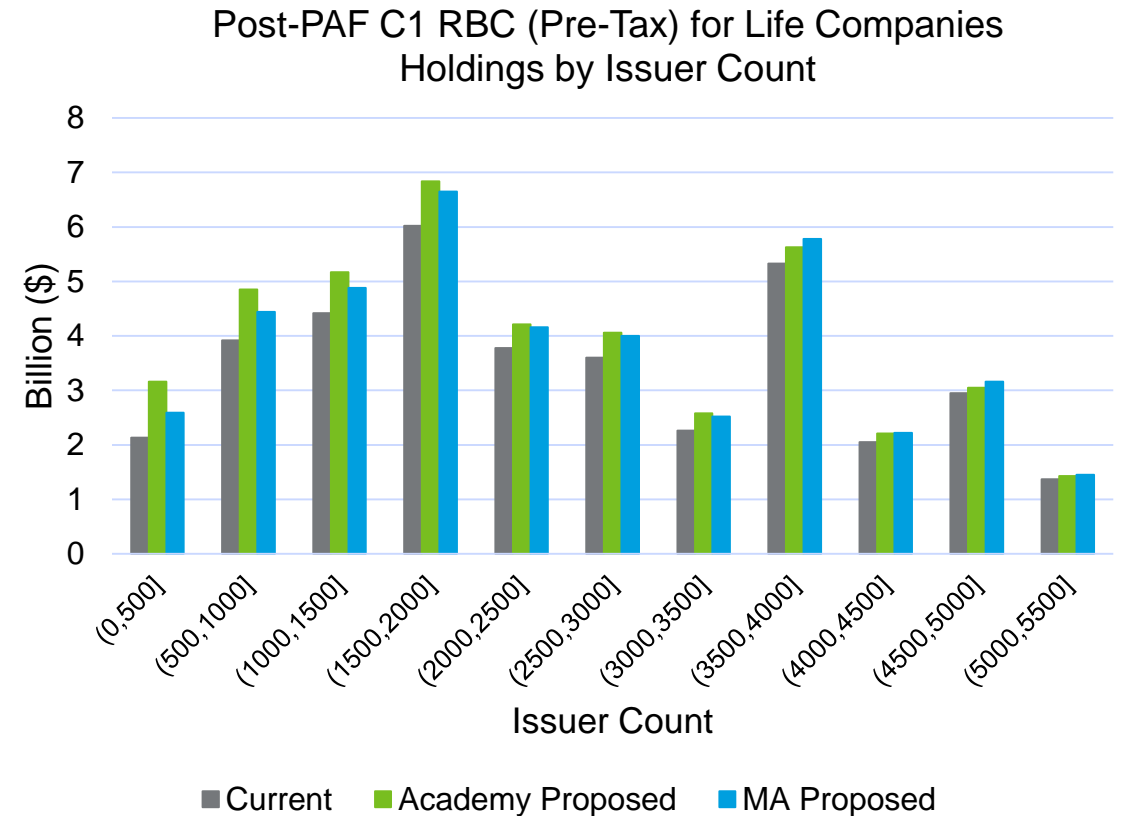
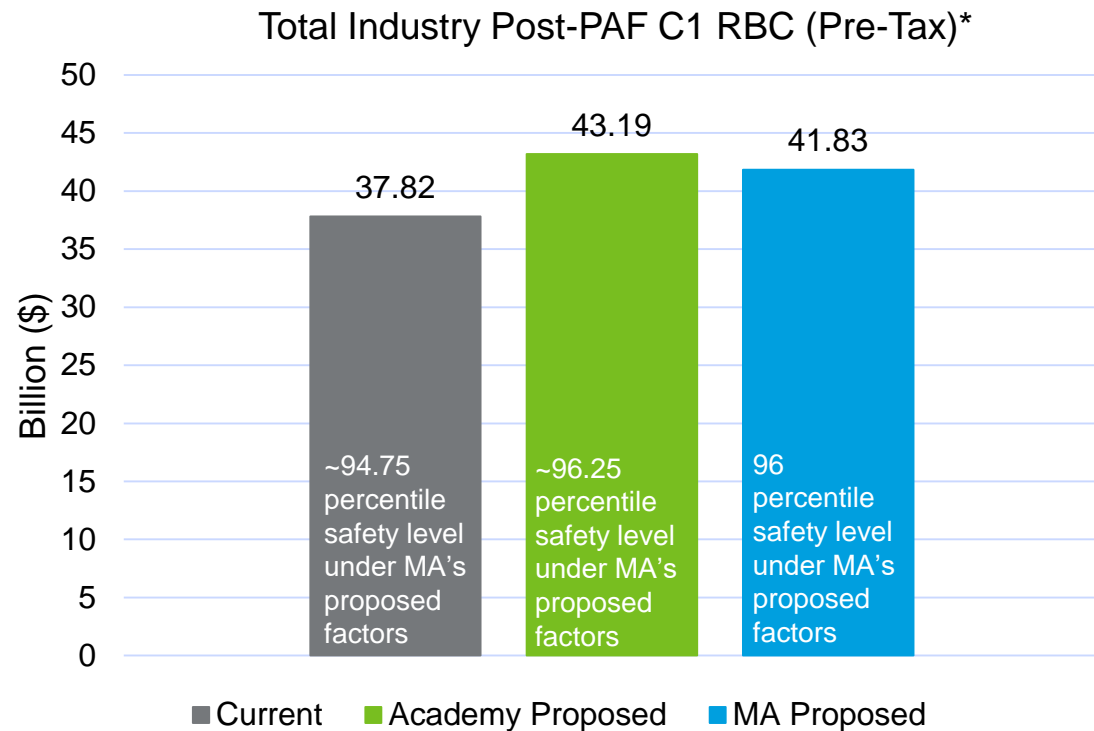
6

Recap



# Post-PAF C1 RBC Industry Impact – Complete Portfolio Holdings

Post-PAF RBC proposed by MA is higher than the current level



\*Data on ~94% life companies in US that have reported, which includes over 99% of the industry BACV as of 03/19/2021

# Summary of MA Proposed C1 Factors and their Impact

Data better represents historical experience of life insurers' holdings; methodologies better capture issuer diversification

C1 base factors & PAFs more accurately reflect empirically observed default rates, default correlations, & diversification

More accurate C1 base factors and PAFs; better aligned with insolvency risk; reduced risk-shifting incentives

## » Impact on post-PAF C1 RBC

- Higher post-PAF RBC, on average, across the life industry compared to current formula
- Larger post-PAF RBC increase compared to current formula, on average, for insurers with small and medium number of issuers, but much less so than that under Academy's proposal

## » Limitations of economic state model and their impact on accuracy of C1 base factors & PAFs

- The economic state model overstates diversification across issuers relative to that observed empirically, resulting in
  - › Understatement of credit losses in C1 base factors, all else equal
  - › PAFs that are overly punitive (lenient) to portfolios with a smaller (larger) number of issuers
- Economic Scalars, which are part of the economic state model under the Academy's proposal, result in counterfactual increases and decreases to the C1 base factors across the NAIC designation categories. They lead to an overall flattening of high yield C1 base factors relative to investment grade, and under certain parameterizations C1 base factors that are non-monotonic.

## » Impact of replacing the economic state model with MA proposed correlation model

- MA proposed correlation model more accurately reflects empirically observed default correlations and issuer diversification benefits, and that addresses all aforesaid limitations of the economic state model. As a result:
  - › MA proposed C1 base factors are more conservative and more differentiated across NAIC designation categories than those implied by the economic state model.
  - › MA proposed PAFs more accurately reflect issuer diversification benefits and are less punitive (lenient) to portfolios with a small (larger) number of issuers, relative to those from the Academy's proposal.

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MA C1 Factors with Risk Premium (RP) Sensitivity Analysis and  
Override of Portfolio Adjustment Factors (PAFs)  
For Discussion with Life Risk-Based Capital (E) Working Group

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# Requested Sensitivity Analysis of MA C1 Factors

As requested by Life Risk-Based Capital (E) Working Group on May 20, 2021

1. Sensitivity analysis of MA C1 factors with Risk Premium changed from expected loss plus 0.5 standard deviation to 60<sup>th</sup> percentile while maintaining other MA targeted modifications
  - Increases and flattens the base factors. The factors are less differentiated across NAIC designations, resulting in lower rated credit becoming more attractive on a relative basis
  - Base factors increase by ~21% for investment grade NAIC designations, and ~11% for high yield
  - The increase in Post-PAF C1 RBC range from 9% (for portfolios with lower NAIC rated issuers) to 37% (for portfolios with higher NAIC rated issuers)
2. Analysis of post-PAF RBC with portfolio adjustment factor (PAF) overridden for portfolios with fewer than 50 issuers (106 life portfolios; Book Adjusted Carrying Values range from \$79K to \$877M)
  - MA PAF-override post-PAF C1 RBC is, in general, higher than under the current formula, and the increase continues to be relatively evenly distributed across life companies of different sizes
  - To facilitate comparison, the Academy's PAF-override post-PAF C1 RBC is analyzed, and is found to remain disproportionately higher for small and medium sized life portfolios

**For articulation of defined scope and performance criteria associated with methodology, data, and limitations associated with MA C1 factors, see [‘Moody's Analytics' Report on Proposed Bond Factor Revisions’](#)**

# Overview of Risk Premium (Recap)

One of several interconnected modifications with largest impact to MA C1 factors

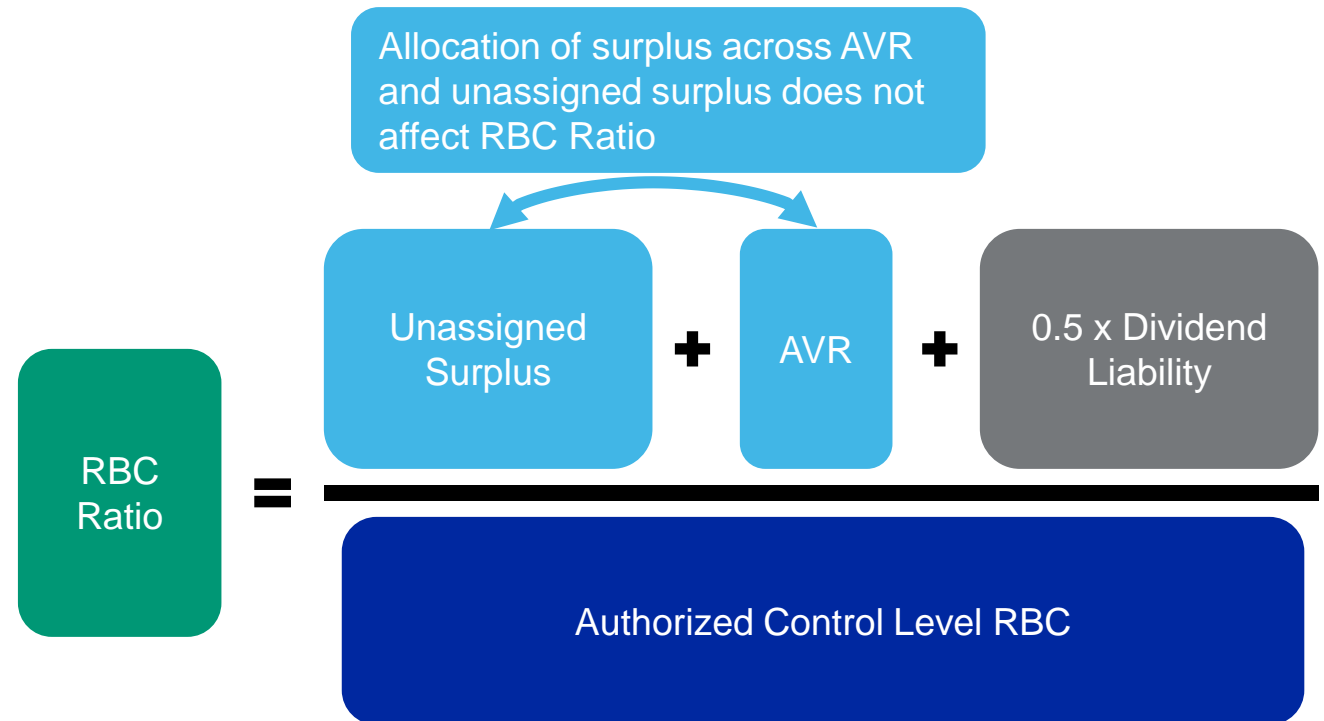
- » MA understands C1 RBC is the minimum required capital above statutory reserves to buffer against a tail loss
  - Risk Premium acts as an offset to C1 RBC
- » Variation in industry reserving standards
  - VM-20 and VM-21 explicitly require that reserves cover CTE 70, or approximately 88th percentile, default loss, without accounting for any assets backing Asset Valuation Reserve (AVR)
  - VM-20 applies to new life products after 2017; with increasing coverage for new bond purchases
  - New reserve standards such as VM-22 are also expected to follow the same framework and cover CTE 70 default loss
  - Existing policies follow industry reserving standards, which generally aim to cover moderately adverse conditions; AVR used in Cash Flow Testing (CFT) of these reserves is excluded from Total Adjusted Capital (TAC), and thus functions as additional CFT reserves rather than available capital
- » MA's Risk Premium
  - Together with several other interconnected modifications, MA's Risk Premium was set at **expected loss plus 0.5 standard deviation** recognizing variation in industry reserving standards and to closer align with PBR and other reserving standards generally aimed to cover moderately adverse conditions



# Aligning C1 Factors with AVR (Recap)

The Academy raised concerns related to Risk Premium and AVR consistency

- » AVR is an allocation of surplus to smooth the cyclical of credit default events
- » Allocation of surplus across AVR and unassigned surplus does not affect RBC Ratio
- » AVR does not enter the Academy or MA's C1 formula
- » While historically the basic contribution of AVR has been set to be the same as Risk Premium, the alignment between AVR and Risk Premium is not relevant to the RBC framework, whose purpose is to help identify potentially weakly capitalized companies



# C1 Base Factors

Sensitivity analysis with Risk Premium set at 60<sup>th</sup> percentile

- » With the Risk Premium set at the 60<sup>th</sup> percentile, base factors increase across the board
- » The factors are less differentiated across NAIC designations, resulting in lower rated credit being more attractive on a relative basis
- » Factors increase by around 21% for investment grade NAIC designations, and around 11% for high yield

MIS Rating	Current Base Factors	Academy Proposed Base Factors	MA Base Factors	MA Base Factors with Risk Premium at 60 <sup>th</sup> Percentile
Aaa	0.390%	0.290%	0.158%	0.204%
Aa1	0.390%	0.420%	0.271%	0.334%
Aa2	0.390%	0.550%	0.419%	0.501%
Aa3	0.390%	0.700%	0.523%	0.623%
A1	0.390%	0.840%	0.657%	0.787%
A2	0.390%	1.020%	0.816%	0.976%
A3	0.390%	1.190%	1.016%	1.217%
Baa1	1.260%	1.370%	1.261%	1.505%
Baa2	1.260%	1.630%	1.523%	1.782%
Baa3	1.260%	1.940%	2.168%	2.562%
Ba1	4.460%	3.650%	3.151%	3.692%
Ba2	4.460%	4.660%	4.537%	5.160%
Ba3	4.460%	5.970%	6.017%	6.858%
B1	9.700%	6.150%	7.386%	8.404%
B2	9.700%	8.320%	9.535%	10.692%
B3	9.700%	11.480%	12.428%	13.637%
Caa1	22.310%	16.830%	16.942%	18.328%
Caa2	22.310%	22.800%	23.798%	25.209%
Caa3	22.310%	33.860%	32.975%	34.720%

# PAF-Override for Portfolios with Fewer than 50 Issuers

Assigned the PAF level of a portfolio with 50 issuers

## PAFs in step function form

# of Issuers in the Portfolio	Current		Academy		MA			
					Risk Premium at Expected Loss Plus 0.5 Std Dev		Risk Premium at 60%ile	
	PAF	PAF	PAF Override	PAF	PAF Override	PAF	PAF Override	
Up to 10	2.50	7.50	2.90	5.87	2.40	6.24	2.43	
Next 40	2.50	1.75	2.90	1.53	2.40	1.48	2.43	
Next 50	1.30	1.75	1.75	1.53	1.53	1.48	1.48	
Next 100	1.00	0.90	0.90	0.85	0.85	0.86	0.86	
Next 300	0.97	0.85	0.85	0.85	0.85	0.86	0.86	
Over 500	0.90	0.75	0.75	0.82	0.82	0.83	0.83	

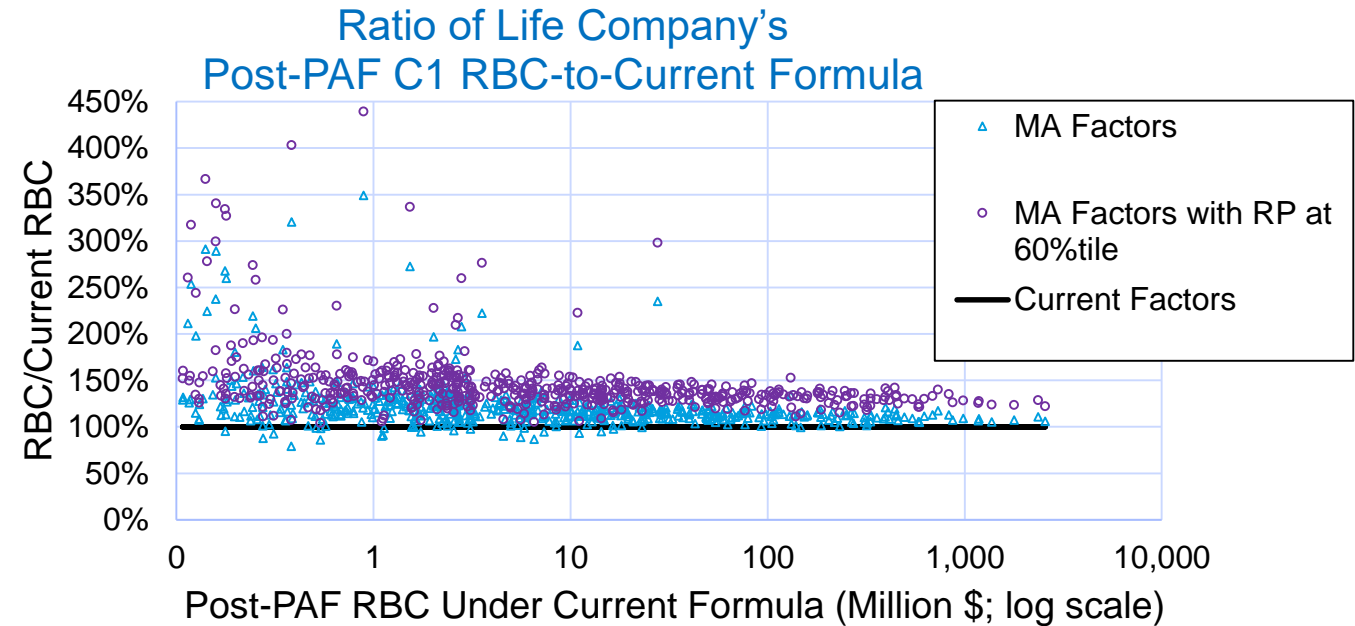
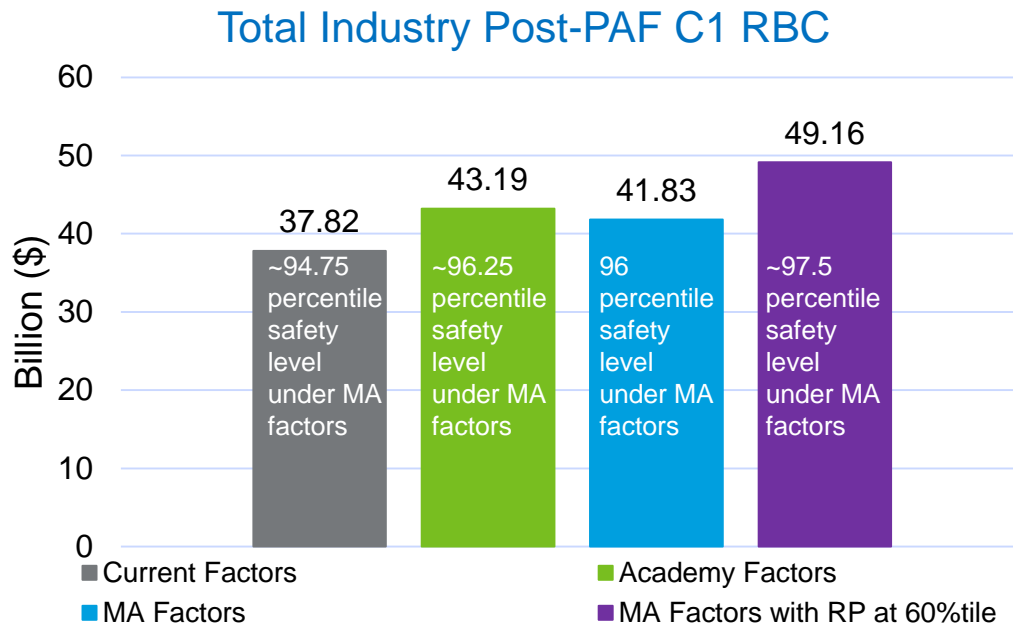
## PAFs in final form

# of Issuers in the Portfolio	Current		Academy		MA			
					Risk Premium at Expected Loss Plus 0.5 Std Dev		Risk Premium at 60%ile	
	PAF	PAF	PAF Override	PAF	PAF Override	PAF	PAF Override	
10	2.50	7.50	2.90	5.87	2.40	6.24	2.43	
50	2.50	2.90	2.90	2.40	2.40	2.43	2.43	
100	1.90	2.33	2.33	1.96	1.96	1.96	1.96	
300	1.30	1.36	1.36	1.22	1.22	1.23	1.23	
500	1.16	1.16	1.16	1.07	1.07	1.08	1.08	
1000	1.03	0.95	0.95	0.95	0.95	0.95	0.95	
2000	0.97	0.85	0.85	0.88	0.88	0.89	0.89	
3000	0.94	0.82	0.82	0.86	0.86	0.87	0.87	

# Sensitivity Analysis with Risk Premium set at 60<sup>th</sup> percentile

## Without PAF-override

- » Total industry post-PAF C1 RBC increases from \$41.83B to \$49.16B when MA formula's Risk Premium is set at 60<sup>th</sup> percentile
- » The increase in Post-PAF C1 RBC ranges from 9% (for portfolios with lower NAIC rated issuers) to 37% (for portfolios with higher NAIC rated issuers)



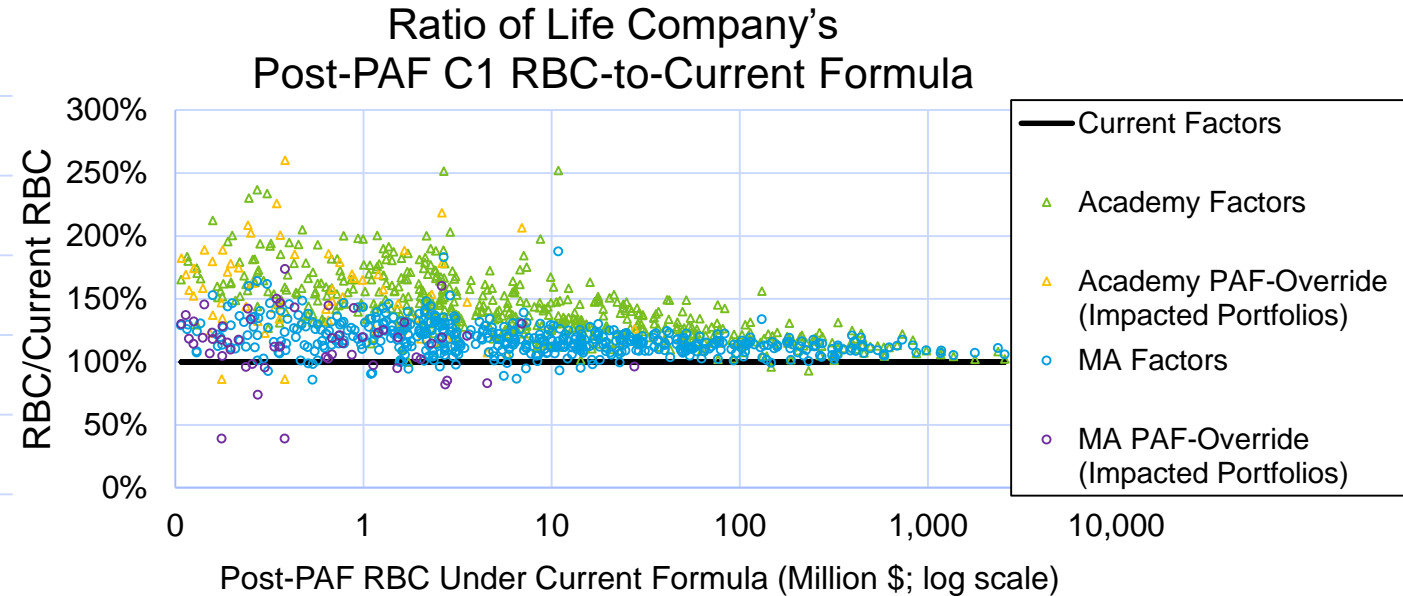
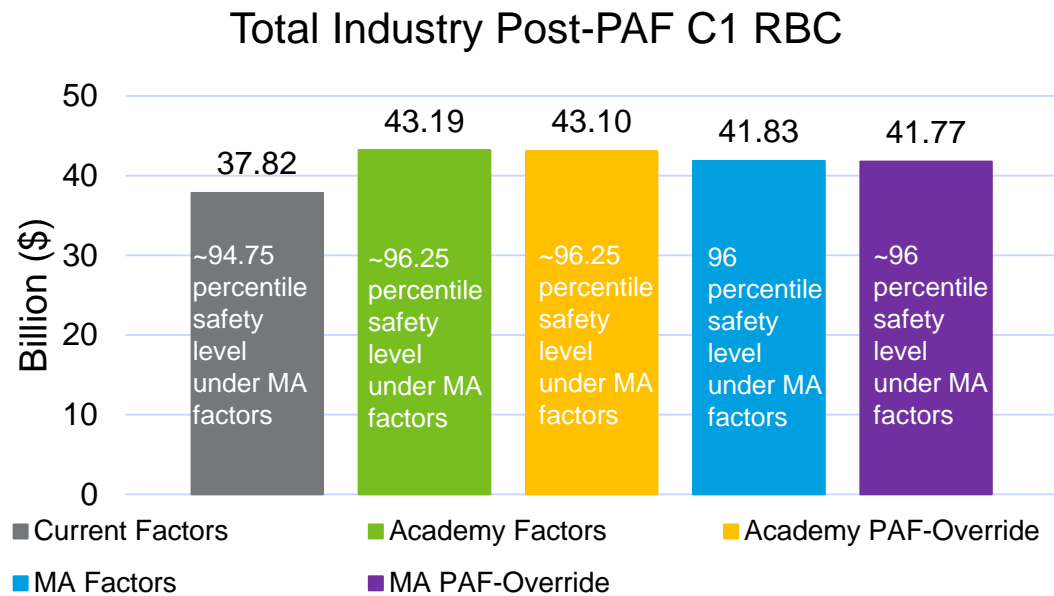
Note 1: Holdings includes all exposures on Schedule D Part 1 excluding US government bonds.

Note 2: For visual ease, the right-hand graph excludes portfolios with less than \$100K post-PAF RBC under the current formula.

# Impact of PAF-Override for Portfolios with fewer than 50 Issuers

While keeping MA's Risk Premium set at expected loss plus 0.5 standard deviation

- » PAF-override decreases Post-PAF RBC for 106 portfolios with fewer than 50 issuers; Book Adjusted Carrying Values ranges from \$79K to \$877M
- » Total industry PAF-override post-PAF C1 RBC impact is limited under the MA and Academy factors
- » MA PAF-override post-PAF C1 RBC is, in general, higher than under the current formula; the increase continues to be relatively evenly distributed across life companies of different sizes
- » To facilitate comparison of the two proposals, the Academy's PAF-override post-PAF C1 RBC is analyzed and found to be, in general, higher than under the current formula; the analysis continues to show the disproportionate increase for small and medium sized life portfolios



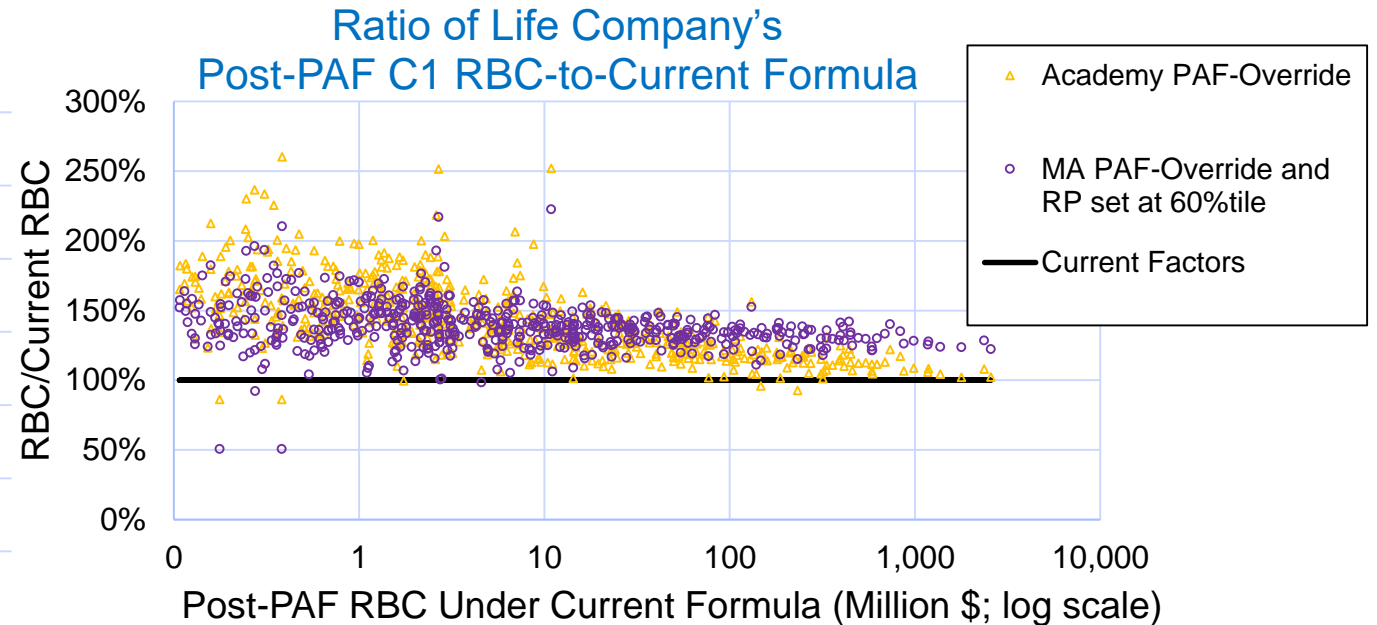
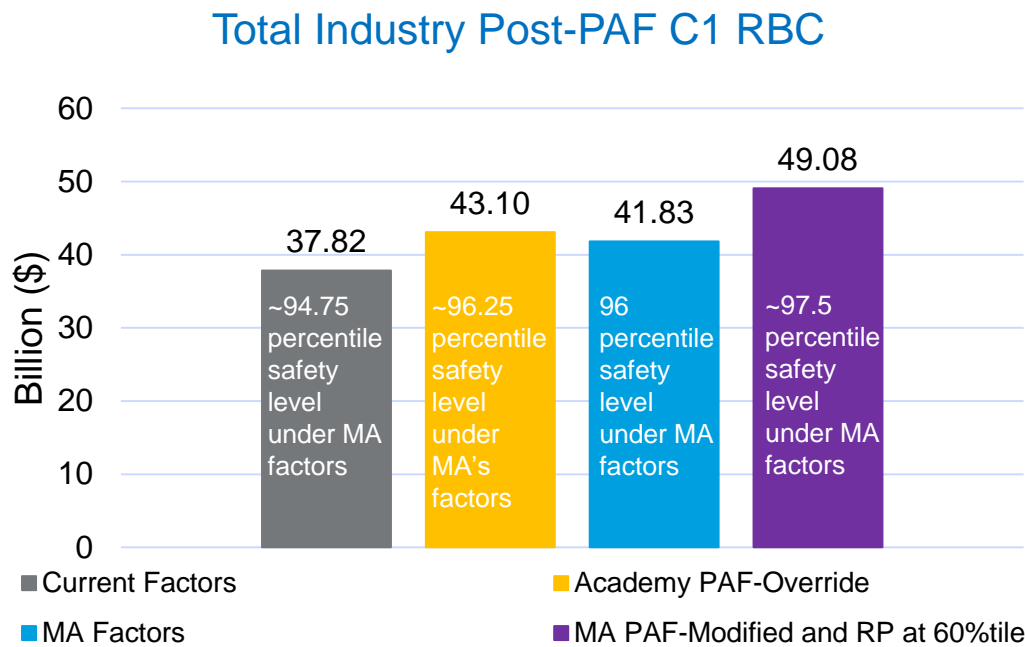
Note 1: Holdings includes all exposures on Schedule D Part 1 excluding US government bonds.

Note 2: For visual ease, the right-hand graph excludes portfolios with less than \$100K post-PAF RBC under the current formula.

# Combined Impact

With Risk Premium set at the 60<sup>th</sup> percentile and PAF-override

- » MA formula with Risk Premium and PAF-override set at the 60<sup>th</sup> percentile results in post-PAF C1 RBC that is, in general, meaningfully higher than under the current formula, and relatively evenly distributed across life companies of different sizes
- » To facilitate comparison of the two proposals, the Academy’s PAF-override post-PAF C1 RBC is analyzed and found to be higher than under the current formula and the increase remains disproportionately larger for small and medium sized life portfolios



Note 1: Holdings includes all exposures on Schedule D Part 1 excluding US government bonds.

Note 2: For visual ease, the right-hand graph excludes portfolios with less than \$100K post-PAF RBC under the current formula.

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