

Chairman of :
NAIC Capital Adequacy (E) Task Force
NAIC Property & Casualty Risk-Based
Capital (E) Working Group

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March 15, 2022

2022

RBC
Risk-Based Capital

Overview and
Upcoming Changes

Objectives

- What is RBC?
- Understand the RBC Ratio
- Identify the differences in the RBC action levels
- Understand the RBC Components
- Upcoming Changes of the RBC Formula



Capital Adequacy Standards

- Relates to risk
- Raises a safety net for insurers
- Are uniform among states
- Provides regulatory authority for timely action
- RBC formula does not account for all risk and may not be completely accurate for all companies but is reasonably accurate for most companies

RBC is NOT

- An early warning device
- Designed to detect fraud
- A stand-alone tool for solvency
- Designed to fit every scenario and capture every possible risk
- Public Information (RBC Filing Itself)
- A Ranking Mechanism

Total Adjusted Capital

- Capital and Surplus of the company is taken from the Annual Statement Filing
- Then, adjusted for:
 - Non-tabular discount
 - Affiliated amount
 - AVR & Dividend Liability of Life Subsidiaries
 - Capital Notes
- Deferred taxes Sensitivity tests do not impact the RBC calculated

Authorized Control Level Risks

- **Subsidiary Risk (R0)**

**Asset Risk
(R1, R2, R3)**

**Underwriting
Risk (R4, R5)**

**Catastrophe
Risk (Rcat)**

Operational Risk

RBC Trend Test

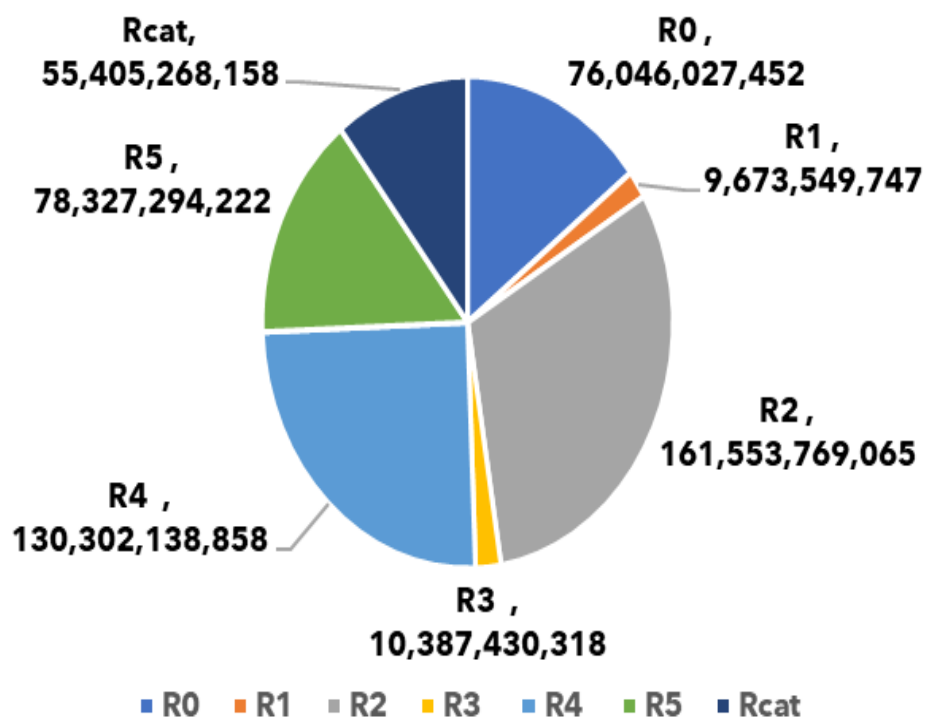
- RBC Ratio Between 200 and 300%
- Combined Ratio > 120%
- If both are met, then the trend test triggers the RBC Company Action Level

Action Levels

RBC Ratio	Action Level
> 200%	No Action Required
150% - 200%	Company Action Level
100% - 150%	Regulatory Action Level
70% - 100%	Authorized Control Level
< 70%	Mandatory Control Level

Risk Components

2020 Aggregated P&C RBC Data



Property/Casualty Formula

R0	Subsidiary Insurance Companies & Misc. Other Amounts
R1	Asset Risk - Fixed Income
R2	Asset Risk - Equity
R3	Asset Risk - Credit
R4	Underwriting Risk - Reserves
R5	Underwriting Risk - Net Written Premiums
Rcat	Catastrophe Risk

Operational Risk was implemented in 2018 as an additional 3% add on.

RBC Statistics

	2020	2019	2018	2017
No Action	2,411	2,435	2,400	2,412
Company - Trend Test	24	17	17	16
Company Action Level	15	9	14	28
Regulatory Action Level	4	8	11	6
Authorized Control Level	3	2	1	5
Mandatory Control Level	20	19	22	19
Total	2,477	2,490	2,465	2,486
% No Action	97.34%	97.79%	97.36%	97.02%

2020 Property Casualty RBC Statistics

Covariance Adjustment

- Reduces aggregate amount of RBC recognizing not all risk components will move in the same direction at the same time.
- Formula of the Covariance Adjustment including Basic Operational Risk:
 - Operational Risk $+R_0 + \text{SQRT}((R_1)^2 + (R_2)^2 + (R_3)^2 + (R_4)^2 + (R_5)^2 + (R_{\text{cat}})^2)$

RBC Ratio

capital and surplus
adjusted for
specified amounts

Total Adjusted Capital

Authorized Control Level
Including Basic Operational Risk

Risk
components

RBC Model Act 312

Model Regulation Service—January 2012

RISK-BASED CAPITAL (RBC) FOR INSURERS MODEL ACT

Table of Contents

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Section 12.	Severability Clause
Section 13.	Notices
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R0 Subsidiary Insurance Companies & Misc. Other Amounts

- Two Broad Categories of Affiliated Investments:
 - Insurance affiliates subject to RBC:
 - RBC charge is based on the RBC After Covariance prorated for percentage of ownership
 - Non-insurance affiliates:
 - Book/adjusted carrying value x factor
- Misc. Off-Balance Sheet Items:
 - Non-controlled assets
 - Guarantees for Affiliates
 - Contingent Liabilities
 - Deferred Tax Assets

R1 Fixed Income Assets

- Modified the bond classification from 6 to 20 designations.
 - Category 1.A through 2.C factors are based on cash flow modeling
 - Category 3.A through 6 are reported at the lower of amortized cost or fair value
 - U.S. Government Bonds, Other U.S. Government Obligations/Full Faith and Credit Exempt Money Market Funds are exempted from RBC
- Bond Size Factors:
 - 801 or less issuers receive additional charge
 - 803 or more will receive a discount

R2 Equity Assets

- Unaffiliated Preferred Stocks
 - Data comes from Annual Statement Schedule D, Part 2, Section 1
 - 6 Rating Categories
 - Factors = original bond factor and capped at 30%
- Unaffiliated Common Stocks
 - Data comes from Annual Statement Schedule D, Summary
 - Factors = 15%
- Other Long-term and Miscellaneous Assets

R3 Credit Risk

Reinsurer Designation Equivalent Rating Category and Corresponding Factors—For RBC R3 Credit Risk Charge						
Description	Secure 1	Secure 2	Secure 3	Secure 4	Secure 5	Vulnerable 6 or Unrated
Best	A++	A+	A	A-	B++, B+	B, B-, C++, C+, C, C-, D, E, F
S&P	AAA	AA+, AA, AA-	A+, A	A-	BBB+, BBB, BBB-	BB+, BB, BB-, B+, B, B-, CCC, CC, C, D, R
Moody's	<u>Aaa</u>	Aa1, Aa2, Aa3	A1, A2	A3	Baa1, Baa2, Baa3	Ba1, Ba2, Ba3, B1, B2, B3, <u>Caa</u> , Ca, C
Fitch	AAA	AA+, AA, AA-	A+, A	A-	BBB+, BBB, BBB-	BB+, BB, BB-, B+, B, B-, CCC, CC, C, D, R
Collateralized Amounts Factors	3.6%	4.1%	4.8%	5.0%	5.0%	5.0%
Uncollateralized Amounts Factors	3.6%	4.1%	4.8%	5.3%	7.1%	14.0%

- Reinsurance Recoverables
 - Recoverables for reinsurers
 - Risk-Based Approach
 - RBC charge is detailed in Annual Statement
 - Ratings based on interactive communication between rating agency and the assuming insurer
- Miscellaneous Recoverables
 - Recoverables other than reinsurers
 - Flat charge
- Health Credit Risk
 - Credit risk related to health business written by a property insurer
 - Flat charge

R4 Underwriting Risk - Reserves

- Includes:
 - ½ of Reinsurance RBC
 - Total Adjusted Unpaid Loss/Expense Reserve RBC
 - Excessive Premium Growth
 - A&H Claims Reserves
- Quantified separately by each line of business using ten-year Schedule P data

R5 Underwriting Risk - Net Written Premium

- Includes:
 - Total Adjusted Net Written Premium RBC
 - Excessive Premium Growth - Net Written Premium Charge
 - Total Net Health Premium RBC
 - Health Stabilization Reserves
- Reflects the risk of potential underwriting losses

Rcat Catastrophe Risk

- Only Earthquake and Hurricane are included in the Rcat
 - Wildfire for informational only in 2022 reporting
 - Additional perils will be evaluated in the near future
- Charge:
 - 100% of modeled net loss for the worst year in 100
 - Contingent credit risk
 - Reduce to 1.8% from 4.8% to address the industry duplicative concern
 - Exemption interrogatories are required to be completed if minimum or no cat exposures

Operational Risk

- Add-on (% of RBC after covariance) approach adopted for 2018
 - 3% factor
 - C-4a offset for Life RBC subsidiaries
- Some significant operational risks include:
 - Cyber
 - Legal / Contractual
 - Delegation / Outsourcing
 - Political
- Hard to quantify

Upcoming Changes

- Proposals:
 - 2021-14-P (R3 Factor Adjustment)
 - 2021-15-CR (Adding KCC Model)
 - 2021-17-CR (Adding Wildfire Peril For Informational Purposes Only)
- Items Under Discussion
 - Academy Underwriting Risk Projects
 - Underwriting Risk Line 4 Factors
 - Investment Income Adjustment
 - Loss/Premium Concentration Factor
 - Possibility of Adding Flood Peril in Rcat Component
 - Modify the Affiliated Investment Instructions and Structure

Proposal: 2021-14-P (R3 Factor Adjustment)

- Intend to eliminate the double-counting effect of the operational risk charge in R3
- Insignificant Impact to the RBC based on the analysis result

Description	Secure 1	Secure 2	Secure 3	Secure 4	Secure 5	Vulnerable 6 or Unrated
A.M. Best	A++	A+	A	A-	B++, B+	B, B-, C++, C+, C, C-, D, E, F
Standard & Poor's	AAA	AA+, AA, AA-	A+, A	A-	BBB+, BBB, BBB-	BB+, BB, BB-, B+, B, B-, CCC, CC, C, D, R
Moody's	Aaa	Aa1, Aa2, Aa3	A1, A2	A3	Baa1, Baa2, Baa3	Ba1, Ba2, Ba3, B1, B2, B3, Caa, Ca, C
Fitch	AAA	AA+, AA, AA-	A+, A	A-	BBB+, BBB, BBB-	BB+, BB, BB-, B+, B, B-, CCC, CC, C, D, R
Collateralized Amounts Factors	1.6%	2.1%	2.8%	3.0%	3.0%	3.0%
Uncollateralized Amounts Factors	1.6%	2.1%	2.8%	3.3%	5.1%	12.0%

Proposal: 2021-15-CR (Adding KCC Model)

- Intend to add KCC catastrophe model as one of the approved models
- KCC Model has been reviewed and verified by the Florida Commission

Proposal: 2021-17-CR (Adding Wildfire Peril For Informational Purposes Only)

- Identified Wildfire as one of the major drivers of the U.S. Insured Losses
- Limitations exist in the current model
- Continue modify the Instructions and Structure during the for informational purposes only period



Academy Underwriting Risk Projects

- Underwriting Risk Factors (RRF and PRF)
 - RBC Line 4 on PR017 and PR018
 - [Update to Property and Casualty Risk-Based Capital Underwriting Factors Experience Through December 31, 2017](#)
- Investment Income Adjustment (IIA)
 - RBC Line 8 on PR017 and Line 7 on PR018
 - Report will be available in the upcoming months
- Loss Concentration Factor (LCF) and Premium Concentration Factor (PCF)
 - RBC Line 14 on PR017 and PR018
 - Report will be available by the end of this year
- Industry Average Development and Industry Loss & Loss Adjustment Expense Ratio
 - RBC Line 1 on PR017 and PR018
 - Evaluate the methodology

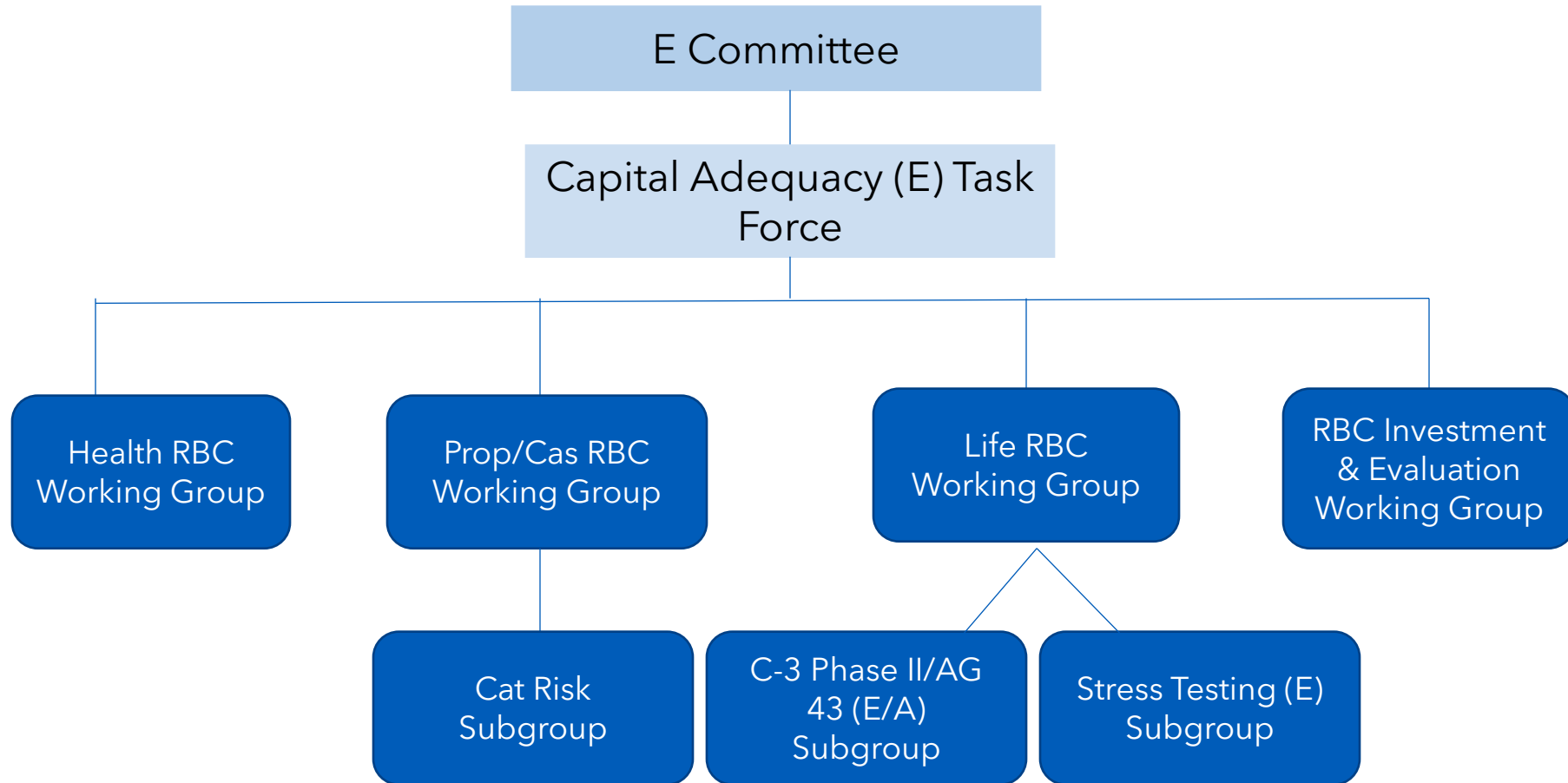
Possibility of Adding Flood Peril in Rcat

- Flood Model Review Phases
 - Introduction to Flood Models
 - Technical Reviews
 - Develop Flood Rcat Structure and Instructions
 - Expose Flood Structure and Instructions
 - Implement Flood Peril in Rcat For Informational Purposes only in 2023 RBC Reporting



Affiliated Investments

- Affiliated Investments Ad Hoc Group was created to review RBC instructions and Structure
 - Framework Document is under development
 - Document will be shared with the P/C RBC WG for further review
- Changes Include:
 - Changing valuation basis
 - Expanding the affiliate types
 - Adding non-admitted insurance affiliates to Total Adjusted Capital
- Expected Completion Date: Year-End 2023 or Later



PC RBC Working Group Webpage

Property and Casualty Risk-Based Capital (E) Working Group

Financial Condition (E) Committee



2021 Membership

2022 Adopted Charges

The **Property and Casualty Risk-Based Capital (E) Working Group** of the Capital Adequacy (E) Task Force will:

1. Evaluate refinements to the existing NAIC risk-based capital (RBC) formulas implemented in prior year. Forward the final version of the structure of the current year life and fraternal, property/casualty (P/C) and health RBC formulas to the Financial Condition (E) Committee by June.
2. Consider improvements and revisions to the various RBC blanks to: 1) conform the RBC blanks to changes made in other areas of the NAIC to promote uniformity; and 2) oversee the development of additional reporting formats within the existing RBC blanks as needs are identified. Any proposal that affects the RBC structure must be adopted no later than April 30 in the year of the change and adopted changes will be forwarded to the Financial Condition (E) Committee by the next scheduled meeting or conference call. Any adoptions made to the annual financial statement blanks or statutory accounting principles that affect an RBC change adopted by April 30 and results in an amended change may be considered by July 30 for those exceptions where the Capital Adequacy (E) Task Force votes to pursue by super-majority (two-thirds) consent of members present, no later than June 30 for the current reporting year.
3. Monitor changes in accounting and reporting requirements resulting from the adoption and continuing maintenance of the revised *Accounting Practices and*

Meeting Materials

Exposure Drafts

Documents

Calendar

Public Webex Meeting

Monday, October 25, 2021

2:00 PM ET, 1:00 PM CT, 12:00 PM MT, 11:00 AM PT

Expected Length of Call: 1 hr

[Webex Link](#)

In lieu of meeting at the 2021 Fall National Meeting

The purpose of the call is to 1) consider adoption of its Summer National Meeting minutes; 2) hear an update from the Catastrophe Risk (E) Subgroup on the development of the wildfire risk charge; 3) consider exposure of draft recommendation to the Restructuring Mechanism (E) Subgroup; 4) consider exposure of Proposal 2021-14-P (R3 Factor Adjustment); 5) hear updates on current P/C RBC projects from the American Academy of Actuaries.

- [Agenda](#)
- [Agenda & Materials](#)
- [Summary](#)
- [Minutes](#)

Public Webex Meeting

Monday, March 15, 2021

9:00 AM ET, 8:00 AM CT, 7:00 AM MT, 6:00 AM PT

Expected Length of Call: 1 hr

[Webex Link](#)

Interim meeting in lieu of the Spring National Meeting.

- [031521 PC RBC agenda.pdf](#)
- [031521 PC RBC agenda & materials_0.pdf](#)

RELATED NAIC PUBLICATIONS

Minutes for recent national meetings are available for meeting attendees via an event

Adopted Proposal

CAPITAL ADEQUACY (E) TASK FORCE - ADOPTED MODIFICATIONS TO RISK-BASED CAPITAL FORMULAS

Capital Adequacy (E) Task Force

Adopted Modifications to Risk-Based Capital Formulas (Health, Life and Property/Casualty)

Last Updated July 28, 2021

This listing does not include adopted proposals for Risk-Based Capital for the years 2019 and prior.

Proposals are listed in "Effective Date" order followed by the "Date Adopted."

Statement Type:

CA = All Formulas; **H** = Health; **L/F** = Life/Fraternal; **P/C** = Property/Casualty

PROPOSAL NO.	EFFECTIVE DATE	DESCRIPTION	DATE ADOPTED	FORMULA AFFECTED
2021-04-CA	2021 Year-End	This proposal includes a .5% investment income adjustment to the the Health Underwriting Risk Factors for Comprehensive Medical, Medicare Supplement and Dental/Vision lines of business across all lines of business.	07/28/2021	CA
2021-07-CA	2021Year-End	The proposal updates the Receivables for Securities factors across all lines of business.	06/30/2021	CA
2021-09-H	2021 Year-End	The proposal incorporates the 20 designation bond factors for the Off-Balance Sheet Collateral and Schedule DL, Bonds and Asset Concentration pages in the health formula.	06/30/2021	H
2021-06-L	2021 Year-End	This proposal updates the RBC formula for real estate to reflect updated experience and analysis.	06/30/2021	L
2021-11-L	2021 Year-End	The proposal incorporates the 20 designation bond factors for the Off-Balance Sheet Collateral and Schedule DL, Bonds and Asset Concentration pages in the life formula.	06/30/2021	L
2021-12-L	2021 Year-End	This proposal changes the description on Line 15 on page LR016 to allow for the inclusion of amounts held for reciprocal jurisdiction reinsurance.	06/30/2021	L
2021-13-L	2021 Year-End	This proposal presents base factors and correlation and guardrail factors for the longevity risk charge.	06/30/2021	L

Thank You
for attending the
Risk-Based Capital Overview and
Upcoming Changes