

Rating Agency Overview

BACE Spring Meeting April 11, 2019



Intro and Agenda

Section 1: Rating Agency Advisory Overview

Section 2: Reinsurance as Capital

Section 3: Rating Agency Overview

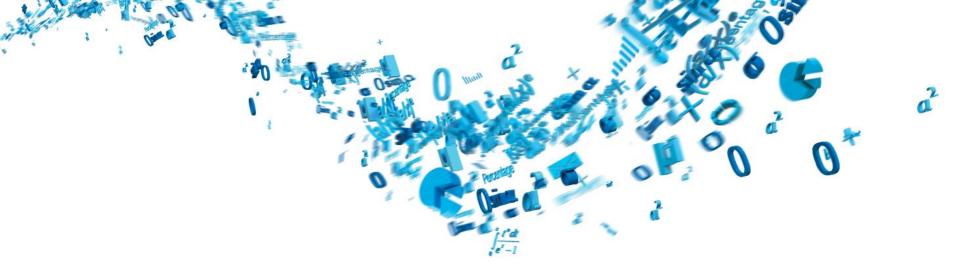
Section 4: AM Best Overview

Section 5: Rating Agency Hot Topics



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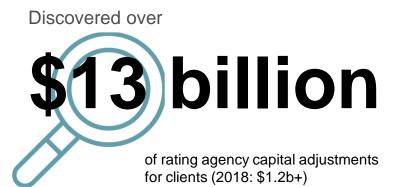




Rating Agency Advisory Overview



Rating Agency Advisory Practice Group





100 years of team experience

In assisting clients to achieve their rating objectives

Backgrounds include actuary, auditor, CPA, CFO, examiner, and ratings analyst

Involved in over

200 projects per year

Understanding developing criteria, emerging topics, and unique rating circumstances



Thought Leadership

130+ Client

Stochastic BCAR and BCRM Analyses



Criteria papers and benchmark studies in 2018





Overview of Rating Agency Advisory Services

Broad array of value added services

- Financial and qualitative rating analysis, including review of capital adequacy models (i.e., RBC, BCAR, S&P)
- Evaluate capital management strategies (pro forma BCAR / S&P capital, reinsurance impact analysis, capital allocation, etc.)
- Peer analyses by company profile and analyst, industry benchmarks, loss out/under performance (LOUPe)
- Develop strategies to enhance rating position
- Assist with development of rating presentations including prep session prior to meeting
- Assist with completing SRQ filing
- Provided benchmarking data of AM Best's building block assessments based on Aon's database of rated entities
- Updates to rating criteria / process and analysis on proposed changes (e.g., S&P new framework)
- Advanced notice of indicators of ratings pressure or challenges to ratings objectives
- Detailed Review of quarterly/annual financials in preparation for rating agency meetings

Our team provides value-add research such as:

- Catastrophe Risk Tolerance Study
- Observations A-, A and A+ rating trends—key drivers for upgrades and downgrades
- Evolving Criteria (annual publication on rating agency and regulatory developments)
- Bulletin on Stochastic BCAR Update
- Insights on Preparing an ORSA / ERM report
- Summary of AM Best Review/Preview Conference



Additional RAA Capital/Risk Management Services



Capital Efficiency

- Analyzing optimization of capitalization allocation among subsidiary of holding group
- Evaluating different capitalization alternatives such as reinsurance, additional debts, surplus notes, capital infusion from holding company
- Develop and evaluate capital management strategies to meet management's objectives

Premium Strategy

- Evaluating capital requirement for select lines of business
- Peer analysis benchmarking on capital adequacy, profitability and volatility measures
- Determine profitability among individual LOBs utilizing LOUPe Analysis

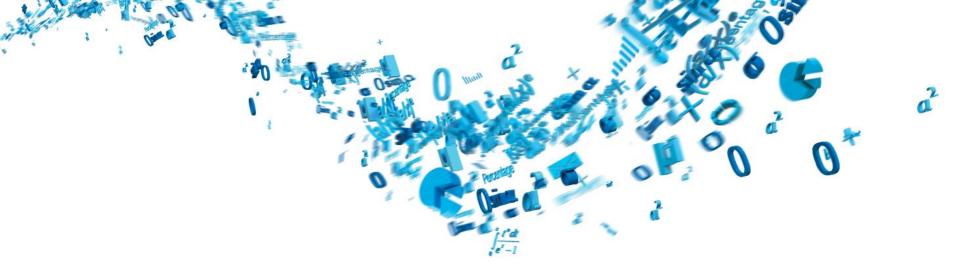
Reinsurance Solutions

- Analyzing reinsurance retention levels to maximize capital utilization
- Assessing impacts on return on equity based on different reinsurance structures
- Determining impact of reinsurance programs on financial statements

Enterprise Risk Management

- Prepare financial modeling stress testing
- Review Own Risk and Solvency Assessments (ORSA)
- Analysis on AM Best's ERM assessment based on Aon's internal RITE tool





Reinsurance as Capital



Capital Source Comparison

	Reinsurance	Equity	Debt
Shares in Fortune of Firm	Yes	Yes	No
Exit Strategy	Non-Renew	Buy Shares Back	Pay Off
Can Force Bankruptcy	No	No	Yes
Term	Generally annual; reprices annually	Perpetual	Specified maturity
Reduces Earnings Volatility	Yes	No	No
ROE Impact	Accretive or dilutive	Accretive or dilutive	Leverages ROE
Availability	Strong today; historically cyclical	Strongly cyclical	Cyclical
Cost	<10%	>15%	>8%

- The Reinsurance market remained the one 'capital market' open throughout the financial crisis
- Current pricing is generally preferable compared to the cost of issuing debt or raising capital
- Reinsurance can be reassessed annually to address changing needs of clients



Core Beliefs: Reinsurance Adds Shareholder Value

Shareholders value is created when insurers:

- Grow revenues and earnings at rates that beat inflation
- Earn returns greater than the cost of capital
- Produce consistent earnings with minimal volatility

Insurers that create value generally have:

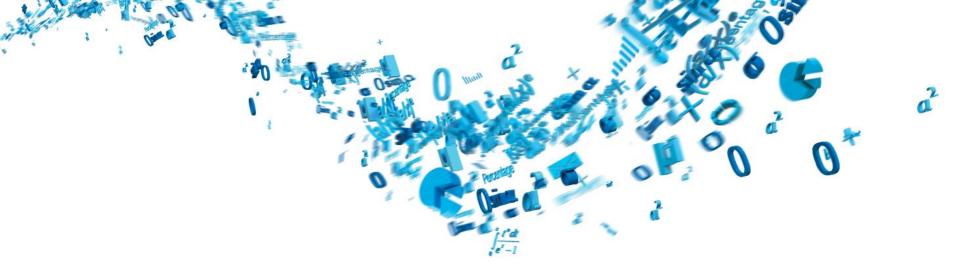
- Products or services that meet consistent or rising demand
- Clearly understandable value proposition
- Sustainable competitive advantages

Reinsurance can help

- Lowering the weighted average cost of capital
- Reducing earnings volatility
- Supporting new products to help drive revenue
- Supporting the value proposition of insurance: risk transferred for price
- Providing sustainable competitive advantage through structure and underwriting performance improvement







Rating Agency Advisory Overview

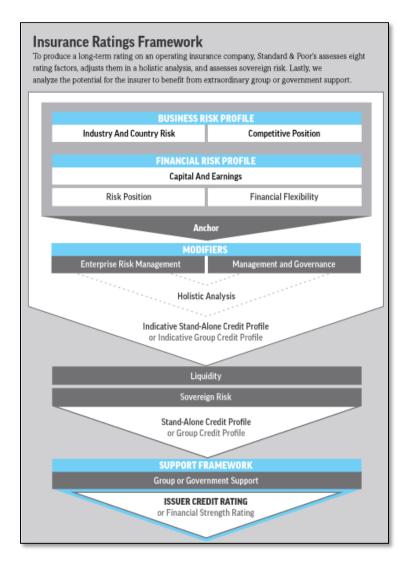


Rating Agency Comparisons

	AM Best	Standard & Poor's	Moody's	Fitch	Demotech	Kroll Bond Rating Agency
Company Profile	Entire US Insurance Industry	Large National / Multinational Firms	Large National / Multinational Firms	High Profile Companies, Med malpractice focus	Smaller companies in select markets, especially Florida, Title Industry	US Insurance Industry
International Focus	Emerging	Significant	Significant	Significant	None	None
Primary Users	Producers / Policy Holders	Capital Markets / Investors	Capital Markets / Investors	Capital Markets / Investors	Banks / Mortgage Companies	Banks / Mortgage Companies
Analysis	More Historical, Quantitative & Qualitative	Sustainable Earnings, Quantitative & Qualitative	Quantitative (Scorecard Approach) & Qualitative	Quantitative & Qualitative	Primarily Public Information & PML Analysis	Quantitative & Qualitative
Debt Ratings	Some	#1 in the World	In the Top 3	In the Top 3	None	Some



S&P Overview



Summary of Criteria

- Applies to all global-scale insurers in the business of life, health, P&C and reinsurance
- Methodology consists of assessing the stand-alone credit profile (SACP) / group credit profile (GCP)
- SACP/GCP rests on eight rating factors:
 - IICRA
 - Competitive Position
 - Capital & Earnings
 - Risk Position
 - Financial Flexibility
 - Enterprise Risk Management
 - Management & Governance
 - Liquidity

Business Risk Profile Financial Risk Profile Modifier / Cap

 S&P released request for comment on this criteria, currently awaiting feedback



Moody's Overview

Moody's uses a rating scorecard to assess a company's business profile and financial profile

Financial Strength Rating Scorecard	Aaa	Aa	Α	Baa	< Baa
Business Profile					
Market Position, Brand and Distribution (20%)					
Relative Market Share Ratio, Global Reinsurance					
Direct Premiums % GPW					
Product Focus and Diversification (15%)					
Product & Geographic Diversification					
Financial Profile					
Asset Quality (10%)					
High Risk Assets % Invested Assets					
Reinsurance Recoverable and Goodwill % Equity					
Capital Adequacy (20%)					
Gross Underwriting Leverage					
Gross Natural Catastrophe Exposure					
Net Natural Catastrophe Exposure					
Profitability (10%)					
Return on Average Equity (5 yr. avg.)					
Sharpe Ratio of Return on Revenue (5 yr.)					
Reserve Adequacy (10%)					
Adv. (Fav.) Loss Dev. % Beg. Reserves (5 yr. avg.)					
A&E Net Funding Ratio (5 yr. avg.)					
Financial Flexibility (15%)					
Financial Leverage					
Earnings Coverage (5 yr. avg.)					
Aggregate Profile					



Fitch Overview

Industry Review	Organization Review	Management Review	Operational Review	Financial Review	ERM
Level of orderly competition	Parent financial strength and financial flexibility	Strategic vision	Distribution mix	Operating performance	Risk governance
Industry competitive advantage	Upstream dividend requirements	Appetite for risk	Market position	Capital adequacy	Risk tolerance, monitoring and reporting
Barriers to entry / exit	Potential need to divert capital to underperforming affiliates	Credibility of track record for meeting expectations	Franchise value	Investment quality	Risk assessment (economic capital modelling and catastrophe risk management)
Regulatory, legal and accounting environment	Business synergies	Controls and risk management capabilities	Expense efficiency	Asset / liability and liquidity management	Operational risk analysis (including planning for the unknown)
	Formal guarantees or support agreements	Depth, breadth and succession plans	Underwriting and pricing experience	Financial flexibility	Risk optimisation
		Key executives accomplishments	Product mix		
			Administrative /technology capabilities		



Demotech Overview

Demotech recently increased reinsurance requirements for cat exposed companies from 100yr to a
 130yr on the first event; while the 50yr second event remains the same

- Loss & LAE Reserves are a key indicator of management's commitment to financial solvency, stability, and capital adequacy
- Demotech generally views any amount of adverse loss development as unacceptable and as a red flag for potential inability or unwillingness to properly estimate incurred losses

Balance Sheet Strength



- Balance Sheet strength is a pivotal part of Demotech's "Financial Stability Analysis Model". Additionally, the NAIC's RBC model is utilized as an additional comparative benchmark with a guideline of 300% for an A rating
- IRIS ratios and Target Liquidity metrics are also utilized to differentiate companies and analyze financial strength

Loss & LAE Reserves

Financial Stability Rating



Operating Profitability

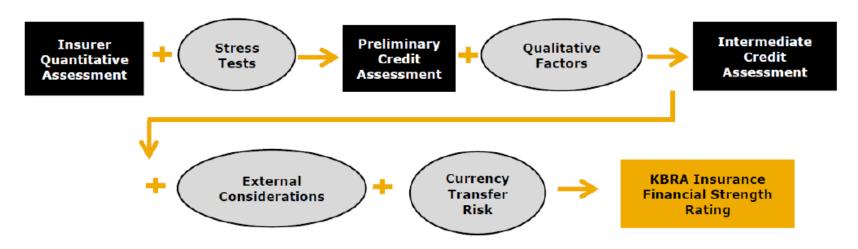
- **Reinsurance** is one of Demotech's focal areas of interest particularly for FL companies.
- Companies must demonstrate effective risk tolerance through the use of reinsurance. This includes maintaining a cat retention less than 15% of PHS and buying catastrophe limits that protect the company up to a 1 in 130 year hurricane and a subsequent 1 in 50 year hurricane in a given year (excluding FHCF on the 2nd event) as well as purchasing Reinstatement Premium Protection



- Operating Profitability is utilized by Demotech as a general measure of insurer wellbeing. While Demotech does not expect companies to report underwriting gains in each quarter, an underwriting loss greater than 10% of prior year surplus will generally result in additional scrutiny.
- Longer term unprofitability resulting from several years of increased catastrophe activity will also prompt additional discussions on underwriting initiatives or action plans that need to be taken



Kroll Bond Rating Agency (KBRA) Overview



The KBRA IFSR is based on the sequential incorporation of the following four credit factors:

- A quantitatively-based insurer quantitative assessment (IQA), expressed in lowercase letters using KBRA's long-term credit scale. After the application of stress testing, the IQA is converted to a preliminary credit assessment (PCA);
- 2. A qualitative score for factors that may have financial underpinnings but contain some subjectivity, including balance sheet management, operating fundamentals, company profile and risk management;
- 3. An external considerations score indicating either potential credit support from a parent organization/affiliated group or negative impact from perceived risks outside the insurance operations; and
- 4. A potential rating constraint due to currency-transfer risk



Source: KBRA Global Insurer & Insurance Holding Company Rating Methodology

Rating Agencies Impact on the P&C Industry

- May impact the amount of business that is written by different insurers and reinsurers
 - Companies with a higher rating get more business for the same relative price
 - Agents won't place business with a low rated carrier (often less than A- rating)
 - Ceding companies don't place their business with poorly rated reinsurers, especially on long tail business
 - Competitive advantage allows companies to compete other than by price
- May place more constraint on the company's financials
 - Higher capital adequacy requirement than state regulator
 - BCAR / S&P Capital vs RBC (risk-based capital)
 - Premium growth, investment allocations, catastrophe exposure, etc.



Rating Agencies Impact on the P&C Industry

- May impact the insurer's financial flexibility
 - Ability to raise capital or debt
 - Qualify for debt funding (e.g. shadow credit rating)
 - Ability to declare and pay dividends
- May impact the cost of capital or debt
- May impact the insurer's growth plans
 - There may be pressure from the rating agencies to diversify
 - Rate of growth
 - Can't outgrow your capital base
 - Type of growth organic vs. acquisition
 - · Risk involved in acquiring a company with existing liabilities
 - Where you grow your business
 - Some products or lines of business may be deemed too risky
 - Some territories may be too risky



Rating Agencies Impact on Reinsurance Transactions

- May impact the amount and type of reinsurance you purchase
 - Want to protect capital base
 - Catastrophe reinsurance purchase up to 250 year All Perils (e.g. impacts BCAR and S&P Capital)
 - Want to stabilize earnings and reduce volatility
 - Per Risk XOL, Aggregate Stop Loss
 - Shrink the Balance Sheet improve rating metrics
 - Quota share
- May impact the selection of reinsurance partners
 - Higher rated reinsurers viewed more favorably by the rating agencies
 - Higher rated reinsurers require less capital in rating agency capital models
- May impact the terms on reinsurance agreements
 - · Funds withheld for lower rated reinsurers
 - Rating triggers
 - Commutation provisions

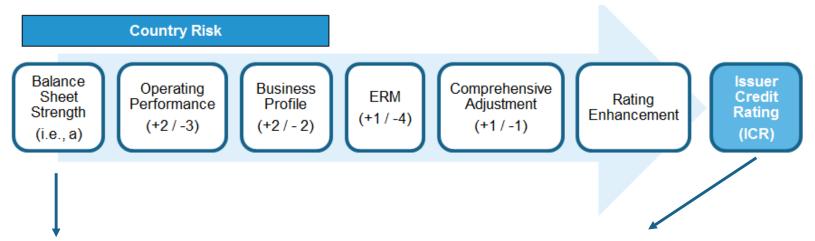




AM Best Methodology Overview



Best's Credit Rating Methodology (BCRM) Overview



Description	Stochastic BCAR	ICR	FSR
Strongest	>25 at 99.6	a+/a	Α
Very Strong	>10 at 99.6	a / a-	A / A-
Strong	>0 at 99.5	a- / bbb+	A- / B++
Adequate	>0 at 99	bbb+/bbb/ bbb-	B++ / B+
Weak	>0 at 95	bb+ / bb / bb-	B / B-
Very Weak	<0 at 95	b+ and below	C++ and below

ICR	FSR
aaa / aa+	A++
aa / aa-	A+
a+ / a	Α
a-	A-
bbb+/bbb	B++
bbb-	B+

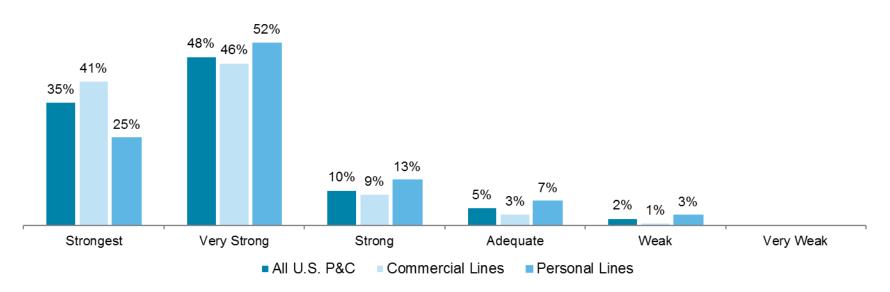


BCRM Building Block Assessments

Balance Sheet Strength (Starting ICR)	Operating Performance (+2 / -3)	Business Profile (+2 / -2)	ERM (+1 / -4)	Comprehensive Adjustment (+1 / -1)	Rating Enhancement (+4 / -4)
Strongest (a+ / a)	Very Strong (+2)	Very Favorable (+2)	Very Strong (+1)	Positive (+1)	Typical Lift (+1 to +4)
Very Strong (a / a-)	Strong (+1)	Favorable (+1)	Appropriate (0)	None (0)	Neutral (0)
Strong (a- / bbb+)	Adequate (0)	Neutral (0)	Marginal (-1)	Negative (-1)	Typical Drag (-1 to -4)
Adequate (bbb+ / bbb / bbb-)	Marginal (-1)	Limited (-1)	Weak (-2)		
Weak (bb+ / bb / bb-)	Weak (-2)	Very Limited (-2)	Very Weak (-3 to -4)		
Very Weak (b+ and below)	Very Weak (-3)				



Balance Sheet Strength



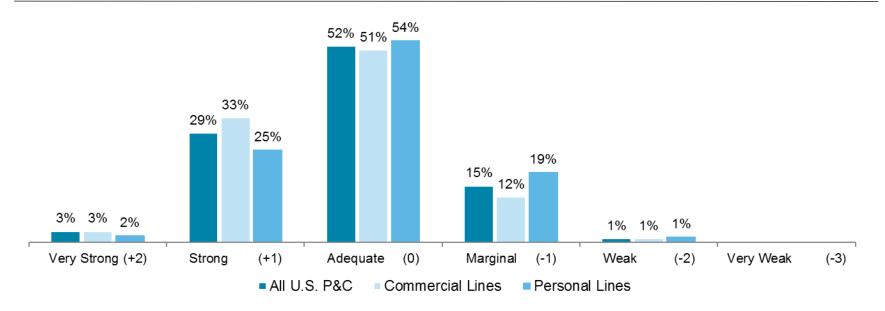
	BCAR @ VaR 99.6 "Strongest" Balance Sheet Strength								
	All US P&C	Commercial	Personal						
Count	219	144	68						
25 th Percentile	50	50	53						
Median	61	61	63						
75 th Percentile	69	69	70						

- While BCAR threshold to be eligible for "Strongest" balance sheet strength assessment is 25 points at VaR 99.6, most companies achieve scores well in excess of target
- AM Best considers additional factors such as quality of capital, reserve adequacy, appropriateness of reinsurance program, financial flexibility, and liquidity within the balance sheet strength assessment

US P&C Count - All: 633; Commercial Lines: 351; Personal Lines: 269 Source: Aon internal BCRM database compiled from published AM Best credit reports



Operating Performance



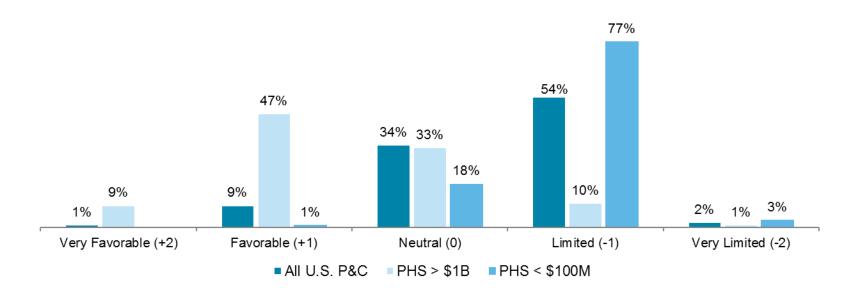
	5 Year Combined Ratio "Strong" Operating Performance								
	All US P&C	Commercial	Personal						
Count	185	116	66						
25 th Percentile	94	93	94						
Median	87	85	90						
75 th Percentile	78	73	84						

 Volatility and trends of underwriting performance, investment performance, and total operating earnings are examined for operating performance assessment

US P&C Count - All: 633; Commercial Lines: 351; Personal Lines: 269
Source: Aon internal BCRM database compiled from published AM Best credit reports



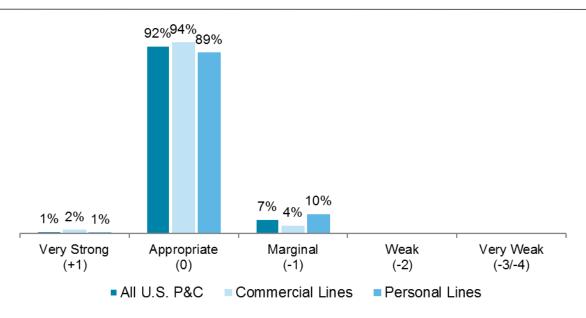
Business Profile



- Business profile assessment for majority of all U.S. P&C companies that have been rated under the new criteria is "Limited"
 - 56% of companies with >\$1B surplus are assessed "Favorable" or above
 - 77% of companies with <\$100M surplus are assessed "Limited"
- AM Best considers market position, pricing sophistication, data quality, product risk, degree of competition, management quality,
 regulatory & market risk, distribution channels, innovation and product/geographic concentration for business profile



Enterprise Risk Management



- Most companies receive an "Appropriate" ERM assessment
 - Personal lines companies receive a "Marginal" ERM score more often
- AM Best evaluates ERM on three fronts: the company's risk management framework, its risk management capabilities in light of its risk profile, and overall ERM



Enterprise Risk Management (ERM) (+1 to -4)

Analysts use a Risk Impact Worksheet as the primary tool in the ERM assessment process

1. Framework Evaluation

- Risk identification and reporting
- Risk appetite and tolerances
- Stress testing
- Risk management and controls
- Governance and risk culture

2. Risk Evaluation – measure management capabilities relative to risk profile

- Product/underwriting
- Reserving
- Concentration
- Reinsurance
- Liquidity and capital management
- Investments
- Legislative/regulatory/judicial/economic
- Operational

3. Overall ERM Assessment

Assessment	Notches	Key Characteristics
Very Strong	+1	Risk management capabilities are excellent and are more than adequate for the risk profile of the company.
Appropriate	0	Risk management capabilities are good and are adequate for the risk profile of the company.
Marginal	-1	Risk management capabilities are neutral given the risk profile of the company.
Weak	-2	Risk management capabilities are insufficient given the risk profile of the company.
Very Weak	-3 to -4	Risk management capabilities contain severe deficiencies relative to the risk profile of the company.



Companies Receiving a "Marginal" ERM Assessment

	2018 Surplus	Publis	hed Stocha	stic BCAR	Score	Balance Sheet	Operating	Business	Enterprise Risk	Rating		
Company Name	(\$000)	VaR 95.0	VaR 99.0	VaR 99.5	VaR 99.6	Strength	Performance	Profile	Management	Enhancement	ICR	FSR
CSE Insurance Group (G)	94,656	62	43	35	32	а	-1	-1	-1	+2	a-	A-
Aegis Security Insurance Company	62,668	52	35	28	26	а	0	0	-1	0	a-	A-
AmTrust Group (G)	2,163,952	48	29	21	18	а	0	0	-1	0	a-	A-
Amalgamated Casualty Insurance Company	36,216	88	82	79	78	a	0	-1	-1	0	bbb+	B++
Crusader Insurance Company	50,148	81	72	68	67	а	0	-1	-1	0	bbb+	B++
California Casualty Group (G)	191,624	74	61	56	55	а	-1	0	-1	0	bbb+	B++
Cooperativa de Seguros Multiples de PR**	153,185	67	52	47	45	а	0	-1	-1	0	bbb+	B++
AmeriTrust Insurance Group (G)	579,588	60	42	35	33	a	-1	0	-1	0	bbb+	B++
Global Hawk Property & Casualty Ins Co	7,158	100	99	99	99	a-	0	-1	-1	0	bbb	B++
Southern Guaranty Insurance Company	25,714	93	89	88	88	a-	0	-1	-1	0	bbb	B++
Madison Mutual Insurance Company (IL)	38,159	77	66	61	60	а	-1	-1	-1	0	bbb	B++
Sublimity Insurance Company	17,175	69	53	47	44	a-	0	-1	-1	0	bbb	B++
First Mutual Insurance Company	4,987	87	79	65	34	bbb+	+1	-1	-1	0	bbb	B++
South Carolina Farm Bureau Group (G)	73,679	77	69	64	62	a-	-1	-1	-1	0	bbb-	B+
PrimeOne Insurance Company	10,388	72	66	63	62	a-	-1	-1	-1	0	bbb-	B+
Pacific Pioneer Insurance Company	9,097	79	68	63	61	a-	-1	-1	-1	0	bbb-	B+
Casualty Underwriters Insurance Company	4,468	58	55	51	50	bbb+	0	-1	-1	0	bbb-	B+
Nazareth Mutual Insurance Company	7,129	70	55	48	46	bbb+	0	-1	-1	0	bbb-	B+
MutualAid eXchange	15,314	59	47	42	41	a-	-1	-1	-1	0	bbb-	B+
Cameron Mutual Group (G)	35,601	65	49	41	39	a-	-1	-1	-1	0	bbb-	B+
United Heritage Property & Casualty Co	16,314	64	46	39	37	a-	-1	-1	-1	0	bbb-	B+
Triple-S Propiedad, Inc.**	135,596	59	41	33	31	bbb+	0	-1	-1	0	bbb-	B+
Specialty Risk of America	6,937	55	33	24	21	a-	-1	-1	-1	0	bbb-	B+
Bondex Insurance Company	3,660	49	27	18	15	bbb+	0	-1	-1	0	bbb-	B+
Farmers Mut Fire Ins Co McCandless Twsp	6,132	59	33	19	14	bbb+	0	-1	-1	0	bbb-	B+
Discovery Insurance Company	15,251	63	44	34	32	bbb	0	-1	-1	0	bb+	В
Buckeye Insurance Group (G)	18,122	60	40	33	31	bbb+	-1	-1	-1	0	bb+	В
Greenville Casualty Companies (G)	7,748	84	76	72	71	bbb	-1	-1	-1	0	bb	В
American Federated Insurance Company	14,384	73	67	64	64	bb+	+1	-1	-1	0	bb	В
Nations Insurance Company	11,950	39	17	8	5	bbb-	0	-1	-1	0	bb	В
Southern General Insurance Company	21,147	51	28	19	16	bbb	-2	-1	-1	0	bb-	B-
Tower Bonding and Surety Company**	889	19	10	6	4	bbb-	-2 -1	4	-1	0	bb-	B-
, , ,					·							
First Chicago Insurance Group (G)	23,003	30	(4)	(18)	(22)	bb	0	-1	-1	0	b+	C++
Farmers Mutual Insurance Company of MI	1,110	64	36	15	5	bbb-	-2	-2	-1	0	b	C++
First Acceptance Insurance Group (G)	94,751	41	13	2	(1)	bb	-1	-1	-1	0	b	C++
INTEGRAND Assurance Company**	50,719	38	12	1	(3)	bb+	-1	-2	-1	0	b	C++
United Equitable Insurance Company	5,873	9	(25)	(39)	(43)	bb-	0	-1	-1	0	b	C++
Country-Wide Insurance Company	38,222	24	(11)	(25)	(30)	bb-	-1	-1	-1	0	b-	C+
United Security Health and Casualty Co	3,936	79	68	64	63	bb-	-2	-2	-1	0	ccc	С

^{*}YE 2017 data due to unavailable YE 2018 data

Count: 40

Source: Aon internal BCRM database compiled from published AM Best credit reports



Companies Receiving a "Very Strong" ERM Assessment

	2018 Surplus	Publis	hed Stocha	astic BCAR	Score	Balance Sheet	Operating	Business	Enterprise Risk	Rating		
Company Name	(\$000)	VaR 95.0	VaR 99.0	VaR 99.5	VaR 99.6	Strength	Performance	Profile	Management	Enhancement	ICR	FSR
USAA Group (G)	27,606,110	63	57	55	54	a+	+2	+2	+1	0	aaa	A++
Houston Casualty Group (SG)**	2,162,829	73	65	61	60	а	+2	+1	+1	0	aa+	A++
Hartford Steam Boiler Group (SG)	582,082	67	58	54	53	а	+2	+1	+1	0	aa+	A++
Philadelphia Insurance Companies (SG)**	2,506,912	70	57	51	48	а	+2	+1	+1	0	aa+	A++
First of Hawaii Group (SG)**	281,543	78	67	63	62	а	+1	0	+1	+1	aa	A+
Acuity A Mutual Insurance Company	1,869,272	77	67	63	62	а	+1	+1	+1	0	aa	A+
RLI Group (G)	829,775	68	56	50	48	а	+1	+1	+1	0	aa	A+
Allstate Insurance Group (G)	17,806,665	59	45	39	36	а	+1	+1	+1	0	aa	A+
Safety National Group (SG)**	2,085,522	60	42	35	32	а	+1	0	+1	+1	aa	A+

^{**}YE 2017 data due to unavailable YE 2018 data



Source: Aon internal BCRM database compiled from published AM Best credit reports



"Very Strong" ERM Assessment – Common Descriptors

Enterprise Risk Management: Very Strong

USAA

- Risk management capabilities are extensive, with a conservative risk appetite and established corporate governance framework.
- Group employs extensive stress testing in catastrophic weather, economic downturn, and other potential loss scenarios.

Enterprise Risk Management: Very Strong

Allstate

- Risk management capabilities are extensive, with established risk appetites and corporate governance framework.
- Group focuses on maintaining strong foundation, building value and optimizing returns.

Enterprise Risk Management: Very Strong

Philadelphia, HCC & First of HI

- Risk management capabilities are very strong for the risk profile of the group and are in excess of comparable organizations.
- The Philadelphia Insurance Companies' ERM is fully integrated within Tokio Marine's framework. Best practices are shared across insurance operating entities.

Enterprise Risk Management: Very Strong

Hartford Steam Boiler

- HSB has an established formal enterprise risk management, which is embedded across the whole organization.
- HSB's strong underwriting results, coupled with low volatility, are evidence of the exceptional risk management capabilities.
- HSB Group is a leader in its niche EB market, with direct premium production distributed throughout the U.S. with no one state

Enterprise Risk Management: Very Strong

Acuity

- Comprehensive ERM program, centered on the organization's major risk categories.
- Defined risk appetite and risk tolerance statements are in place.
- Very strong risk assessment culture and risk management controls. Highly risk aware management team.
- Acuity uses a dynamic financial model to project future outcomes and perform scenario testing.

Defined risk appetite and risk tolerance statements

Established and integrated ERM process/framework

Stress testing performed using various scenarios



Spectrum of Approaches to Risk Tolerance

Quantitative

Qualitative

Catastrophe Risk

- Lat/Long level exposure data available
- Model-centric quantitative approach
- Likelihood and severity both quantified
- Portfolio level tolerance linked to front line underwriting decisions

Market/Credit Risk

- CUSIP level exposure information available
- Scenario based quantitative approach
- Severity impact of interest rate changes or stock price drop quantified
- Portfolio level tolerance linked to asset allocation limits
- Credit quality and concentration limits

Reserve Risk

- Limited exposure benchmark data
- Rate and reserve adequacy monitored
- Variability not commonly quantified
- Rarely articulated in "limit" formulation
- Usually increases along with growth

Operational Risk

- Limited exposure data
- Rarely quantified or articulated as a limit
- Limited monitoring of specific exposures
- Examples:
 - Regulatory Risk
 - Financial Controls
 - HR/EmployeeTurnover



Risk Tolerance/Risk Appetite Statement Examples

Quantitative Definition

"The Company manages its exposure to key risks such that the **modeled economic loss at** a 1 in 15 year and a 1 in 75 year return period are less than the economic capital the Company is willing to expose to the key risks at those return periods... The Company's risk **limits** are stated as explicit numerical expressions, such as total aggregate limits in a catastrophe zone, earned premium for casualty business, and the market value of equity and equity-like securities." (Modeled economic loss appetite by risk type: Cat risk at a 1 in 75yr \$960M max, Casualty at a 1 in 15yr \$480M max, Equity at a 1 in 75yr \$720M max)

Qualitative Definition

"The risk appetite is set in relation to a variety of risk measures including economic capital and earnings at risk, as well as regulatory capital requirements. To ensure exposures to particular risks are appropriate and that the Company remains well-diversified across risk categories, we manage specific risk exposures against enterprise-wide limits established for each of these specific risks."

Simple Definition

"Grow as fast as possible at a 96 Combined Ratio"



Risk Impact Tool for ERM (RITE)

Overview

The new AM Best criteria places more focus on ERM with the potential for a positive or negative notching on insurers' overall ratings. ERM is now evaluated on three major components:

- Risk Management Framework
- Risk Management Capabilities in light of Risk Profile
- Overall ERM

Aon's Online Tool:

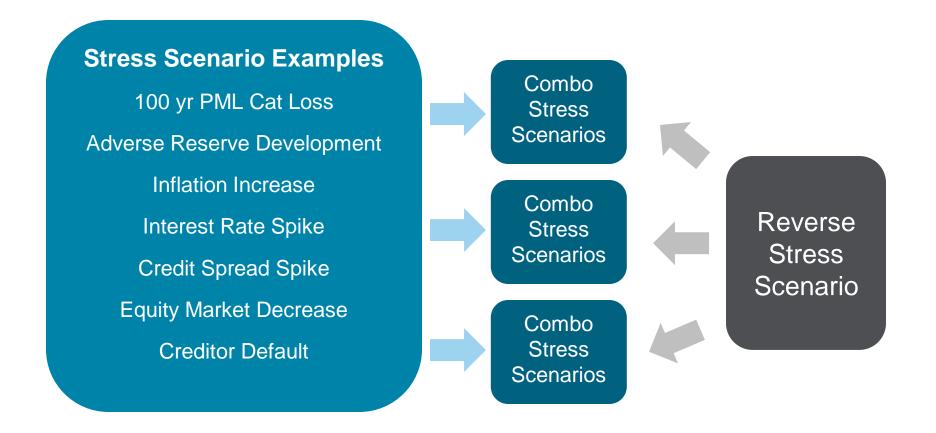
Risk Impact Tool for ERM (RITE) is one-of-its-kind proprietary tool based on 10+ years of AM Best interactions with Aon's rating agency experts.

- Performs assessment with detailed guidelines to identify strengths and weaknesses
- Highlights areas for improvement that will have the most impact
- Creates a detailed scorecard report to show how AM Best rating may be impacted
- Assists in preparation of AM Best meeting materials to emphasize strengths of ERM framework
- Helps facilitate ERM discussions with management team and board





Stress Test Scenario Framework





AM Best Proposed Innovation Criteria

- AM Best released a proposed innovation criteria that details methodology to introduce an innovation score and subsequent assessment that will be published for all rated companies
- Innovation Score will be the sum of the Innovation Input Score and Innovation Output Score
- Innovation Input Score will be the sum of four sub-components; scored 1 (negative) to 4 (positive)
 - Leadership
 - Culture
 - Resources: Allocation, Strategy and Management
 - Processes and Structure
- Innovation Output Score will be double of the sum of two sub-component; scored 1 (negative) to 4 (positive)
 - Results
 - Level of Transformation
- Innovation will be incorporated into the Business Profile assessment to determine ratings impact
- Innovation score will not be directly correlated and does not automatically have a positive or negative impact on ratings
- Below is a table showing the final Innovation Assessment derived from the Innovation Score;

Assessment	Score
Non-innovator	< 12
Reactor	12 – 17
Adaptor	18 – 22
Innovator	23 – 27
Innovation Leader	> 28

Innovation Score = Innovation Input Score + Innovation Output Score

Innovation Input Score = Leadership + Culture + Resources + Processes & Structure

Innovation Output Score = $2 \times (Results + Level of Transformation)$

Comments due back to AM Best May 13th





Rating Agency Hot Topics



Rating Agency Hot Topics

Catastrophe Losses

- Model performance and risk tolerances
- Potential pressure on reinsurance pricing
- Additional emphasis within capital frameworks: RBC cat charge and updated BCAR model

Inadequate Loss Reserves

- AM Best estimates that YE 2018 loss & LAE reserves for the P/C Industry are about \$29B deficient; or about 4% of total loss & LAE reserves
- On total LOB basis, redundancies are coming from AY 2013 2018

Innovation

- AM Best released Innovation criteria and plan to publish an Innovation assessment based on the process of innovation and if it yields results
- Innovation will become rated sub-component of the Business Profile assessment

Cyber

- Inadequate reserves throughout the industry for multiple LOBs
- Unsuccessful plan execution as combined ratios and profitability are becoming unfavorably

Enterprise Risk Management

- Consequences of various stress scenarios including catastrophes, terror, casualty events, cyber risk, etc.
- Response to hurricane and wildfire losses and comparing modeling results

Empower Results®



Thank You!

Any questions?

