

The Litmus Rating Review

Reinsurance & Specialty Edition

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Welcome to the inaugural edition of the Litmus Rating Review (the 'LRR'), Reinsurance & Specialty Edition.

This periodic publication gives Litmus' perspective on key recent activity by the main rating agencies used in the sector.

Rating activity on two 'cohorts' of carriers is focussed on; firstly global composite reinsurers and significant third-party reinsurers owned by global primary insurance groups (the '*Majors*'); secondly, those international non-life reinsurance & specialty carriers with significant operations in one or more of the main international hubs for these business lines; London, Zurich, Bermuda, Dublin and Singapore (the '*L-Zebedees*').

We do not currently cover the more regional and/or state-owned carriers. We will be looking to add these in the near future.

We list the S&P and A.M. Best financial strength ratings (at the time of going to press) of a legal entity we view as a major carrier for the group (described by us as the 'group reference carrier'). However, we stress that these ratings are always subject to

change and that readers should check with the agencies' own websites to confirm the current rating. We also stress that not all carriers within a group may have the same rating as the 'group reference carrier' or be rated at all.

We then calculate our unique Litmus Score (LS). This proprietary calculation converts the ratings of S&P and A.M. Best into a numerical score. The score outcome also reflects the rating outlooks. Where ratings from both agencies are available we then provide the average of this (the Litmus Composite Score; LCS) and map that back to the S&P rating scale.

We also provide an indication of the degree of comfort that exists within the LCS rating scale mapping outcome to the next rating level down. This is described as the LCS 'Resilience Indicator' (RI).

The details of our approach are described under 'Litmus Composite Score (LCS) Methodology'.

We welcome your feedback.

The Litmus Commentary

Our perspective on recent activity in the sector by the agencies

Date of comments: September 2nd 2013

Overview

The ratings agencies traditionally have something of a reinsurance sector publishing blitz in the run-up to Monte Carlo. Conventional industry wisdom has it that this includes a tendency to 'organise' downgrades to coincide with the event (presumed to be an attempt to gain media attention).

Actually we would note that a combination of the hurricane season and 'mid-year financial reporting' recognition of gaping holes in casualty reserves led historically to most, or even all, of the 'war story' downgrades from this time of year. If you do not want a pre-Monte downgrade; don't announce major reserving problems in July!

But there is no question the agencies want to get their analytical views on the table just ahead of - and/or at - the event. So far (September 2nd) we have seen those of Fitch and Best. Both stress the P&L account problem of low investment returns for reinsurers driving down profitability (a myth in our view – see our blog site for commentary on this) and of over-supply of capacity, not least from non-traditional sources (much more of a relevant point). Both also retain "stable" reinsurance sector "outlooks" and, indeed, other than some different approaches among the agencies to the impact of reinsurers' sovereign risk exposures, rating activity has been modest; reflecting a not great but essentially 'liveable with' pricing environment and a benign cat season to date.

But what about our old friend casualty/liability reserve adequacy? The agencies do not seem unduly concerned at this point but reserve surpluses have been run-down and there is now the occasional recognition of a modest deficiency or two. We are told there is no longer a generic underwriting cycle (but rather sector specific micro-cycles that move largely independently) but what if systemic reserving problems start to emerge? The worst case industry level scenario would be that, if it does happen, alternative capacity piles in (lacking

the existing tail risk) and there's little or no pricing pick-up as a consequence; just traditional capacity capital destruction. However our guess is that, if anything, it would scare off many non-traditional providers (at least from the longer-tail part of the market) and so might be a positive pricing 'event'.

S&P completed its roll-out of the new insurance rating criteria over the summer. They estimate 10% of ratings were impacted (that would be about 200 ratings). There were no really high profile rating actions in the reinsurance and specialty sector but the publication for the first time of the rating 'anchors' and other rating 'factors' allowed a much clearer take on the drivers of the current S&P ratings of all the main market participants.

Both Fitch and Best meantime joined S&P in assigning a positive outlook to the Lloyd's market rating (S&P had taken that step last year). Lloyd's is therefore on the cusp of a "AA range" rating (or its Best equivalent) from all three agencies for the first time in its history (Moody's does not rate the market).

In our next edition we will wrap up the comments made by the agencies at their various briefing events being held just prior to and during the Monte Carlo conference.

AM Best

Best has published its annual 'Special Report' on Global Reinsurance; maintaining its stable outlook on the sector.

In this Best highlights the resilience the sector has shown since 2008, not least to the c.\$190bn of insured cat losses that it notes for 2011. Non-traditional ("third-party") capital is the biggest threat it perceives, especially as this is seen competing in (and hence putting rate pressure on) longer-tail lines and at lower levels within cat programmes; their contention being that this is a very different scenario from the capital markets 'competition' traditionally seen via cat bonds.

The Litmus Commentary

Our perspective on recent activity in the sector by the agencies

Like Fitch (see below) Best has moved its Lloyd's market rating to a positive outlook. Currently, on the Best FSR scale Lloyd's is at 'A' but using its ICR scale (which has the same rating categories as Fitch and S&P) the rating is at 'a+'.

Fitch

Fitch has published its 2014 sector outlook and accompanying report for global reinsurance. It has maintained the overall sector outlook at 'stable' and notes that 94% of rated reinsurers individually have a stable outlook.

Not surprisingly therefore recent rating actions have been almost entirely affirmations. The most noteworthy action being the assignment of a positive outlook to the "A+" FSR of the Lloyd's market.

Fitch highlights two 'trend' (our term) risks to the stable outlook; price softening and the on-going low interest rate environment. In the former Fitch includes the impact of alternative capacity on the sector. The latter therefore is purely about the expected investment income returns reinsurers will achieve (i.e. not the impact of low global investment returns on driving too much capital into the industry). As noted above, we fundamentally disagree with the latter being a causal factor in industry profitability.

Fitch's scenario for an event risk driven outlook change is the combined impact of a \$60bn insured loss 'cat', event, a concurrent ("abrupt") 300bp interest rate spike and a lack of willingness of the capital markets to reinvest in the industry post this combined event. They suggest such an overall outcome would be 'rare', as, indeed, it would. But there is no arguing that such a scenario would be credit negative. Indeed our view would be that the impact would not simply be at the level of changing the industry outlook but rather lead to serial near-term downgrades given the impact on the sector's economic capital.

Moody's

No particular commentary or ratings actions from Moody's recently, although they are due to hold a webinar after we go to press and so we will cover that in our next edition.

S&P

S&P's closely followed annual review of the sector is not yet published and we will cover that in our next edition.

Roll-out of their new criteria has included publication of the rating 'anchors' of all the S&P rated reinsurance & specialty lines carriers that we cover here and highlighted some interesting factors in their analysis for several of these.

Various articles covering the new criteria are available at our blog site -

www.litmusanalysisblog.wordpress.com

Litmus Composite Score (LCS) Methodology

Overview

The two most widely referred to rating agencies in the global reinsurance and specialty lines sector are A.M. Best and S&P. Most groups active internationally in the sector have a financial strength rating (FSR) from both agencies assigned to at least their main carriers. We highlight the rating assigned to what we would consider to be a main group carrier (or where that is not clear, a significant carrier for the group in this sector). This is described by us as the 'group reference carrier'. Lloyd's syndicates are not considered for this as we use the Lloyd's market rating for LRR reporting.

We begin by producing the Litmus Score (LS). This translates each agency's Financial Strength Rating (FSR) on the group reference carrier to a numerical score. The exact score assigned reflects both the rating and the rating outlook. As A.M. Best uses a different rating scale from S&P for FSRs we use the A.M. Best Issuer Credit Rating (ICR) assigned to the group reference carrier (and its outlook).

Where ratings from both agencies exist we then produce the Litmus Composite Score (LCS) and map that back to the S&P rating scale.

Where there is no clear outcome for the LCS mapping we use Fitch and/or Moody's ratings as 'tie-breakers'. If this still produces no clear outcome we then give greatest weight to the rating from whichever of S&P and A.M. Best has the lowest mean Litmus Score for the cohort from those carriers rated by both agencies.

The Litmus Score (LS)

The LS is calculated out of 100. Each notch on the S&P rating scale is covered by 4 points on the LS scale. For example, a AA- rating with a stable outlook is assigned an LS of 88, whereas an A+ rating with a stable outlook is assigned an LS of 84.

A positive or negative outlook respectively increases or decreases the LS relative to that for the stable outlook by one point.

The Litmus Composite Score (LCS)

The LCS is the arithmetic mean of the LS outcomes. Where the group reference carrier has only one rating from A. M. Best or S&P this is not assigned. We do not substitute either a Fitch or Moody's rating in such a case as this would challenge the consistency of the calculation process (however we are very open to market participant feedback on this).

In the event that the LCS comes out at a point equidistant from the relevant ratings scale mappings (e.g. as with an LCS outcome of 86 being two points from both the AA- and A+ mappings) we employ the 'tie-breaker' process described later.

The Use of A.M. Best ICRs

In order to create a consistent basis of calculation we use the A.M. Best ICR issued on the group reference carrier as this is assigned using the same scale as S&P FSRs. It should be noted that we are making no judgment as to whether S&P and A.M. Best ratings are equivalent when expressed using the same scale.

A.M. Best assigns ICRs to rated carriers that issue policies at the same level as the FSR (but, as above, using the same scale that S&P uses for its FSRs). The outlook can however vary between Best's FSR and ICR on the same rated carrier. This is because of the greater number of gradations in the S&P type scale. For the LS and LCS calculations we use the ICR rating and outlook.

Rating Scale Mapping Tie-breakers

Where, as noted above, the LCS comes out at a point equidistant from the relevant ratings scale mappings, we use the Fitch and/or Moody's Insurer Financial Strength Ratings (IFSs) on the group reference carrier as the tie-breaker. Both ratings are used if both exist or just one if not.

Litmus Scores calculated from Fitch/Moody's IFSs are not included in the LCS (as this would challenge the consistency of the calculation) rather they simply impact the selected rating scale mapping of the LCS where a tie-break on this is required. Thus, if the Fitch/Moody's LS outcome is below that of the LCS the lower mapping is selected and if the Fitch/Moody's LS outcome is above that of the LCS the higher mapping is selected.

In the event that neither Fitch nor Moody's ratings on the group reference carrier exist, or that they also do not differentiate between the two mapping options, the S&P/A.M. Best rating from the agency with the lower mean LS for that cohort (on those group reference carriers rated by both) is given greater weight in deciding the mapping (this does not change the LCS).

Litmus Composite Score (LCS) Resilience Indicator (RI)

The LCS Resilience Indicator highlights how close the LCS outcome is to a rating scale mapping below its current level.

RI Code		LCS Mapping Description
R7	Highest	The current rating mapping reflects the application of a negative 'tie-break' and hence the LCS is the highest possible for that rating scale mapping
R6	High	The LCS is materially above the median score for that rating scale mapping
R5	Moderately High	The LCS is somewhat above the median score for that rating scale mapping
R4	Average	The LCS is exactly at the median score for that rating scale mapping
R3	Moderately Low	The LCS is somewhat below the median score for that rating scale mapping
R2	Low	The LCS is materially below the median score for that rating scale mapping
R1	Lowest	The current rating mapping reflects the application of a positive 'tie-break' and hence the LCS is the lowest possible for that rating scale mapping

Ratings Round-up, LS and LCS outcomes - Majors

Ratings as at 02/09/2013

We have used the following abbreviations -

*ISO 3166-1 Alpha-2 codes

**Pos=Positive, St=Stable, Neg=Negative

***F=Fitch, M=Moody's

Cohort	Group Reference Carrier (LUCID Company Name)	GRC Domicile*	LUCID	S&P Ratings		A.M. Best Ratings				Litmus Composite Score (LCS)	LCS Ratings Mapping	LCS Resilience Indicator	Tie-break Source ***
				S&P FSR/Outlook**	Utlimus Score	AM Best FSR**	AM Best ICR/Outlook	Utlimus Score					
Majors													
Ace	ACE Tempest Reinsurance Ltd	BM	ACEG/A1445A	AA-/Pos	89	A+	aa/Pos	93	91	AA (LCS)	R3		
Alleghany	Transatlantic Reinsurance Co	US	ALLE/A1213A	A+/St	84	A	a+/St	84	84	A+ (LCS)	R4		
Berkshire Hathaway	National Indemnity Co	US	BEHA/A2374A	AA+/Neg	95	A++	aaa/St	100	97.5	AA+ (LCS)	R6		
Everest Re	Everest Reinsurance Company	US	EVER/A1756A	A+/St	84	A+	aa-/St	88	86	AA-(LCS)	R1	F	
Fairfax	Odyssey Reinsurance Company	US	FAIR/A1855A	A-/St	76	A	a+/St	84	80	A (LCS)	R4		
HDI	Hannover Rueckversicherung SE	DE	HDIG/A2565A	AA-/St	88	A+	aa-/St	88	88	AA- (LCS)	R4		
Mapfre	Mapfre Re, Compania de Reas SA	ES	MAPF/A2319A	BBB+/Neg	71	A	a/Neg	79	75	A- (LCS)	R3		
Munich Re	Munich Reinsurance Co	DE	MUNR/A2234A	AA-/St	88	A+	aa-/St	88	88	AA- (LCS)	R4		
Partner Re	Partner Reinsurance Co Ltd	BM	PART/A1957A	A+/St	84	A+	aa-/St	88	86	AA-(LCS)	R1	F	
QBE	QBE Reinsurance Corp	US	QBEG/A2544A	A+/St	84	A	a+/Neg	83	83.5	A+ (LCS)	R3		
SCOR	SCOR Global P&C SE	FR	SCOR/A2437A	A+/St	84	A	a+/St	84	84	A+ (LCS)	R4		
Swiss Re	Swiss Reinsurance Company Ltd	CH	SWRE/A1798A	AA-/St	88	A+	aa-/St	88	88	AA- (LCS)	R4		
Tokio Marine	Tokio Millenium Re Ltd	BM	TOMA/A2016A	AA-/Neg	87	A++	aa+/St	96	91.5	AA (LCS)	R3		
White Mountains	Sirius International Insurance Corp	SW	WHMO/A2259A	A-/St	76	A	a/St	83	78	A (LCS)	R1	F	
XL	XL Re Ltd	BM	XLGR/A2200A	A/Pos	81	A/St	a	80	80.5	A (LCS)	R5		

Please note that Litmus Analysis is not a rating agency

- The ratings and outlooks shown are from 2 September 2013. Ratings can and do change and we strongly advise readers to check with the relevant websites A.M. Best (www.ambest.com) and/or S&P (www.standardandpoors.com) for the latest information and for the relevant rating definitions.
- Where a rating or outlook has changed since the date noted above Litmus will be pleased to consider recalculating the LS, LCS and RI privately for any LRR reader on request. This is a complimentary service and we are pleased to offer this wherever practical, however it is subject to our other commitments and availability.
- Litmus has not sought any endorsement from AM Best or S&P for the LS and LCS calculation methodology and results. Nor do we offer an endorsement of the AM Best or S&Ps ratings quoted here.
- Please note that the Litmus Scores are not ratings; Litmus Analysis is not a rating agency.

Ratings Round-up, LS and LCS outcomes - "L-Zebedees"

Ratings as at 02/09/2013

We have used the following abbreviations -

*ISO 3166-1 Alpha-2 codes

**Pos=Positive, St=Stable, Neg=Negative

***F=Fitch, M=Moody's

Cohort	Group Reference Carrier (LUCID Company Name)	GRC Domicile*	LUCID	S&P Ratings		A.M. Best Ratings				LCS Resilience Indicator	Tie-break Source***	
				S&P FSR/Outlook**	Litmus Score	AM Best FSR****	AM Best ICR/Outlook	Litmus Score	Litmus Composite Score (LCS)			LCS Ratings Mapping
L-Zebedees												
Arch	Arch Reinsurance Ltd	BM	ARCH/A1412A	A+/St	84	A+	aa-/St	88	86	A+ (LCS)	R7	F,M
Argo	Argonaut Insurance Co	US	ARGO/A1344A	A-/Neg	75	A	a/St	80	77.5	A- (LCS)	R6	
Allied World	Allied World Assurance Company Ltd	BM	AWAC/A2272A	A/St	80	A	a/Pos	81	80.5	A (LCS)	R5	
Amlin	Amlin AG	CH	AML/A1118A	A/St	80	A	a/St	80	80	A (LCS)	R4	
Aspen	Aspen Insurance UK Ltd	UK	ASPE/A1435A	A/St	80	A	a/St	80	80	A (LCS)	R4	
Axis	AXIS Specialty Ltd	BM	AXIS/A2433A	A+/St	84	A	a+/Pos	85	84.5	A+ (LCS)	R5	
Beazley	Beazley Insurance Company Inc	US	BEAZ/A4417A	N/R	N/A	A	a/St	80	N/A	N/A	N/A	
Catlin	Catlin Insurance Company Ltd	BM	CATL/A1692A	A/St	80	A	a/St	80	80	A (LCS)	R4	
Endurance	Endurance Specialty Insurance Ltd	BM	ENDU/A1958A	A/St	80	A	a/St	80	80	A (LCS)	R4	
Hiscox	Hiscox Insurance Company Ltd	UK	HISC/A2528A	A/St	80	A	a+/St	84	82	A+ (LCS)	R1	F
Lancashire	Lancashire Insurance Company Ltd	BM	LANC/A2448A	A-/St	76	A	a/Pos	81	78.5	A (LCS)	R2	
Lloyd's	N/A	NA	NA	A+/Pos	85	A	a+/Pos	85	85	A+ (LCS)	R5	
Markel	Alterra Bermuda Ltd	BM	MARK/A1261A	A/St	80	A	a/St	80	80	A (LCS)	R4	
Montpelier	Montpelier Reinsurance Ltd	BM	MONT/A2090A	A-/St	76	A	a/St	80	78	A (LCS)	R1	F
Platinum	Platinum Underwriters Bermuda Ltd	BM	PLAT/A2336A	A-/St	76	A	a/St	80	78	A (LCS)	R1	F
Renaissance	Renaissance Reinsurance Ltd	BM	REN/A1894A	AA-/St	88	A+	aa-/St	88	88	AA- (LCS)	R4	
Validus	Validus Reinsurance Ltd	BM	VALI/A1992A	A/St	80	A	a/St	80	80	A (LCS)	R4	
W R Berkley	Berkley Insurance Co	US	WRBE/A1759A	A+/St	84	A+	aa-/St	88	86	A+ (LCS)	R7	S&P

An Alterra operation is used as the Markel group GRC as S&P does not rate the main Markel branded carriers. It should be noted that neither S&P nor A.M. Best currently assign ratings to the Alterra carriers that reflect the fact that they are core to the Markel group.

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About Litmus Analysis

Litmus is staffed by senior ex-rating agency personnel and provides a range of analytical services to the re/insurance markets and those that serve them.

Training Services

Understanding S&P's New Insurance Criteria

September 18th, London

Visit litmusanalysisblog.wordpress.com/new-sp-criteria/ for details

The Mathematics of Reinsurance (for non-mathematicians)

24th September or October 9th, London

Visit litmusanalysisblog.wordpress.com/math-of-insurance/ for details

Understanding Non-life Re/insurer Financials and Key Ratios

Coming soon, London

For training services contact Florence Henderson at

florencehenderson@litmusanalysis.com

Advisory and Analytical Services

Ratings Advisory

Help and support in managing your relationship with the rating agencies, understanding criteria, the ratings process and the rating agency perspective.

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With an analytical mind, an eye for detail and years of experience, our team can help you and your clients through the complexity of different markets. We also assist in many areas of market security for brokers and cedants.

For Ratings Advice, Market Security Assistance and Analytical Services, please contact Peter Hughes on peterhughes@litmusanalysis.com

Online Services

LUCID - The Litmus Unique Company Identification (LUCID) system – an extensive and growing searchable database of live and legacy market re/insurers and the groups they belong to.

LitmusQ - The online credit-scoring tool for the insurance markets - your cedant and reinsurer financial health assistant.

For details, for a demo or a free trial, contact info@litmusanalysis.com

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