

Agenda

The Big Picture

2016 Key Issues

Observations & Expectations

Alternative Capital Update

Natural Catastrophe Losses

Insured Losses Remain Historically Low Driving Price Softening

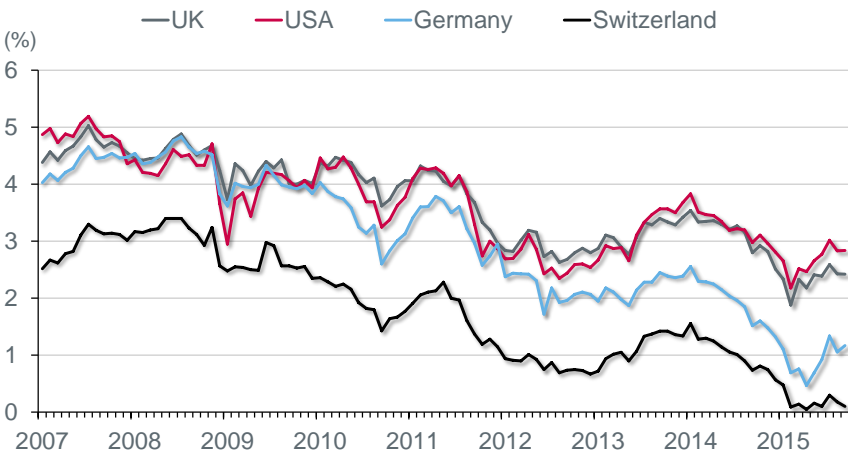
| Date | Event | Location | Economic Loss (USDbn) | Insured Loss (USDbn) |
|--------------------|--------------|-----------|-----------------------|----------------------|
| Feb | Winter storm | US/Canada | 2.4 | 1.8 |
| Mar/Apr | Winter storm | Europe | 1.4 | 1.0 |
| Apr | Severe storm | US | 1.4 | 1.0 |
| Apr | Severe storm | US | 1.1 | 0.8 |
| May | Severe storm | US | 1.3 | 0.8 |
| Overall 1H15 Total | | | 35.0 | 12.0 |

| | | |
|-------------------|---------------|--------------|
| Total 2014 (1H14) | 110.0 (60.0) | 31.0 (23.0) |
| Total 2013 (1H13) | 140.0 (66.0) | 39.0 (21.0) |
| Total 2012 (1H12) | 173.0 (58.0) | 65.0 (19.0) |
| Total 2011 (1H11) | 370.0 (302.0) | 115.8 (81.7) |

Source: Munich Re NatCatService

Investment Yields – Selected Major Sovereigns

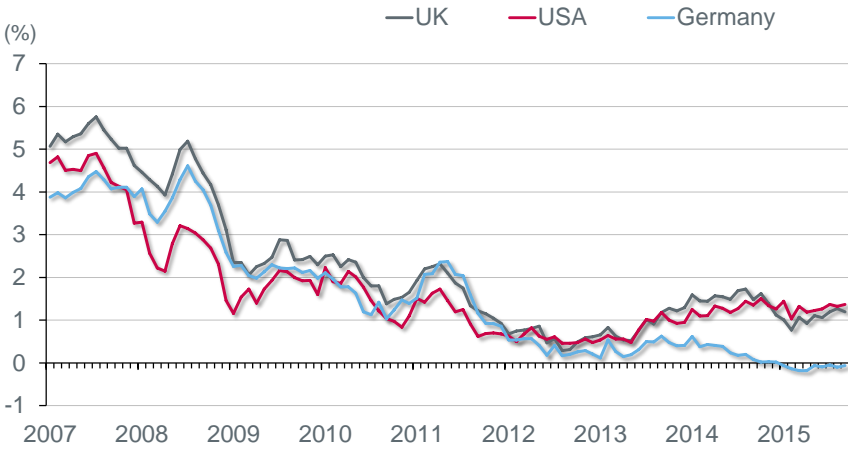
Low Yields Maintain Earnings Pressure / Attract External Capital



Source: Citigroup's world government bond index 10-year government bond yields (local currency)

Investment Yields – Selected Major Sovereigns

Low Yields Maintain Earnings Pressure / Attract External Capital



FitchRatings

www.fitchratings.com

4

2016 Key Issues

1. Managing through protracted soft market requires discipline
2. Prospect of M&A could fuel complacency
3. Alternative capital capacity will continue to impact market

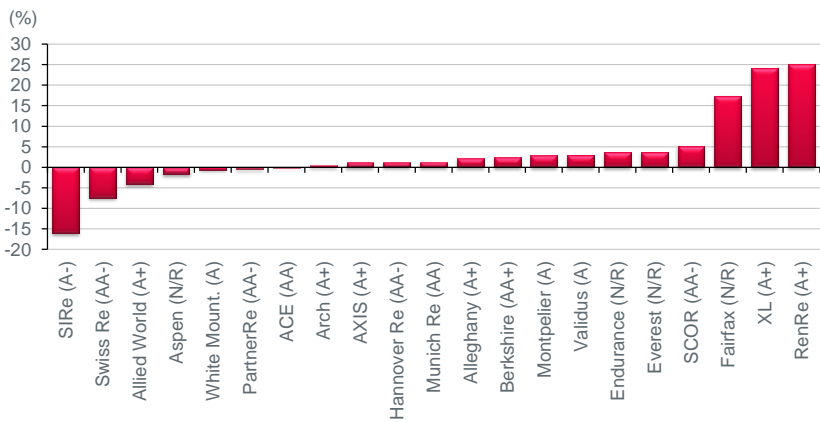
FitchRatings

www.fitchratings.com

5

Capital Remains Strong – Development Uneven

Change in 1H15 Equity – Reinsurers



IFS Ratings in parentheses. N/R - Not rated. p - Positive Outlook.
Source: Fitch, company reports.

FitchRatings

www.fitchratings.com

6

Share Repurchase Activity Decreases

| (USDm) | H115 | H114 |
|----------------------------------------------|------|------|
| Ace Limited | 750 | 557 |
| Alleghany Corporation | 41 | 160 |
| Allied World Assurance Company Holdings Ltd. | 246 | 138 |
| Arch Capital Holdings Ltd. | 362 | - |
| Aspen Insurance Holdings Ltd. | 84 | 31 |
| AXIS Capital Holdings Ltd. | 26 | 318 |
| Berkshire Hathaway Inc. | - | - |
| Endurance Specialty Holdings Ltd. | - | - |
| Everest Re Group, Ltd. | 125 | 325 |
| Fairfax Financial Holdings Ltd. | 60 | 20 |

Source: Company reports

FitchRatings

www.fitchratings.com

7

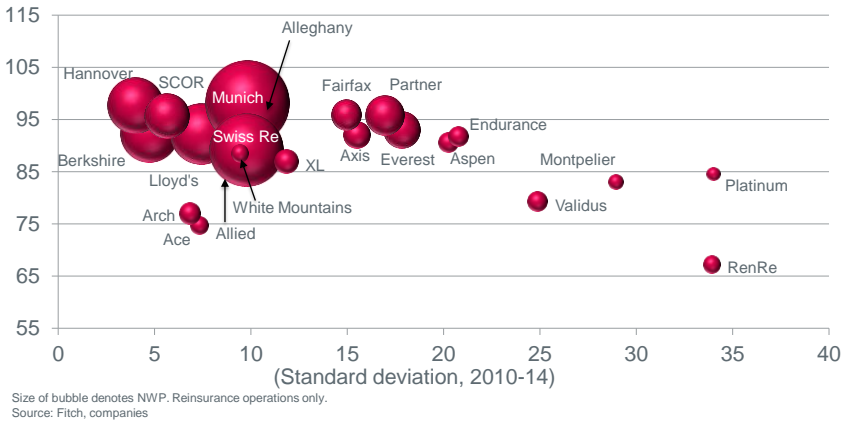
Share Repurchase Activity Decreases (cont.)

| (USDm) | H115 | H114 |
|-------------------------------------|--------------|--------------|
| Markel Corporation | 23 | 17 |
| Montpelier Re Holding Ltd. | - | 94 |
| Munich Re | 340 | 1,097 |
| RenaissanceRe Holdings Ltd. | 1 | 315 |
| PartnerRe Ltd. | 71 | 316 |
| Platinum Underwriters Holdings Ltd. | - | 111 |
| Validus Holdings Ltd. | 143 | 197 |
| White Mountains Insurance Group | 19 | 26 |
| XL Group plc | - | 352 |
| Total | 2,290 | 4,073 |

Source: Company reports

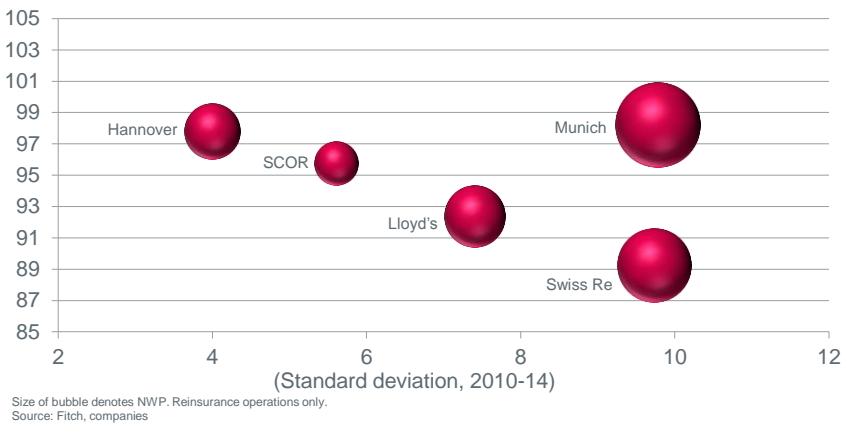
Reinsurance Combined Ratio Volatility

Average Combined Ratio, 2010-14: Europe and Bermuda



Reinsurance Combined Ratio Volatility

Average Combined Ratio, 2010-14: Major European



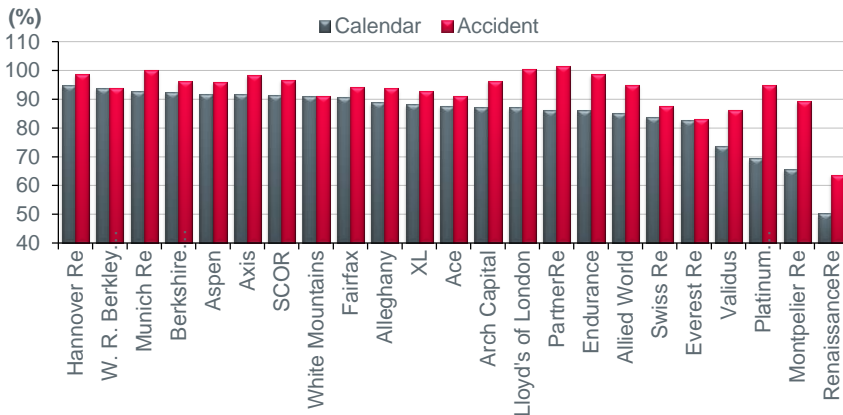
FitchRatings

www.fitchratings.com

10

Prior Year Development Remains in Surplus

2014 – Calendar and Accident Year Combined Ratio



Source: Fitch

FitchRatings

www.fitchratings.com

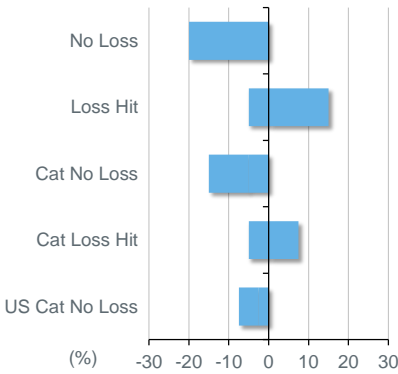
11

Reinsurance Renewal Pricing Trends

Pricing Floor Not Yet Reached

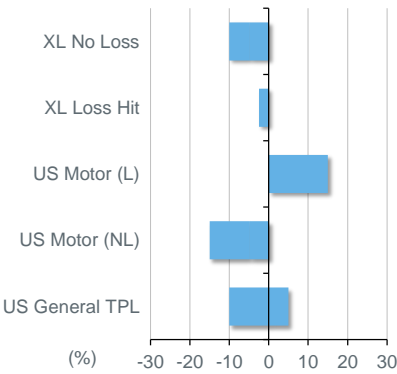
Property

(June/July 2015)



Casualty

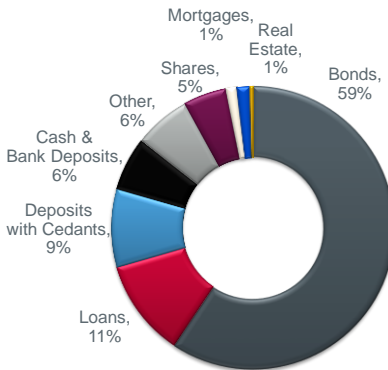
(June/July 2015)



Source: Company and broker reports

Invested Asset Allocation

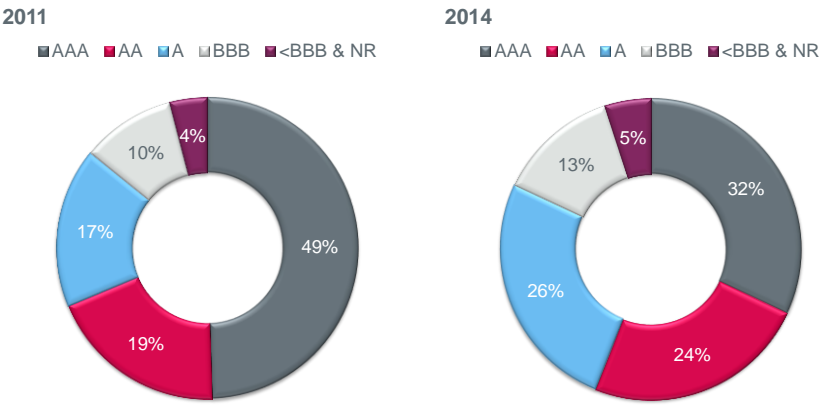
Major Asset Classes – 2014



Note: Combined composition for Hannover Re, Lloyd's of London, Munich Re, SCOR & Swiss Re. Source: Fitch

- Fixed-income remains major class
- Conservative risk appetite
- Key focus for 2016
 - Volatility due to interest rate movements
 - Changing risk appetite
 - Duration management

Fixed Income Credit Quality



Note: Combined composition for Hannover Re, Munich SCOR & Swiss Re Source: Fitch

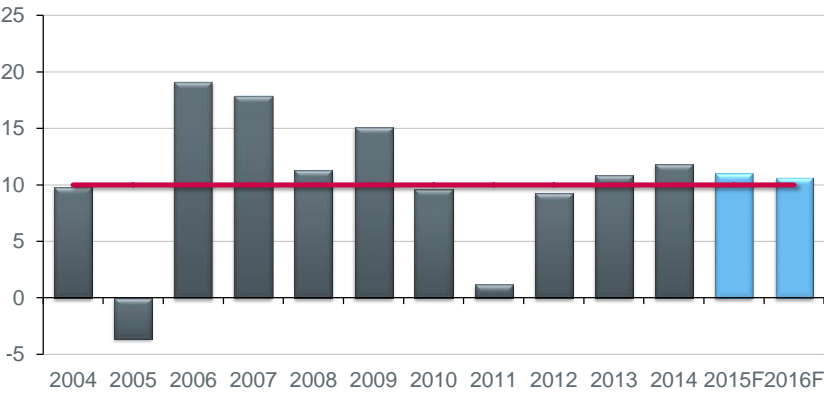
FitchRatings

www.fitchratings.com

14

ROE Declines – 10% Could Change View

Average Net Income ROE



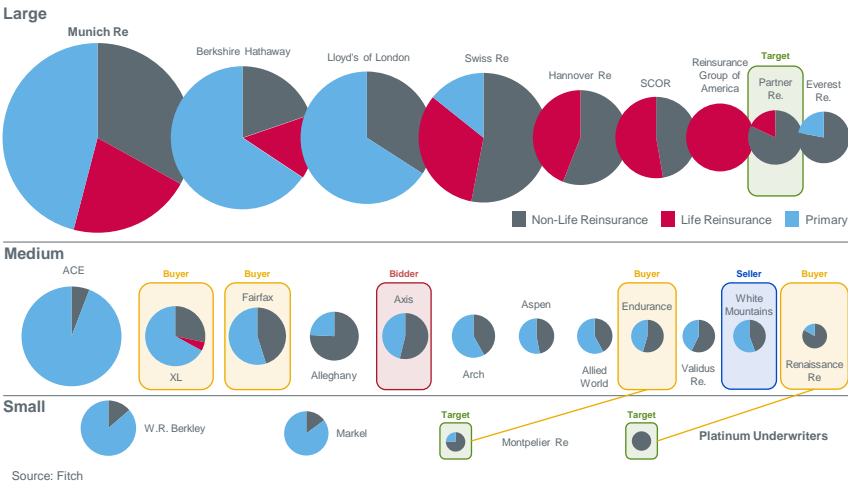
Source: Fitch

FitchRatings

www.fitchratings.com

15

Reinsurer Merger and Acquisition Activity



FitchRatings

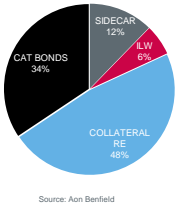
www.fitchratings.com

16

“Convergence”

- blurring the line between traditional and alternative capital

- Capital Markets are finding ways to enter the property cat space
 - Sidecars, ILWs, Collateral Reinsurance, Cat Bonds
 - Search for yield in low rate environment
 - Aon estimates to grow to \$120 B to \$150B (from around \$70 B)
- Direct writers are retaining more risk
 - Buoyed by lack of Cat 3-type events
- Reinsurers are not sitting still
 - Forming partnerships, M&A, setting up ILS shops



FitchRatings

www.fitchratings.com

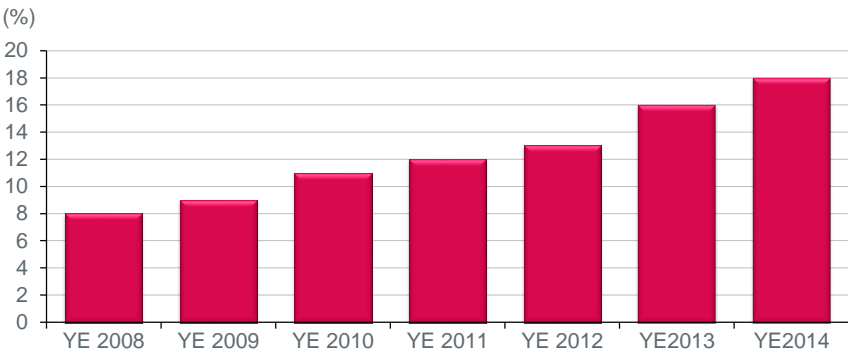
11/13/2015

17

Alternative Reinsurance Capacity

Alternative Market Capacity Continues to Grow

Alternative Capacity as a % of Global Property Catastrophe Reinsurance Limit



Source: Guy Carpenter Estimates

FitchRatings

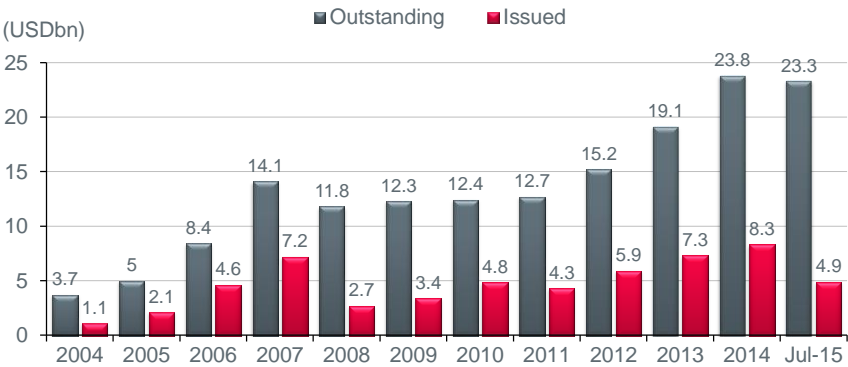
www.fitchratings.com

18

Catastrophe Bond Issuance

Issuance Remains Strong

Catastrophe Bonds (Non-Life)



Source: Willis Capital Markets & Advisory

FitchRatings

www.fitchratings.com

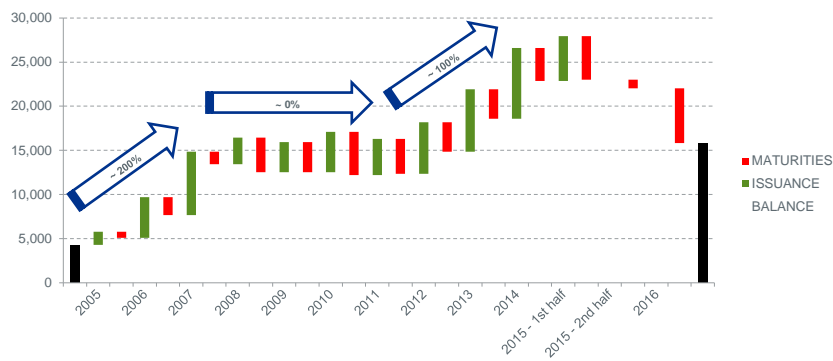
19

ILS Growth

– can the recent success continue?

•Tough sledding ahead

- What goes up, must come down – significant maturities coming due (\$6 B in 2016)
- Unless there is a paradigm shift, we believe not much more growth

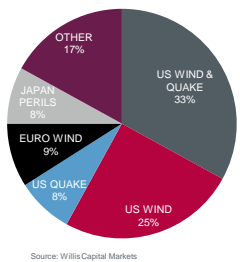


Basic Hurdles Still Exist for Cat Bonds

- though changes are in the air

- Niche market
- Expensive to structure
- Lack of robust secondary market
- Seasonality
- Peak perils
- Lack of standardization
- Private placements

OUTSTANDING PERILS



Source: Willis Capital Markets



Quake, Quake and more Quake

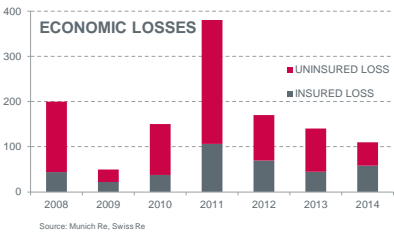
- no wind peril since Compass Re (June, 2015)



| Company | Sponsor | Issue Date | Peril | Covered Area | Par Amount (MM) |
|---------------|----------------------|------------|------------------------------|--------------|-----------------|
| AZZURRO RE | UNIPOLSAI GROUP | JUN 2015 | EQ - ITALY | INDEMNITY | € 200 |
| PANDA RE | CHINA RE | JULY 2015 | EQ - CHINA | INDEMNITY | \$ 50 |
| ACORN RE | HANNOVER RE (Kaiser) | JULY 2015 | EQ - CALIFORNIA | PARAMETRIC | \$ 300 |
| BOSPHORUS LTD | TCIP | AUG 2015 | EQ - TURKEY | PARAMETRIC | \$ 100 |
| URSA RE | CEA | SEPT 2015 | EQ - CALIFORNIA | INDEMNITY | \$ 250 |
| PENN UNION RE | AMTRAK | SEPT 2015 | MULTI-PERIL incl. EQ - US | PARAMETRIC | \$ 200 |

Where is the Supply?

- Most large (re)insurers are already in the cat bond space
 - Only a few new sponsors per year
- Direct writers will need to radically change reinsurance program
- Who takes the lead on uninsured or under-insured losses?
 - Government sponsored entities (TWIA, TCIP, MPUIA, Amtrak)
 - Traditional Reinsurers
 - Alternative Capital – World Bank



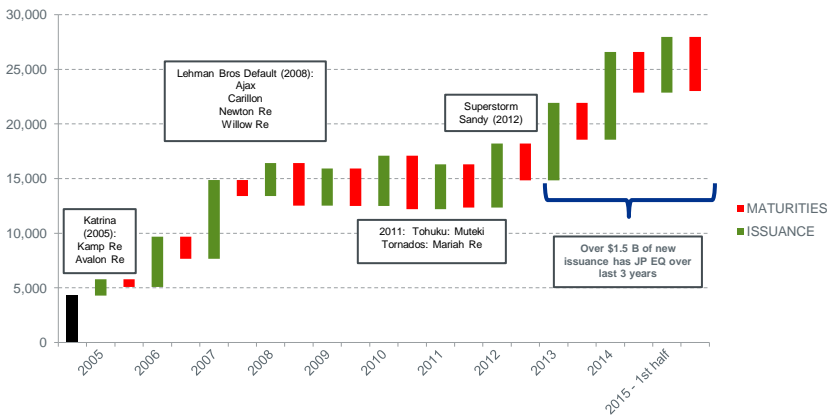
Where is the Supply (continued)?

- Are investors interested in other casualty lines?
 - Longer tail lines, adverse reserve development
 - Are there accepted models? Are there appropriate triggers?
 - Mortgage insurance
- Are Longevity Bonds attractive?
 - Defined Benefit transactions
 - Multi-billion dollar deals, very long dated



Will Investors Leave When Claims Happen?

- doesn't seem so based on past events



Sector Outlook Negative

- Sector (fundamental) outlook negative since January 2014
 - Premium prices to fall further in 2016
 - Investment yields to remain close to historic lows
 - Increased M&A to have limited impact on abating supply-side competition
- Reinsurers' ratings expected to remain resilient
 - Adequate profitability and strong capitalisation
 - Earnings decline within ranges that current ratings can tolerate
 - Small group of mono-line companies could be downgraded, moved to Neg. Outlook

What Could Lead to Downgrades?

- Deterioration in sector profitability, even if capital remains strong
 - Run-rate combined ratio stay closer to 100%
 - Return on equity dropped below 10%
- Catastrophic loss with interest rate spike
 - Catastrophic loss in excess of USD70bn coupled with a sudden spike in interest rates of 300bps or more

Related Research

Fitch research can be accessed via our website www.fitchratings.com

- *Monte Carlo Reinsurance Rendez-Vous Roundup* (21 September 2015)
- *Global Reinsurance Guide 2016* (7 September 2015)
- *2016 Outlook: Global Reinsurance* (3 September 2015)
- *Latin American Reinsurance* (27 August 2015)
- *Global Reinsurers' Mid-Year 2015 Financial Results* (25 August 2015)
- *Asian Reinsurance Markets* (21 August 2015)
- *Bermuda (Re)insurers Financial Performance* (27 July 2015)

FitchRatings

www.fitchratings.com

28

Disclaimer

Fitch Ratings' credit ratings rely on factual information received from issuers and other sources. Fitch Ratings cannot ensure that all such information will be accurate and complete. Further, ratings are inherently forward-looking, embody assumptions and predictions that by their nature cannot be verified as facts, and can be affected by future events or conditions that were not anticipated at the time a rating was issued or affirmed.

The information in this presentation is provided "as is" without any representation or warranty. A Fitch Ratings credit rating is an opinion as to the creditworthiness of a security and does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. A Fitch Ratings report is not a substitute for information provided to investors by the issuer and its agents in connection with a sale of securities.

Ratings may be changed or withdrawn at any time for any reason in the sole discretion of Fitch Ratings. The agency does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell, or hold any security.

ALL FITCH CREDIT RATINGS ARE SUBJECT TO CERTAIN LIMITATIONS AND DISCLAIMERS. PLEASE READ THESE LIMITATIONS AND DISCLAIMERS AND THE TERMS OF USE OF SUCH RATINGS AT WWW.FITCHRATINGS.COM.

FitchRatings

www.fitchratings.com

29



FitchRatings

New York

33 Whitehall Street
New York, NY 10004

London

30 North Colonnade
Canary Wharf
London E14 5GN