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Today’s Agenda

- Today’s P&C Reinsurance Market
- Marine in Today’s Market
- Emerging Marine Underwriting Issues
- Closing Points
Today’s P&C Reinsurance Market
Economic Forces at Play in the Industry
News

There has been more change in the property/casualty reinsurance business in the last 2 years than the prior 25.
Reinsurance Outlook – Negative

Today's Reinsurance Market – Economic Forces at Play in the Industry

News

Pressures on many fronts including oversupply of capacity, new entrants, substitute products, low interest rates, greater bargaining power of buyers.

Moody's
Reinsurers are being paid less and less to bear risk.
The traditional reinsurance business model is under threat.
## Making Sense of the Headlines

Today’s Reinsurance Market – Economic Forces at Play in the Industry

<table>
<thead>
<tr>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Capital</td>
</tr>
<tr>
<td>Market Impact</td>
</tr>
<tr>
<td>Emerging Strategies</td>
</tr>
</tbody>
</table>
Global Reinsurance – Combined Ratios

<table>
<thead>
<tr>
<th>Year</th>
<th>Loss Ratio</th>
<th>Expense Ratio</th>
<th>Combined Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>56.8</td>
<td>30</td>
<td>86.8</td>
</tr>
<tr>
<td>2010</td>
<td>62.4</td>
<td>30.2</td>
<td>92.6</td>
</tr>
<tr>
<td>2011</td>
<td>75.1</td>
<td>30.5</td>
<td>105.6</td>
</tr>
<tr>
<td>2012</td>
<td>57</td>
<td>31.1</td>
<td>88.1</td>
</tr>
<tr>
<td>2013</td>
<td>53</td>
<td>33.4</td>
<td>86.4</td>
</tr>
<tr>
<td>2014</td>
<td>62.5</td>
<td>35</td>
<td>97.5</td>
</tr>
<tr>
<td>2015</td>
<td>64.5</td>
<td>36.5</td>
<td>101</td>
</tr>
</tbody>
</table>

Source: Standard and Poor’s
Keys to Interpreting Recent Results

Expense Ratios are growing

- Lower premium volume in many cases
- Higher acquisition costs (ceding commissions) with shift toward Proportional

Loss Ratios appear better than they really are

- Significant benefit of reserve releases over the last 5 years may be over
- Natural catastrophe losses in 1H 2013 & 2014 were 20% below 10-year average
Today’s Reinsurance Market – Economic Forces at Play in the Industry

Natural Loss Events – Full Year 2013

Selection of significant Natural catastrophes

- **Natural catastrophes**
- **Meteorological events** (storm)
- **Geophysical events** (earthquake, tsunami, volcanic activity)
- **Hydrological events** (flood, mass movement)
- **Climatological events** (extreme temperature, drought, wildfire)
- **Extraterrestrial events** (Meteorite impact)

880 Loss events

Global Natural Catastrophe Update – Loss Events Worldwide 2014
Overview and Comparison with Previous Years

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Events</td>
<td>490</td>
<td>470</td>
<td>410</td>
<td>315</td>
</tr>
<tr>
<td>Overall Losses in US$ m (Original Values)</td>
<td>42,000</td>
<td>66,000</td>
<td>95,000</td>
<td>66,000</td>
</tr>
<tr>
<td>Insured Losses in US$ m (Original Values)</td>
<td>17,000</td>
<td>21,000</td>
<td>25,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Fatalities</td>
<td>2,700</td>
<td>9,100</td>
<td>53,000</td>
<td>30,000</td>
</tr>
</tbody>
</table>

Source: Munich RE
Making Sense of the Headlines

Today’s Reinsurance Market – Economic Forces at Play in the Industry

- Results
- New Capital
- Market Impact
- Emerging Strategies
Alternative Reinsurance Market

Alternative reinsurance is effectively any form of managing and transferring (re)insurance risk through the use of the capital markets rather than the traditional reinsurance market. These nontraditional structures commonly include catastrophe bonds (cat bonds), collateralized quota-share reinsurance vehicles (sidecars) and industry loss warranties (ILWs).

Alternatives to traditional reinsurance essentially began following Hurricane Andrew in 1992, the first cat bond in 1994, and later sidecars in 2001, following the events of Sept. 11, 2001. The market began to grow significantly following Hurricane Katrina in 2005.

Source: Fitch Ratings; Insurance Information Institute, shortened by Andrew Flitcroft/Takashi Ishii
Alternative Capacity Development, 2001-2013: H1

Source: Guy Carpenter; Mid-Year Market Report, September 2013; Insurance Information Institute.
New Capital – Classes of 2013 & 2014

Today's Reinsurance Market – Economic Forces at Play in the Industry

Who?
• Previously limited to Private Equity and Pension Funds
• Now including Hedge Funds and other professional asset managers, in some cases in partnership with existing insurance companies (e.g. ACE & BlackRock)

What?
• Catastrophe Bonds, Industry Loss Warranties, Sidecars, Offshore Collateralized Reinsurance Vehicles (e.g. Greenlight Re)
• Targeted class of business was initially Property Cat, now spreading to low-severity Casualty, and Specialty Lines

Why?
• Results appear to have been good
• Perception of insurance risk as a means of non-correlated diversification
• Superior nominal rates of return relative to other interest-bearing investments
• For fund managers:
  - Reserves as a source of “permanent” capital
  - Tax-free growth of capital while offshore
  - Profits receive preferential capital gains treatment regardless of whether eventually repatriated or IPO
Catastrophe Bond Issuance Is Approaching Pre-Crisis Levels While Risk Capital Outstanding Stands at an All-Time Record

Risk capital outstanding reached a record high in 2013 and could set a new record in 2014

CAT bond issuance reached a record high in 2013 and could set a new record in 2014

*Through June 30, 2014.
Source: Guy Carpenter; Insurance Information Institute.
Alternative Capital Growing as % of Industry Total

Global Reinsurer Capital

Source: Company reports, Aon Benfield Analytics
For Buyers – Alternative Capital

Today’s Reinsurance Market – Economic Forces at Play in the Industry

The Case For

• Diversifies away from reliance on traditional reinsurers
• Fully collateralized
• Abundant capital (for now)
  • Recent launches have easily raised $500m - $1B
• It’s cheap
  - “Lower cost of capital”
  - Lower return expectations
    (12% ROE vs. 3.5% over LIBOR)

The Case Against

• ILS complexity, uncertainty, basis risk
• No relationship = willingness to pay is untested
• No expertise to add or local presence to understand client’s business
• Longevity at current volumes questionable
  - When interest rates rise
  - When losses inevitably occur
  - When managers can cash out
# Making Sense of the Headlines

## Today’s Reinsurance Market – Economic Forces at Play in the Industry

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Reinsurance rates down consistently around the world with just a few exceptions

Loss Ratios are up despite BELOW AVERAGE Natural Catastrophe activity

Expense Ratios also up due to
- Declining premium volumes in some cases and
- Rising ceding commissions on proportional business

Extent depends on each company’s business model
- Traditional reinsurers vs. CAT specialists (e.g. Renaissance Re and Montpelier)
- Narrow focus of specialists puts all the power in the hands of buyers and brokers

Reinsurance Brokers
- Client expectations increasing
- Not immune and frequently need to cut brokerage and throw in services to avoid or win RFPs
- Influence over reinsurers grows as they become more desperate
Market Impact – Terms and Conditions

Contract erosion is the Pandora’s Box of a soft reinsurance market

Examples

- Event hours clause extension
- Terrorism & Cyber exclusions missing
- Sole judge language added
- Coverage for risks below retention
- Missing standard industry contract clauses

All of these amount to a form of a rate decrease, but they:

- Are more difficult to track and quantify
- Take time to show up in results
- Will definitely have an effect on reinsurers loss ratios over the next few years
- Are difficult to fix and will lead to disputes
Soft Market Cycle or New Normal?
Theories on What’s Next?

Today’s Reinsurance Market – Economic Forces at Play in the Industry

Interest rates rise

Mega Catastrophe turns the market

• Depends on size and health of balance sheets at the time of the event
• Over $100 Billion in CAT losses in 2011 only temporarily slowed market softening
• Likely that some capital providers would “double down” based on expectations for future profits

Death by a Thousand Cuts

“It is only a question of time before (re)insurers have to shoulder the consequences of their underwriting policies”

Nikolaus Vom Bomhard, Munich Re CEO
Mergers and Acquisitions

“Came up a lot more frequently than we’d anticipated”

Keefe, Bruyette and Woods at Monte Carlo Rendez-Vous

Some (re)insurers may “come to the conclusion that their business model is no longer appropriate given the current market circumstances”

David Cole, CFO Swiss Re

New Normal

“Over time, if the alternative capital that has come into the market stays in a meaningful way, the expectation is that we would see a permanent erosion of profit margins.”

Martyn Street, Senior Director, Fitch
Making Sense of the Headlines

Today’s Reinsurance Market – Economic Forces at Play in the Industry

- Results
- New Capital
- Market Impact
- Emerging Strategies
Take advantage of the buying power

• Opportunistic purchases to lower net during period of deteriorating results
• Volatility is still there despite lull in CATs

Be wary of strategic changes to pricing models

“*The use of reinsurance at the bottom end of a cycle is a critical factor in managing the portfolios. And anybody who thinks that they can retain larger amounts of their business unprotected at this stage of the cycle, I think you should suggest they need some medical attention*”

*John Charman, Endurance CEO*

However, “*there is no winning [long term] strategy through arbitrage*”

*Stefan Holzberger, A.M. Best Europe*
Soft Market Strategies – Sellers (not recommended)
Soft Market Strategies – Sellers

Today’s Reinsurance Market – Economic Forces at Play in the Industry

Embrace 3rd party capital model to deliver scale

Increase retrocession purchase to lower net effect

Pull Back from commoditized lines

*Pursuing reinsurance growth in this market is a “fool’s game”*

*Bronek Masojada, Hiscox CEO*
Soft Market Strategies – Sellers

Today’s Reinsurance Market – Economic Forces at Play in the Industry

Replacing lost business with more emphasis on:
- Casualty and Long-Tail Business
- Specialty Lines including Marine
- Accident and Health
- Emerging markets

Expand existing or get into primary insurance operations

Focus on markets with low insurance penetration and high growth rates

Strengthen resolve toward value-added relationship model

*This market “will divide the market between those who focus on the client and those who focus on the product.” – Charles Franks, Kiln CEO*
Parallels with rest of P&C

- Relative absence of large losses in 2013
- Rising non-CAT loss ratios
- Abundant capacity from new underwriting markets
- Decent 2013 result fueling unhealthy sense of complacency
U.S. Ocean Marine Combined Ratio
2004-2013

Ocean Marine results have improved markedly in 2013

Ocean Marine Results Have Been Quite Volatile Over the Past Decade, with the Combined Ratio Ranging by More than 20 Points

Sources: A.M. Best; Insurance Information Institute.
Cargo Loss Ratios Have Deteriorated

Cargo – Gross* Ultimate Loss Ratio
Europe/USA**, Underwriting Year 1996-2013

Since 2007:
• Deterioration of good 2002-2006 results

2009-2013:
• 2011-2013 start at about 72%
• 2012 Sandy affects mainly US

* Technical breakeven: gross loss ratio does not exceed 100% minus the expense ratio (usually 20%-30% acquisition cost, capital cost, management expenses)

** Data: Belgium, France, Germany, Netherlands, Italy, Spain (until 2007), UK, USA

Sources: IUMI Facts and Figures Committee
Hull Loss Ratios Continue to Be Terrible

Hull – Gross* Ultimate Loss Ratio
Europe/USA**, Underwriting Year 1996-2013

2011:
• Strong major loss impact (Costa Concordia and others)

2012/2013:
• Less major loss impact as in 2011

2013
• Improvement, but technical result still at loss (18th year)

* Technical breakeven: gross loss ratio does not exceed 100% minus the expense ratio (usually 20%-30% acquisition cost, capital cost, management expenses)
** Data: Belgium, France, Germany, Netherlands, Italy, Spain (until 2007), UK, USA

Sources: IUMI Facts and Figures Committee
While Declining Loss Frequency Tells One Story

Claim Frequency by Size of Claims

Total Losses

Sources: Cefor Statistics Forum, IUMI Facts and Figures Committee, Lloyds List Intelligence, Clarkson Research, August 2014
Note: Total Losses as Percentage of World Fleet, Vessels > 500 GT
Vessels with Values xs 100 USD Million as % of Total Insured Portfolio:

Sources: Cefor Statistics Forum, IUMI Facts and Figures Committee
# How Marine Stacks Up in this Environment

## Today’s Reinsurance Market – Impact on Marine Specifically

### Parallels with rest of P&C

- Relative absence of large losses in 2013
- Rising non-CAT loss ratios
- Abundant capacity from new underwriting markets
- Decent 2013 result fueling unhealthy sense of complacency

### Differences

- Historically superior profit margins
- Perception as a non-correlated line
- Lower default capital requirements under Solvency II
- Hard to model CAT exposures
- Smaller pool of qualified experts
Is Marine Immune from the Influence of New Capital?

Today's Reinsurance Market – Impact on Marine Specifically

Yes

• Marine is different
  - Yes, a low correlation with some events
  - But, limited data for CAT modeling and relatively low demand

• “Markets such as marine and aviation are tiny, and there isn’t a crying need for capital.”

  Tony Tettino, CEO Elementum

No

• The Deepwater Horizon and Costa Concordia losses have highlighted the need for limits exceeding traditional (re)insurance appetite

• Marine is just one of many attractive Specialty lines likely to feel the spillover effects as reinsurers diversify

• Marine Industry Loss Warranties already in use with growing interest
Reasons Why This Marine Market Will Be Ugly

Today’s Reinsurance Market – Impact on Marine Specifically

Lack of industry loss statistics for most classes

- Marine is small line (relatively) and P&C senior management
  - Doesn't understand it and pays next to no attention
  - Is over reliant on benchmarking reports but ignorant of limitations of marine data
    - I.e. ERC available on renewals but not enough data for adequately assessing new business
  - Holds naïve assumptions regarding mobility and absence of static exposures and will be unpleasantly surprised
Reasons Why This Marine Market Will Be Ugly

Today’s Reinsurance Market – Impact on Marine Specifically

Experienced underwriters, brokers, claims adjusters spread thin across the growing multitude of shops

- Limited depth, awareness of risks/discipline varies by company
- Two decades of under investment in talent leaves little depth

Too many non-experts writing business they don’t fully understand

For example:
- “Winning” stock throughput accounts from property markets based on low price and loose T&Cs
- Outsourcing CAT modeling for static exposures = HUGE miscommunication risks in the hand-offs
- Leading to culture of model reliance, shared responsibility / no accountability and foreseeable results
Emerging Underwriting Issues
Trends We Are Watching Closely
Emerging Marine Underwriting Issues

- Larger Vessels
- Piracy
- Port Congestion
- Cyber Risk
- Removal of Wreck
- Salvage Expenses
- Arctic Shipping
- Climate Change
- Trade Sanctions
- Panama Canal

Emerging Underwriting Issues
The Wide Wake of Larger Vessels

Emerging Underwriting Issues

Economies of Scale Risk:

**Concentration of Risk**
- Cargo + Hull quickly approaching $1-2B at risk on larger vessels
- Many concerns about loss scenarios

**Salvage and Wreck Removal**
- Occurring more frequently, each with higher costs
- Size, Environmental Sensitivity, Politics, Limited Infrastructure contribute

**Port Congestion**
- Less predictable arrivals due to slow steaming
- Once in port, larger vessels tie up facilities for longer, with potential to overwhelm
- Resulting increase in average daily port values could be multiples of vessel size increase
Large Partial Losses Are Increasing in Frequency

Claims in Excess of USD 30M

Serious and Total Losses

Sources: Cefor Statistics Forum, IUMI Facts and Figures Committee, Lloyds List Intelligence, Clarkson Research, August 2014
Note: Total Losses as Percentage of World Fleet, Vessels > 500 GT
Partial claim per sum insured, by sum insured layer, 2008-2013, by date of loss

Underwriting Challenges and Dilemma

• Greater complexity and exposure
• Significant claims handling uncertainty

Cefor analysis shows a flattening of partial claims by Sum Insured, and possible increase for the largest vessels

Will the Total Loss rate eventually exhibit a similar pattern?

Source: Cefor Annual Report 2013
Extreme Weather

Emerging Underwriting Issues

- Climate Change is a Reality
- Most static Marine exposures are located near the coast
- Marine insurers have to prepare for a higher frequency of larger storms and the implications for their portfolios
- Wind
- Flood
- Storm Surge

2005
US (Katrina) $47B

2012
US (Sandy) $29B

2011
Thailand Flooding $15B

2012
Europe Flooding $4B

Source: Central Europe Flooding, "Povodně v Praze_30.jpg" by Jargo/CC BY-SA 3.0
85% of executives cited Cyber Risk as a top concern – AIG Study

- Downside to the digitizing of operations
- In addition to data breach potential, some operations exposed to:
  - Property Damage, Bodily Injury, Business Interruption, & Third Party Liability
- Both Financial & Reputational Costs

Ports

- Significant vulnerabilities in essential trade infrastructure - Brookings Institute

Cargo

- Shipping and supply chains are the next targets for hackers - International Maritime Bureau

Vessels

- Researchers have found significant holes in navigation systems (GPF, AIS, ECDIS) security
- “Every ship has a back door – communication lines” – Markus Wahler, marine cyber consultant
The Total Number of Data Breaches (+38%) and Number of Records Exposed (+408%) in 2013 Soared

Shipping identified as highly important to achieving objectives

Marine and Aviation pose the highest risk for insurers

“Underwriting” Risks

- Criminal Charges
- Fines
- Reputation
- Potential Breach of Contract
Closing Points
• Reinsurance results aren’t as good as they’ve looked and are deteriorating rapidly.

• Risk is still out there – don’t get lulled into a false sense of security!

• New capital will be disruptive in the short term; in the longer term some players will leave but others are here to stay.

• Marine reinsurance will feel these effects just like the rest of P&C, but indirectly rather than through major structural changes.

• For buyers this creates a near term opportunity for arbitrage, but don’t bet on it as part of your long term business strategy.

• There will continue to be a role for the traditional reinsurance model, but individual companies’ strategies will vary.
Reinsurance Risk Transfer Cycle

IDENTIFY

TRANSFER

TREATY

PROGRAM

FACULTATIVE

RETAIN

RISK

UNDERSTAND

TREATY

PROGRAM

FACULTATIVE
Thank You

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Visit genre.com for more info.