Marsha A. Cohen
Senior Vice President & Director of Education
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Washington, D.C.

Marsha A. Cohen is senior vice president and director of education for the Reinsurance Association of America. RAA, headquartered in Washington D.C., is a nonprofit trade association for reinsurers and reinsurance intermediaries. Marsha is responsible for the operations of the RAA’s Reinsurance Education Institute.

Prior to joining the RAA, Marsha was assistant vice president and corporate secretary of Royal Reinsurance American Holdings and its subsidiaries, American Royal Reinsurance Company and American Royal Reinsurance Management Corporation, which is now known as QBE Re. Marsha began her career in reinsurance at the New England Reinsurance Corporation.

In October 2006, Marsha was named one of the Women to Watch by Business Insurance. In 2005, the Association of Professional Insurance Women named her Insurance Woman of the Year. In 2000, she was honored as one of Business Insurance Leading 100 Women and was presented with the Association of Professional Insurance Women’s Women of the Future award. She is a board member of the New York chapter of CPCU; a committee member of the Reinsurance Section of the CPCU Society; the treasurer of the D.C. Insurance Federation; a board member and past chair of the Insurance Education Council to the National Conference of Insurance Legislators; a member of the Angus Robinson Scholarship Committee; a past president of The International Alliance; and a past president of the Association of Professional Insurance Women. Marsha is a member of Boston University Metropolitan College advisory board and a member of the board of the American Hebrew Academy. She was an adjunct professor of management at Baruch College, City University of New York from 1988 to 1992.

Marsha has been a speaker for the Illinois State University’s Katie School of Insurance and Financial Services, Drake University, Insurance Regulatory Examiners Society, CPCU Society, National Association of Insurance Commissioners, Intermediaries & Reinsurance Underwriters Association, Contracts Wording Discussion Group, APIW, National Association of Mutual Insurance Companies, TIA, and the New York Insurance Association.

Marsha received her master’s degree from Boston University and holds a bachelor’s degree from the University at Albany, State University of New York. She also attained the Chartered Property and Casualty Underwriter and Associate in Reinsurance designations.
Foundations of Reinsurance

Marsha A. Cohen, CPCU, ARé
Senior Vice President, Director of Education
Reinsurance Association of America
NAMIC Annual Convention
September 23, 2013

Overview of Reinsurance
Property & Casualty

- Introduction
- Purpose
- Forms & Types
- Domestic Market
- Marketing Reinsurance
- Security
Definition of Reinsurance

“Reinsurance is a contract of insurance whereby one insurer (called the reinsurer or assuming company) agrees, for a portion of the premium, to indemnify another insurer (called the reinsured or ceding company) for losses paid by the reinsured under insurance policies issued by the reinsured to its policyholders.”
Elements of Reinsurance

- Reinsurance is a form of insurance.
- There are only two parties to the reinsurance contract - the Reinsurer and the Reinsured - both of whom are insurers, i.e. entities empowered to insure.
- The subject matter of a reinsurance contract is the insurance liability of the Reinsured undertaken by it under insurance policies issued to its own policyholders.
- A reinsurance contract is an indemnity contract.
  - The reinsurer “reimburses” the insurer for its portion of paid claims

What Reinsurance Does

1. It converts the risk of loss of an insurer incurred by the reinsured under its policies according to its own needs.

2. It redistributes the premiums received by the reinsured, which now belong to the reinsured, according to its own business needs.
What Reinsurance Does Not Do

- Reinsurance is not coinsurance.
- Reinsurance is not banking – it is not the lending of money but it can have the same effect.
- Reinsurance is not a security.

Reinsurance does not:
- Convert an uninsurable risk into an insurable risk.
- Make loss either more or less likely to happen.
- Make loss either greater or lesser in magnitude.
- Convert bad business into good business.

It is not Alchemy.

History

- First reinsurance contract dates back to 1370
- Early contracts revolved around Marine contracts
- First reinsurance company established in Germany (1846)
- Later years, during industrial revolution, reinsurance developed primarily around Fire coverage
Lloyd’s History

- Began in 1689
- “Underwriter” term
- Not an insurance company
- Names
- Asbestos
- Risk diversification
- Insurance Spiral

Top ten reasons to buy reinsurance

- To pay losses
- Surplus relief / finance growth
- Smooth financial results
- Increase capacity
- Protect earnings
- Provide catastrophic protection (property, casualty, ECO)
- Protect treaty structure &/or net retention
- Deal with high hazard risks
- Access reinsurers’ underwriting expertise
- Compete
Functions of Reinsurance

- Financing
- Stabilization
- Capacity
- Catastrophe Protection
- Services

Financing

- It is growing and needs additional surplus to maintain acceptable premium to surplus ratios.
- Unearned premium demands reduce surplus.
- In a down cycle, underwriting results are bad and reduce surplus.
- Investment valuation negatively impacts surplus.
- Marketing considerations dictate that an insurer enter new lines of business or new territories.
Stabilization

**Marketing Consideration**
Policyholders and stockholders like to be identified with a stable and well managed company.

**Management Consideration**
Planning for long term growth and development requires a more stable environment than an insurance company’s book of business is apt to provide.

Capacity

- Refers to an insurer’s ability to provide a high limit of insurance for a single risk, often a requirement in today’s market.
- Reinsurance can help limit an insurer’s loss from one risk to a level with which management and shareholders are comfortable.
- Most states require that the maximum “net retention” from one risk must be less than 10% of policyholders’ surplus.
Catastrophe Protection

- Objective is to limit adverse effects on P&L and surplus from a catastrophic event to a predetermined amount.

- Covers multiple smaller losses from numerous policies issued by one primary insurer arising from one event.

Services

1. Claims Audit
2. Underwriting
3. Product Development
4. Actuarial Review
5. Financial Advice
6. Accounting, EDP and other systems
7. Engineering - Loss Prevention
Reinsurance is Provided Through

A. Treaty
   a. Covers classes or entire “books” of business
   b. Reinsurer accepts as written by insurer as to form, price and risk

B. Facultative
   a. Single Policy/Risk
   b. Reinsurer evaluates each risk and establishes or agrees to acceptance, form and price
   c. Automatic or semi-automatic facilities

Facultative

- Risk by risk selection
- Right to accept or reject
- Right to establish unique price
- Unique terms and conditions
Facultative Hybrid

- Obligatory Facultative
  - Pre-Agreed Risk Selection Profile
  - Limited Right to Accept or Reject Cessions
  - Priced on Basis of Pre-Agreed Parameters
  - Similar Terms and Conditions

Use of facultative in reinsurance program design

- High hazard risk
- Additional capacity
- Protect net retention
- Protect treaties
- Treaty exclusions
- Underwriting expertise
Treaty

- No risk by risk selection (portfolio)
- No individual right to accept or reject (obligatory)
- Reinsurer accepts insurer price
- Reinsurer follows terms and conditions

Types of Reinsurance

1. Proportional or Pro Rata
   - Quota Share
   - Surplus
2. Non-Proportional or Excess of Loss
   - Per risk
   - Occurrence
How many types of reinsurance there?

- 60
- 100
- 2
- 7

**Types of Reinsurance**

<table>
<thead>
<tr>
<th>Quota Share</th>
<th>Surplus Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reinsurer covers the same percent on each risk</td>
<td>Reinsurer’s share based on type or size of risk</td>
</tr>
</tbody>
</table>

**PROPORTIONAL**

- 50% quota share means
- Of each and every risk
- Cedent writes 100%
- Keeps fixed 50% each loss and 50% premium
- Cedes other fixed 50% to reinsurers
- Reinsurer pays ceding commission

- a.k.a. Variable Quota Share
- Cedent keeps $500k all policies
- Cedent writes $1M limit CGL
- Keeps 50% cedes 50% premium & loss
- Cedent writes $2M policy
- Keeps 25% cedes 75%
- Cedent writes $3M policy
- Keeps 17% cedes 83%
- Reinsurer pays ceding commission
Forms of Reinsurance

PROPORTIONAL

Quota Share
Reinsurer covers the same percent on each risk

Surplus Share
Reinsurer’s share based on type or size of risk

EXCESS OR NON-PROPORTIONAL

Excess Each Risk/Per Risk
Reinsurer covers excess of a predetermined amount; limits apply separately to each loss

Excess Each Occurrence (Catastrophe)
Reinsurer covers over a predetermined amount or limit for all losses arising out of one event or occurrence

Aggregate Excess (Stop Loss)
Reinsurer covers over a predetermined aggregate limit of loss or loss ratio for a specific period of time

Per Risk Excess of Loss
Reinsurer covers excess of a predetermined amount; limits apply separately to each loss

Per Risk Aggregate Excess of Loss
Reinsurer covers over aggregate claims for a risk in a specified period of time

There are only two types of reinsurance

- **Proportional** (e.g., quota share & surplus share)
- **Non-proportional** (e.g., excess of loss, aggregate excess of loss)
Pro Rata or Proportional

- Share in Premium in Predetermined Manner
- Share in Losses in Direct Proportion to Premium Ceded
- Pays Ceding Commission to Reimburse for Expenses
- Can be Quota Share or Surplus Share
  - **Quota Share**: Reinsurer covers some percent on each risk
  - **Surplus**: Reinsurer share based on type/size of risk

Excess or Non-Proportional

- No Proportional Sharing of Premium or Loss
- Responds to Losses Excess of Predetermined Retention
- Negotiated Premium
- Written in Layers
Excess (XS)
Risk Excess
Written in Layers

Excess (continued)
CATASTROPHE

POLICY LIMITS (THOUSANDS)

INSUREDs

1ST LAYER
2ND LAYER
RETENTION

CATASTROPHE

$LOSS

10MM
5MM
1MM

$5MM
XS $5MM

$4MM XS
$1MM

1ST 2ND 3RD ETC.

OCCURRENCE
Cat XS

Summary
- Retention Established
- Maximum Recovery Established
- Premium Negotiated
- Sold in Layers
- Usually Limited to Two Occurrences
  - Additional Cover Needed

Aggregate XS

Summary
- Stop Loss
- Accumulation of Losses
Special Note

- Reinsurance contracts are all manuscript contracts – each treaty is unique
- It is a serious mistake to think of a reinsurance treaty as “standard” like a Commercial General Liability Policy
- It is also a mistake to think the words mean the same in a reinsurance contract as an insurance policy – the word “occurrence”, for example, is often defined differently
- “Aggregate”, for example, in an insurance policy often limits coverage in a reinsurance contract it may be an expansion of coverage
- Don’t assume

Manuscript reinsurance treaties and coverage

- *Every* clause is a coverage opportunity
- There are *NO* standard clauses
- Coverage is more important than price
- When you have a large loss no one is going to ask you what you paid for the treaty
- Is it covered?
Boot Camp Mutual Facts

- Boot Camp Mutual founded in 1900’s.
- 1969 premium volume was $10 million.
- By 1980 premium volume grew to over $50 million.
- 2005 premium volume $130 million.

Boot Camp Mutual expanded lines of coverage as follows:

- Initially wrote farms and other properties;
- Currently writes: homeowners, umbrella liability, mobile homes, automobiles, dwelling fire, boats, snowmobiles, various small business owner commercial packages including commercial auto and workers compensation.
What types of reinsurance could Boot Camp Mutual have used to meet the following objectives?

- Increase capacity;
- Increase surplus; and,
- Increase underwriting expertise.

Answer: Pro Rata or Proportional
What types of reinsurance could Boot Camp Mutual have used to attain the following goals?

- Limit liability on specific risks;
- Limit the aggregate amount of total losses that would add up in the event of a catastrophic;
- Stabilize wide swings in its loss ratio and profit margins.

Answer: Excess or Non-Proportional
Types of Reinsurers

1. Professional Reinsurers
   - Specialize in Reinsurance
   - Are Licensed in at Least One State
   - Derive Majority of Their Premium Income From Reinsurance
   - Forms
     - Stock Company
     - Mutual Company
     - U.S. Branch of Alien Company

2. Reinsurance Department of Primary Company

3. Pools
   - Special Purpose
   - General Purpose
   - Inter-Company
   - Involuntary (Residual Market Mechanism)

4. Lloyd’s of London
Marketing of Reinsurance

1. Broker (Intermediary) Market
   - Reinsurance Intermediary
     - Provides Business for Reinsurers
     - Brings Parties Together - Helps Negotiate Reinsurance Terms
     - Acts as Agent of Ceding Company
     - Compensated by Reinsurer
   - Reinsurers Share Reinsurance Programs

2. Direct Writers
   - Contact Primary Insurers Directly Through Salaried Employees
   - Frequently Assume 100% of Reinsurance Program
### Market Share of U.S. Reinsurers' Year-End 2012 Results
Ranked by Net Reinsurance Premiums Written

<table>
<thead>
<tr>
<th>Reinsurers</th>
<th>Net Reinsurance Premiums Written</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Indemnity Company</td>
<td>7,124,005</td>
</tr>
<tr>
<td>QBE Reinsurance Group, New York</td>
<td>3,203,726</td>
</tr>
<tr>
<td>Transatlantic/Putnam Reinsurance</td>
<td>3,141,216</td>
</tr>
<tr>
<td>Munich Re America, Corp.</td>
<td>3,113,015</td>
</tr>
<tr>
<td>Odyssey Reinsurance Group</td>
<td>2,273,357</td>
</tr>
<tr>
<td>Berkley Insurance Company</td>
<td>1,719,304</td>
</tr>
<tr>
<td>Everest Reinsurance Company</td>
<td>1,518,037</td>
</tr>
<tr>
<td>Swiss Reinsurance America Corporation</td>
<td>1,439,428</td>
</tr>
<tr>
<td>General Re Group</td>
<td>1,209,645</td>
</tr>
<tr>
<td>Partner Reinsurance Company</td>
<td>922,992</td>
</tr>
<tr>
<td>XL Reinsurance America, Inc.</td>
<td>841,190</td>
</tr>
<tr>
<td>SCOR U.S. Group / SCOR Re</td>
<td>830,290</td>
</tr>
<tr>
<td>Axis Reinsurance Company</td>
<td>407,527</td>
</tr>
<tr>
<td>The Toa Reinsurance Company of America</td>
<td>391,273</td>
</tr>
<tr>
<td>Platinum Underwriters Reinsurance, Inc.</td>
<td>381,604</td>
</tr>
<tr>
<td>American Agricultural Insurance Company</td>
<td>283,567</td>
</tr>
<tr>
<td>Sirius America Insurance Company</td>
<td>271,201</td>
</tr>
<tr>
<td>Endurance Reinsurance Corporation of America</td>
<td>239,823</td>
</tr>
<tr>
<td>EMC Reinsurance Company</td>
<td>107,246</td>
</tr>
</tbody>
</table>

Source: RAA Reinsurance Underwriting Report

### U.S. Reinsurers 1981-2011

![Number of U.S. Reinsurers Reporting to the RAA](chart)

2013 NAMIC Annual Convention - Cohen
LIST OF WORLD’S 10 LARGEST REINSURANCE BROKERS

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>CROSS REVENUES (MILLIONS)</th>
<th>EMPLOYEES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aon Benfield</td>
<td>$1.44 (B)</td>
<td>3,100</td>
</tr>
<tr>
<td>Guy Carpenter &amp; Company LLC</td>
<td>$975M</td>
<td>2,155</td>
</tr>
<tr>
<td>Willis Re</td>
<td>$664M</td>
<td>1,441</td>
</tr>
<tr>
<td>JLT Reinsurance Brokers Ltd.</td>
<td>$198.7M</td>
<td>N/A</td>
</tr>
<tr>
<td>Towers Watson &amp; Co.</td>
<td>$172.3M</td>
<td>391</td>
</tr>
<tr>
<td>Cooper Gay Swett &amp; Crawford Ltd.</td>
<td>$120.4M</td>
<td>508</td>
</tr>
<tr>
<td>BMS Group Ltd.</td>
<td>$77.6M</td>
<td>296</td>
</tr>
<tr>
<td>Miller Insurance Services Ltd.</td>
<td>$68.2M</td>
<td>82</td>
</tr>
<tr>
<td>UIB Holdings Ltd.</td>
<td>$49.4M</td>
<td>280</td>
</tr>
<tr>
<td>Lockton Cos. International Ltd.</td>
<td>$35.6M</td>
<td>95</td>
</tr>
</tbody>
</table>

Source: Business Insurance, October 2011
Reinsurance is a Global Industry

- In 2011, reinsurance was ceded to or recoverable from over 4,800 reinsurers in over 103 jurisdictions outside the U.S.
- Total premium ceded to offshore reinsurers was $59.4 billion
- Reported reinsurance recoverable from unaffiliated reinsurers was $40.2 billion.
- Total reinsurance recoverables represent a significant part of the assets of U.S. property/casualty insurers.

Reinsurance is a Global Industry (Continued)

- Approximately 39.6% of reinsurance risk ceded by U.S. insurers was assumed by U.S. reinsurers while 60.4% was ceded to non-U.S. reinsurers.
How a Reinsurance Program Works

Company has the following 3 reinsurance contracts. These contracts fit together to form a reinsurance program. Indemnity limits are net amounts in this example:

- **Quota Share:** 50% of $1,000,000 each risk
- **Per Risk Excess:** $400,000 excess $100,000 each risk
- **Catastrophe:** $3,000,000 excess $100,000 each occurrence

- Could be one or multiple reinsurers participating on each one of these reinsurance agreements
- Some reinsurers may participate on more than one type of agreement
- Cedent pays losses, seeks indemnification or reimbursement from its reinsurers per reinsurance agreements
Reinsured Losses

- The Facts: Company suffers four losses (gross) in one windstorm:
  - Loss 1 $25,000
  - Loss 2 $500,000
  - Loss 3 $750,000
  - Loss 4 $1,000,000
  - Total loss to Company: $2,275,000

Applying the QS to Losses

- Contract 1: 50% Quota Share recoveries:
  - Loss 1 $12,500 $12,500
  - Loss 2 $250,000 $250,000
  - Loss 3 $375,000 $375,000
  - Loss 4 $500,000 $500,000
  - Total Recovered QS $1,137,500
### Applying the Per Risk XL to Losses

**Contract 2: Per Risk Excess recoveries ($400k x $100k each risk):**

<table>
<thead>
<tr>
<th>Loss</th>
<th>Net Retained</th>
<th>Recovered XOL</th>
<th>Recoverable QS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$12,500</td>
<td>$0</td>
<td>$12,500</td>
</tr>
<tr>
<td>2</td>
<td>$100,000</td>
<td>$150,000</td>
<td>$250,000</td>
</tr>
<tr>
<td>3</td>
<td>$100,000</td>
<td>$275,000</td>
<td>$375,000</td>
</tr>
<tr>
<td>4</td>
<td>$100,000</td>
<td>$400,000</td>
<td>$500,000</td>
</tr>
<tr>
<td><strong>Total Recovery:</strong></td>
<td><strong>$312,500</strong></td>
<td><strong>$825,000</strong></td>
<td><strong>$1,137,500</strong></td>
</tr>
</tbody>
</table>

Running total Reins recovery: $1,962,500

### Applying the Cat XL to Losses

**Contract 3: Catastrophe Excess recovery ($3M x $100k each occ.)**

- Total all losses in the occurrence: $100,000 $212,500

<table>
<thead>
<tr>
<th>Loss</th>
<th>Net Retained</th>
<th>Recovered</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>$25,000</td>
<td>$500,000</td>
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<tr>
<td>2</td>
<td>$500,000</td>
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</tr>
<tr>
<td>3</td>
<td>$1,000,000</td>
<td>$2,275,000</td>
</tr>
<tr>
<td><strong>Total loss to Company:</strong></td>
<td><strong>$2,275,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

The Facts: Company suffers four losses in one windstorm:

- Loss 1 $25,000
- Loss 2 $500,000
- Loss 3 $750,000
- Loss 4 $1,000,000

Total loss to Company: $2,275,000

Total Loss Occurrence: $2,275,000

Minus QS & XL Inuring so far: $1,962,500

Equals: **$312,500**

- This last total amount is subject to the cat cover
The Overall Reinsurance Recovery

- Total retention and recoveries/indemnity

<table>
<thead>
<tr>
<th>Ultimate net retained</th>
<th>Total reinsurance recoverable</th>
</tr>
</thead>
<tbody>
<tr>
<td>$100,000</td>
<td>$1,137,500</td>
</tr>
<tr>
<td>$825,000</td>
<td>$1,137,500-QS</td>
</tr>
<tr>
<td>$212,500</td>
<td>$1,137,500-Risk XL</td>
</tr>
<tr>
<td>$2,175,000</td>
<td>$1,137,500-Cat XL</td>
</tr>
<tr>
<td></td>
<td>$1,137,500-TOTAL RE RECOVERY</td>
</tr>
</tbody>
</table>

The Facts: Company suffers four losses in one windstorm:
- Loss 1 $25,000
- Loss 2 $500,000
- Loss 3 $750,000
- Loss 4 $1,000,000
Total loss to Company: $2,275,000

Summary: How a Reinsurance Program Works

- A reinsurance program may involve multiple contract types
- May involve one or multiple reinsurers
- Generally, all the cedent’s reinsurance agreements will be considered and applied together
- The result is indemnification of the cedent by the reinsurers per the terms of the reinsurance agreements
- Leaves the cedent with its agreed retention
Questions?

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