

# 2023 CARE Reinsurance Seminar

## C-22: Structured Risk: *How Many Levers Can We Pull*

Raj Bohra FCAS  
Gallagher Re

# CAS Antitrust Notice

**The Casualty Actuarial Society is committed to adhering strictly to the letter and spirit of the antitrust laws. Seminars conducted under the auspices of the CAS are designed solely to provide a forum for the expression of various points of view on topics described in the programs or agendas for such meetings.**

**Under no circumstances shall CAS seminars be used as a means for competing companies or firms to reach any understanding – expressed or implied – that restricts competition or in any way impairs the ability of members to exercise independent business judgment regarding matters affecting competition.**

**It is the responsibility of all seminar participants to be aware of antitrust regulations, to prevent any written or verbal discussions that appear to violate these laws, and to adhere in every respect to the CAS antitrust compliance policy.**



# Structured Quota Share

Managing Capitalization

# Quota Share Reinsurance as Capital Management Tool

## Finance growth

- Generate **capital relief**, improve capitalization scores (i.e., BCAR)
- Competitive pricing, when compared to other forms of capital, plus the flexibility of reinsurance
- Reduces premium required capital

## Available reinsurance options run the continuum of cost/benefit

- **Traditional / Unlimited**
  - Costly under favorable scenarios
- **Structured / Limited**
  - Cost effective

## Available reinsurance capacity from highly rated reinsurers mitigates execution risk

- Well-understood contract and terms
- Deep structured reinsurance market

## Capital issues faced by Insurance Companies

- Statutory accounting and regulatory capital models have conservative biases
  - Accelerate capital requirements
  - Accelerate expense and defer income recognition
- Significant upfront capital contributions required
  - Depresses ROE's during the start-up phase
- **A Quota Share will lower otherwise required capital by sharing economics with reinsurer**

# Capital Benefit of Structured QS Reinsurance

- Quota Share reinsurance acts as a form of capital
  - Reduces and/or delays capital contributions otherwise required
  - Reduces premium capital charges in AM Best BCAR capital model
- Structured Quota Shares are most often compared to debt financing whereas Traditional Quota Shares are more comparable to equity
  - Structured – fixed cost in upside scenarios, limit on downside protection
  - Traditional – proportional sharing of economics both upside and downside
- Cost of “capital” is the reinsurer’s margin relative to capital benefit in AM Best’s BCAR

$$\text{Ceded cost of capital} = \frac{\text{Impact on Net Income (ceded margin)}}{\text{Implied Capital Benefit based on BCAR improvement}}$$

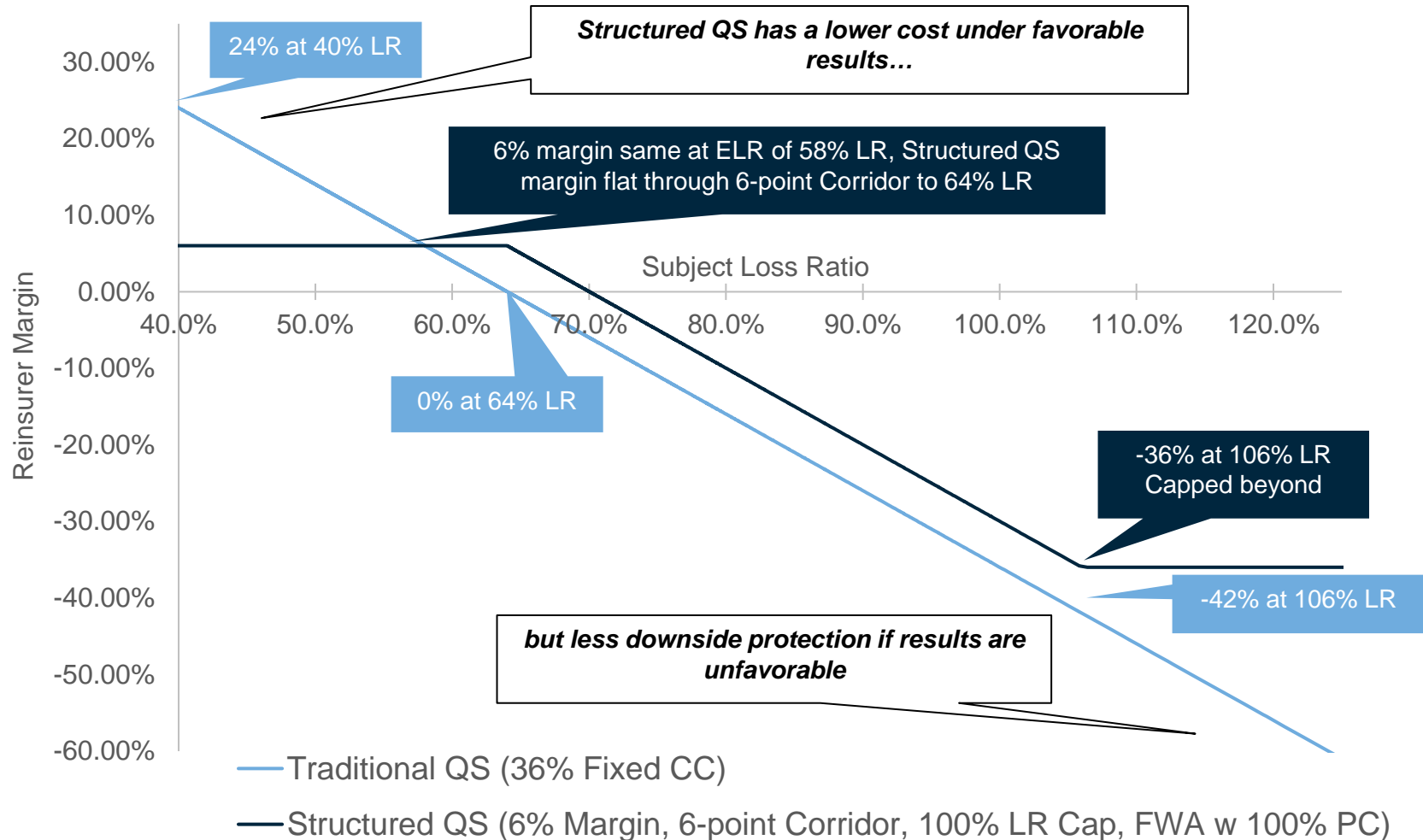
# Structured quota share vs. debt financing

Structured QS

# Structured QS Typical Coverage Terms

- Common contract features used to lower cost and limit risk include:
  - Experience Accounts – returns excess profit to cedant
    - Similar to 100% profit commission at ELR or better
  - Sliding scale ceding commission or loss corridors – losses in a specified range are retained by cedant
    - 60% - 70% corridor used in the example on the next slide
    - Limits reinsurers downside to balance upside retained by cedant
  - Loss ratio caps – losses in excess of the cap are retained by the cedant e.g., the reinsurer will not be responsible for losses in excess of a specified amount
    - 100% LR used in the example on the next slide
- Structured Quota Shares are subject to the same accounting and risk transfer rules as Traditional Quota Shares and all other reinsurance contracts:
  - Any limitations on recoveries (loss ratio or occurrence) must be reflected
  - Any experience related features must be currently accrued (profit commissions, loss corridors)
- Structured deals exceed accounting risk transfer guidelines and fully qualify for reinsurance accounting and capital relief

# Margin Comparison: Structured vs. Traditional QS





# Multi-Year Excess of Loss

Managing XOL Retentions

# Structured Multi-Year XOL with Profit Commission

## Improving Cost Benefit on High Activity Working Layers



**Best for High ROL layers with poor cost-benefit relationship**



**Takes advantage of diversification over time  
– most effective in high loss activity areas**



**Reinsurers often have dedicated teams for this product**



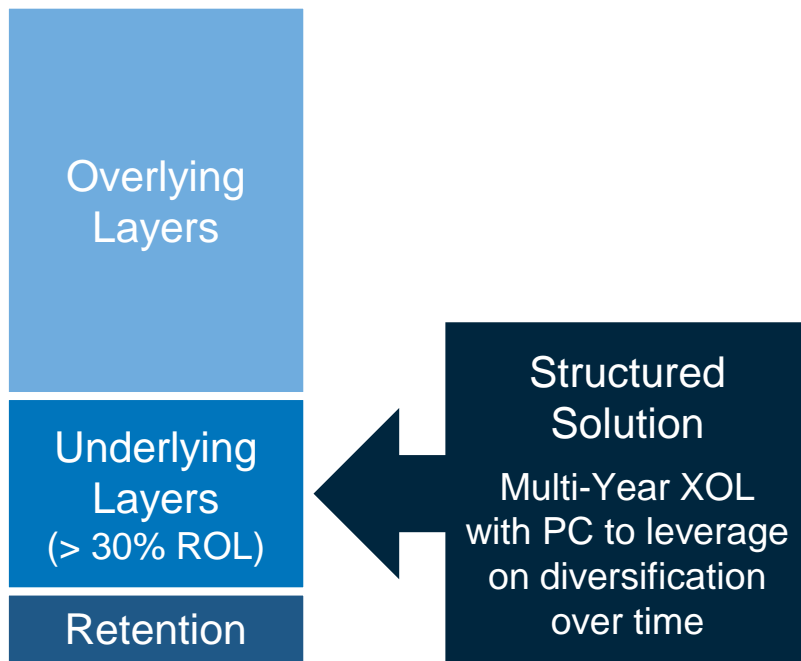
**Typically written with single or limited reinsurer**



**Can help bridge view of loss cost between cedent and reinsurer**

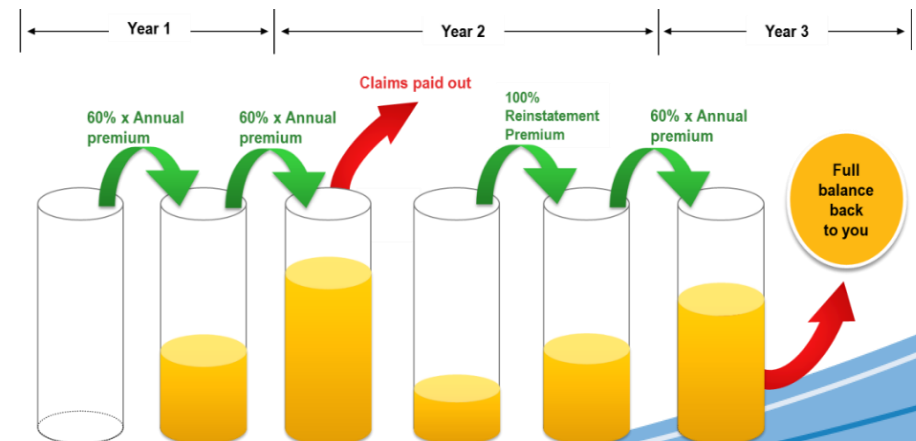
# Multi-Year Excess of Loss

## Potential Solution to Increasing CAT XOL Costs



### How it works:

- 2-to-3-year period
- Upfront Premium same or marginally higher than Traditional
- Cumulative notional Experience Account
- Margin 30-50% / PC 50-70%
- Annual Limits matching Traditional with additional Term Limits share across years
- Early cancellation option if profitable



# Multi-Year Excess of Loss

## Potential Solution to Increasing CAT XOL Costs

### Bottom Layers – Commensurate Protection for Cost?

- High ROL layers = poor cost-benefit
- Large component of loss activity self-funded via high upfront and reinstatement premium
- Time diversification lowers volatility charge, diversification most effective on high loss activity areas

### Identical to Traditional

- Same annual coverage
- Similar or marginally higher upfront ROL

### Cash flow Benefit

- Upfront payment of **only RI margin** instead of full Deposit Premium

### Efficient Solution

- Product with high Profit Commission on good experience
- Budget stability and security over time with strategic capacity provider
- Not exposed to market volatility or post-loss adjustment

### Significant Profit Commission

- Potentially substantial cost savings with **PC up to 70%+**

### Guaranteed Pricing & Capacity

- Regardless of loss experience
- **No post-loss adjustment**

***Attractive cost-benefit with profit commission on good experience, guaranteed terms and capacity on poor experience, all while providing identical annual coverage as Traditional.***

# Motivations & Adaptations

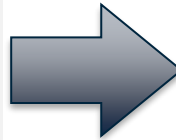
## An approach not a product

### *“Vanilla” MY – Pure Efficiency*

Leveraging on time diversification for better cedant economics without compromising on reinsurer's. In turn can achieve similar premium with significant PC.

- The time element reduces volatility which in turn reduces margin requirement.
- Significant PC possible given modelled loss activity compounded by tightened distribution over time.

Reinsurers, however, are unlikely to openly acknowledge above – expect default position to include loading on upfront premium in their favour.



### *Risk-Reward Tradeoff*

The flexible augmentation of risk-reward profile – to sit in between traditional and self-retention – should in itself be a valuable, differentiating option.

- Works well when there is discrepancy between client and reinsurer view of expected loss – leveraging the gap.
- Also when the client is already in some mindset for higher risk retention – voluntarily or otherwise.

Above aspects compound in a hardening market whereby clients have increasingly limited options outside of straightforward risk-adjusted loadings.

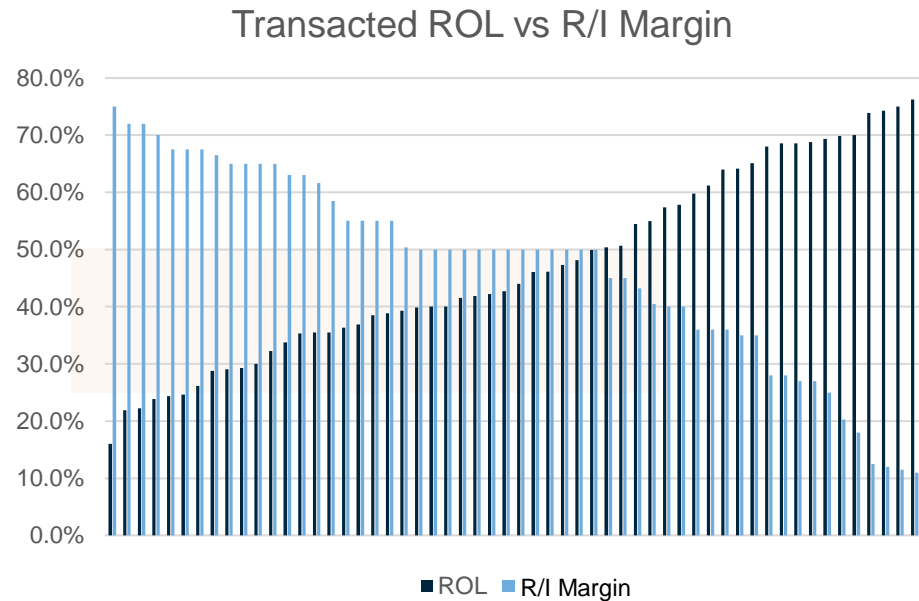
# Transaction Statistics

## Highly varied in application

**(Paid) ROL**  
 Average ~50%  
 Majority 30-70%

**Profit Commission**  
 Average ~50%  
 Majority 30-70%  
**R/I Margin = 1 - PC**

**Duration**  
 Vast majority 3 years  
 Up to 5 years



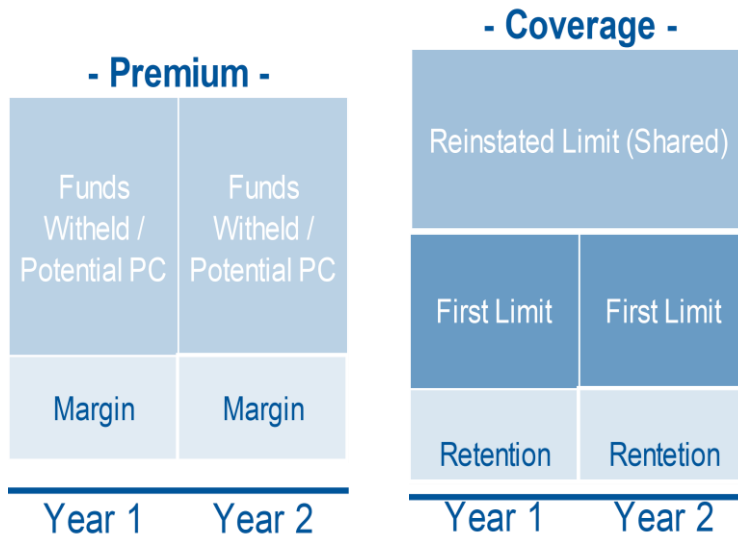
**Customization of Premium, Limits & Margin subject to goals and constraints**

# “Cat 32” Illustration

## 2-Year CAT XOL with 3 Limits over Term

### Illustrative Terms

- 2-year period
- Upfront Premium same or marginally higher than Traditional
- Margin 30-50% / Profit Commission 50-70%
- Annual Limits matching Traditional at 2 occurrence limits, Term Limits set at 3 occurrence limits



Covered Business	
Subject Policies	TBD
Geographic Scope	TBD
Subject Premium	TBD
Broker	Gallagher Re
Structured Terms	
Product	Multi-Year Excess of Loss
Reinsurer	TBD
Effective Term	2 annual periods
Premium	TBD per Annual Period
Reinstatement Premium	TBD
Margin, Funds Transferred	A percentage of the Premium, Settled on a Funds Transferred basis
Funds Withheld Account	Premium less Margin, to be retained by Company on a cumulative Funds Withheld basis
Interest Credit	X%, applied to Funds Withheld Account each year until Commutation
Coverage	
Attachment Point	TBD, each Occurrence
Occurrence Limit	TBD
Aggregate Limit	3 Occurrence Limit per Term
Annual Limit	2 Occurrence Limit per Annual Period

# General Disclaimer for all Analytical Work

This analysis has been prepared by Gallagher Re on the condition that it shall be treated as strictly confidential and shall not be communicated in whole, in part, or in summary to any third party without prior written consent from Gallagher Re. Gallagher Re is a business unit that includes a number of subsidiaries and affiliates of Arthur J. Gallagher & Co. which are engaged in the reinsurance intermediary and advisory business. All references to Gallagher Re below, to the extent relevant, include the parent and applicable affiliate companies of Gallagher Re.

Gallagher Re has relied upon data from public and/or other sources when preparing this analysis. No attempt has been made to verify independently the accuracy of this data. Gallagher Re does not represent or otherwise guarantee the accuracy or completeness of such data nor assume responsibility for the result of any error or omission in the data or other materials gathered from any source in the preparation of this analysis. Gallagher Re shall have no liability in connection with any results, including, without limitation, those arising from based upon or in connection with errors, omissions, inaccuracies, or inadequacies associated with the data or arising from, based upon or in connection with any methodologies used or applied by Gallagher Re in producing this analysis or any results contained herein. Gallagher Re expressly disclaims any and all liability, based on any legal theory, arising from, based upon or in connection with this analysis. Gallagher Re assumes no duty in contract, tort or otherwise to any party arising from, based upon or in connection with this analysis, and no party should expect Gallagher Re to owe it any such duty.

There are many uncertainties inherent in this analysis including, but not limited to, issues such as limitations in the available data, reliance on client data and outside data sources, the underlying volatility of loss and other random processes, uncertainties that characterize the application of professional judgment in estimates and assumptions. Ultimate losses, liabilities and claims depend upon future contingent events, including but not limited to unanticipated changes in inflation, laws, and regulations. As a result of these uncertainties, the actual outcomes could vary significantly from Gallagher Re's estimates in either direction. Gallagher Re makes no representation about and does not guarantee the outcome, results, success, or profitability of any insurance or reinsurance program or venture, whether or not the analyses or conclusions contained herein apply to such program or venture.

Gallagher Re does not recommend making decisions based solely on the information contained in this analysis. Rather, this analysis should be viewed as a supplement to other information, including specific business practice, claims experience, and financial situation. Independent professional advisors should be consulted with respect to the issues and conclusions presented herein and their possible application.

Gallagher Re makes no representation or warranty as to the accuracy or completeness of this document and its contents.

This analysis is not intended to be a complete actuarial communication, and as such is not intended to be relied upon. A complete communication can be provided upon request. Subject to all terms of this Disclaimer, Gallagher Re actuaries are available to answer questions about this analysis.

Gallagher Re does not provide legal, accounting, or tax advice. This analysis does not constitute, is not intended to provide, and should not be construed as such advice. Qualified advisers should be consulted in these areas.

Gallagher Re makes no representation, does not guarantee and assumes no liability for the accuracy or completeness of, or any results obtained by application of, this analysis and conclusions provided herein.

Where data is supplied by way of CD or other electronic format, Gallagher Re accepts no liability for any loss or damage caused to the Recipient directly or indirectly through use of any such CD or other electronic format, even where caused by negligence. Without limitation, Gallagher Re shall not be liable for: loss or corruption of data, damage to any computer or communications system, indirect or consequential losses. The Recipient should take proper precautions to prevent loss or damage – including the use of a virus checker.

This limitation of liability does not apply to losses or damage caused by death, personal injury, dishonesty or any other liability which cannot be excluded by law.

This analysis is not intended to be a complete Financial Analysis communication. A complete communication can be provided upon request. Subject to all terms of this Disclaimer, Gallagher Re analysts are available to answer questions about this analysis.

Gallagher Re does not guarantee any specific financial result or outcome, level of profitability, valuation, or rating agency outcome with respect to A.M. Best or any other agency. Gallagher Re specifically disclaims any and all liability for all damages of any amount or any type, including without limitation, lost profits, unrealized profits, compensatory damages based on any legal theory, punitive, multiple or statutory damages or fines of any type, based upon, arising from, in connection with or in any manner related to the services provided hereunder.

Acceptance of this document shall be deemed agreement to the above.

Gallagher Re is a trading name of Arthur J. Gallagher (UK) Limited, which is authorised and regulated by the Financial Conduct Authority. Registered Office: The Walbrook Building, 25 Walbrook, London EC4N 8AW. Registered in England and Wales. Company Number: 1193013. [www.ajg.com/uk](http://www.ajg.com/uk)

Gallagher Re is a trading name of Nordic Försäkring & Riskhantering AB ("Nordic"). Nordic is authorised by the Swedish Financial Supervisory Authority, and incorporated in Sweden under company number 556418-5014 with registered address at Mölndalsvägen 22, 412 63 Göteborg, Sweden. Nordic also offers and performs insurance distribution services/activities through its Belgian branch. The Belgian branch has its registered office at Posthofbrug 6-8 bus 5/134, 2600 Berchem, company number 0743.567.257. Nordic is also deemed authorised and regulated by the UK Financial Conduct Authority under the Temporary Permissions Regime. UK branch registered in England and Wales under branch number BR021003, with registered address at The Walbrook Building, 25 Walbrook, London EC4N 8AW.