Pools and the Reinsurance Market
What you need to know

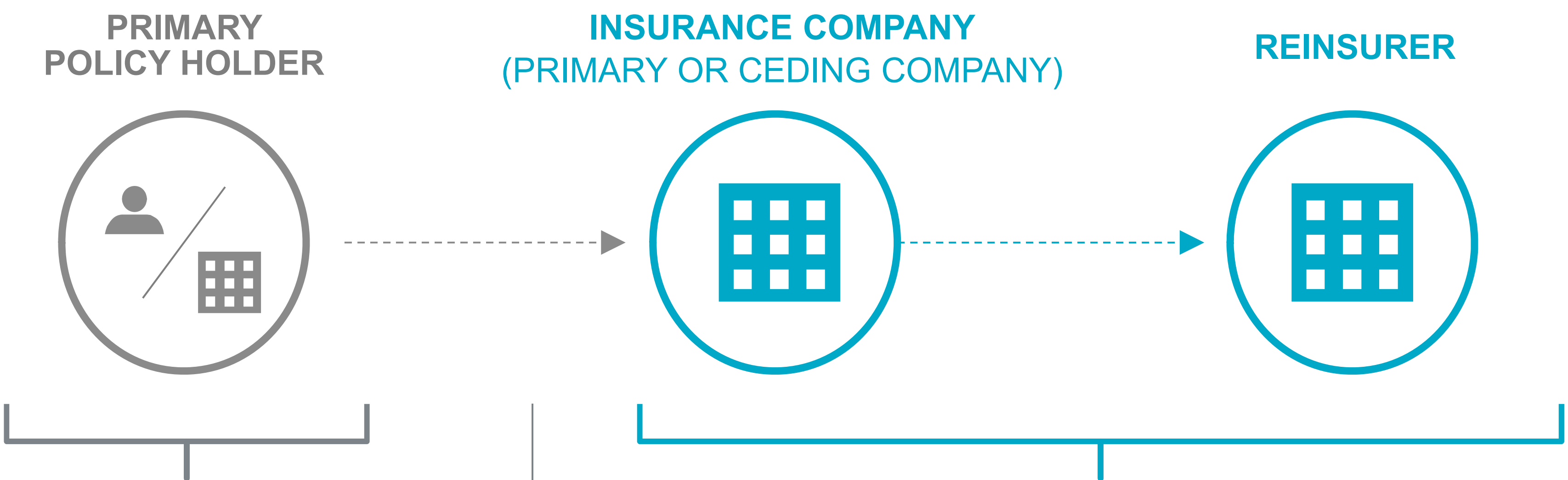
September 13th 4:00-5:15

REINSURANCE 101

INTRODUCTION TO REINSURANCE

What is Reinsurance?

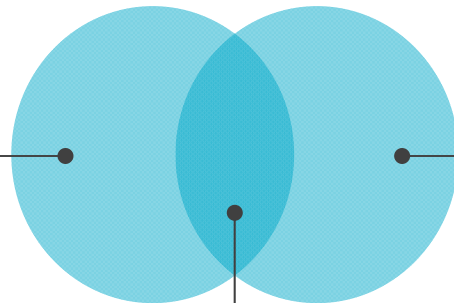
- Insurance for insurance companies
  - An insurance company, called the **primary** or **ceding** company, cedes portions of its liability to another insurance company, known as a **reinsurer**



- Reinsurance is a transaction between insurance companies only
  - Privity of contract (i.e. primary policy-holder not involved)

- By transferring risks, insurers:
  - Protect their balance sheet
  - Reduce earnings volatility
  - Make better use of capital
  - Improve, or manage to, financial strength ratings

Key Similarities and Difference Between Insurance & Reinsurance



INSURANCE

- Buyers have varying knowledge levels
- Provides defense and indemnification
- Payment is made by the insurer to the insured/third party claimant
- Often locally sourced
- Highly regulated
- Underwriting individual risks

Similarities

- Concerned with the uncertainty of future events (risk)
- Require underwriting (risk evaluation) skills
- Involve a transfer of risk
- Require a payment of premium
- Provide protection
- Pay for certain types of expenses
- Subject to some regulation

REINSURANCE

- Buyers are assumed to be knowledgeable
- Provides indemnification only – No defense obligation
- Reimbursement of loss paid by insurer
- International in scope
- Little regulation
- Underwriting portfolios

Who is Involved?

Who buys reinsurance?

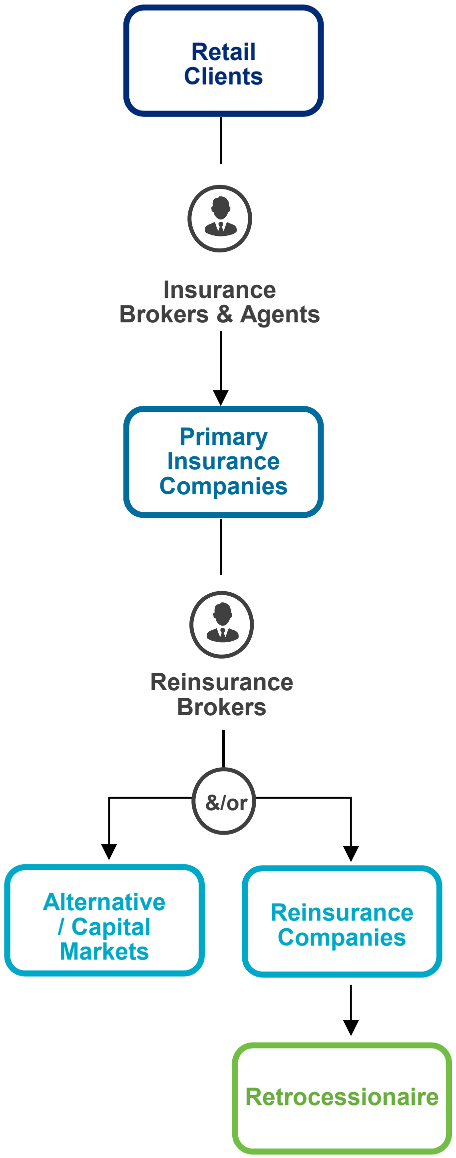
- Traditional admitted / E&S carriers
- Risk retention groups / captives / JPAs
- MGAs
- Reinsurers (retrocessional)
- Sovereign entities

Who sells reinsurance?

- Reinsurance companies (other insurers)
- Lloyd's of London
- Capital markets
- Sovereign entities

But let's look at the bigger picture on the next slide!

How Risk Is Transferred Through the Industry



		EXAMPLES
Retail Clients	Individuals, business of all sizes and government agencies buy Insurance to protect against property and/or liability losses as well as life and health coverages	Motor, Home, Life & Health, Business, Catastrophe
Insurance Brokers & Agents	Brokers and agents match buyers with appropriate insurers. Many insurers also have e-business platform and write business directly over the internet	MARSH, AON, Willis, AmWINS Group, Inc.
Primary Insurance Companies	Primary insurance companies of all shapes and sizes sell policies to the original insureds and are responsible. Company can write several lines of business (multi-line or diversified), a few or just one (Specialty). They can be owned by shareholders (stock) or their policyholders (mutual).	AIG, The Hartford, Progressive
Reinsurance Brokers	Insurance companies amass portfolios of policies and, for a variety of reasons, buy reinsurance to help them manage risk. Reinsurance brokers help to put together these transactions and place them with panels of reinsurers and/or capital markets, thereby spreading risk	Guy Carpenter, Willis Re, Aon Benfield
Reinsurance Companies	Like primary insurers, reinsurers can write many, a few, or just one line of business. Sometimes, they are subsidiaries of primary insurers but many times are independent companies owned by shareholders.	Swiss Re, Lloyd's, Everest
Alternative/ Capital Markets	In recent years capital markets investors have become more active in assuming insurance related risks through insurance-linked securities and other types of transactions.	AlphaCat Validus Group, Nephila, AQR
Retrocessionaire	A retrocessionaire may, in turn, assume risk (or sell an insurance policy) to a reinsurer that desires to manage its risk.	

Broker Market vs. Direct Market

Ceding companies can choose to obtain reinsurance through two means:

1

Broker Market

- Reinsurers who write business through reinsurance intermediaries (like Guy Carpenter)
- Who are some broker market reinsurers?

VALIDUS RE | Munich RE | LLOYD'S | Swiss Re | EVEREST

2

Direct Market

- Reinsurers that deal with ceding companies directly, rather than through intermediaries
- Who are some direct market reinsurers?

Munich RE | Swiss Re | Gen Re

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Broker Market vs. Direct Market Advantages

1

Broker Market

Advantages to accessing reinsurance through the Broker Market

- Access to more reinsurers, can result in greater competition for business
- Greater spread of risk – "syndication"
- Brokers have reinsurance market expertise
- Brokers perform extensive due diligence on creditworthiness of counterparties
- Brokers are advocates of the ceding company – negotiate on their behalf
- Brokers also provide claims, accounting, and other services (i.e. catastrophe modeling, actuarial analysis, operational and financial guidance etc.)

2

Direct Market

Advantages to accessing reinsurance through the Direct Market

- Premium may be offset by brokerage
- Only dealing with one reinsurer can be an administrative advantage
- No "broker risk" – What if broker goes out of business?

REINSURANCE 101

FUNCTIONS OF REINSURANCE

Why do Insurance Companies Buy Reinsurance?

Relief of surplus drain and expense improvement

Deploying larger policy limits

Protection from tail occurrences

Smoothing of results

Capacity

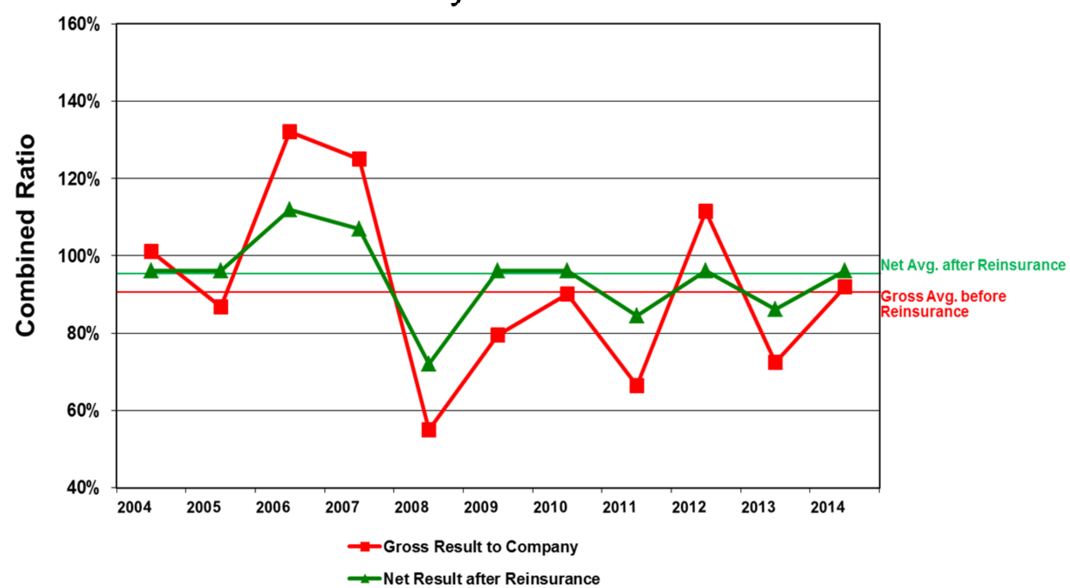
Why do companies want capacity?

- To offer larger line sizes, increasing market profile
- Policy limit capacity
  - Capacity influences the maximum amount of insurance or limit of liability allowed by insurance regulators
  - e.g. Prohibits retaining more than 10% of a company's surplus on any one loss exposure
- Premium capacity
  - Premium capacity ratio = $\dfrac{\text{Net Written Premium}}{\text{Policyholder Surplus}}$
  - IRIS rule – ratio ≤ 3:1
  - Statutory US average of 0.8:1

Stability

Why do companies want stability?

- Volatile loss experience may:
  - Affect stock value of publicly traded insurer
  - Alter financial rating by independent rating agencies
  - Cause abrupt changes in approaches taken in managing the underwriting/claim/marketing departments
  - Undermine the confidence of the sales force (especially independent agents)
  - Lead to insolvency



Financing

Why do companies want financing?

- Provides surplus relief by way of ceding/ profit sharing commission
  - Premium growth = surplus drain
    - Immediate recognition of expenses when issuing policy
    - Combined with premium earned gradually throughout year
    - Causes surplus to decrease with each incremental policy written
- Protects insurer from accumulation of frequent losses
- Reduces liabilities

REINSURANCE 101

TYPES & STRUCTURES OF REINSURANCE

The Matrix

TYPES OF REINSURANCE

FORMS OF REINSURANCE

Note: This is not all inclusive

REINSURANCE CONTRACTS

- **TREATY**
  - **PRO-RATA** (Proportional)
    - Quota Share
    - Surplus Share
  - **EXCESS OF LOSS** (Non-proportional)
    - Per Risk
    - Per Occurrence
    - Aggregate/Stop Loss
- **FACULTATIVE (“FAC”)**
  - **PRO-RATA** (Proportional)
  - **EXCESS OF LOSS** (Non-proportional)

Two Types: Treaty & Facultative

TREATY

- Covers an entire class or portfolio of business (i.e. “All business classified by the company as property”)
- Covers individual risks or policies that fall within the contract terms
- Terms of treaty are tailored for each insurer

Advantages

- Broad-based coverage
- Efficient purchase volume buying
- Coverages beyond the original policy, e.g., ECO/XPL

Disadvantages

- Limits to coverage and capacity
- Reinstatement charges
- Loss occurrence limitations
- Numerous exclusions

FACULTATIVE

- Covers individual risks
- Each risk individually negotiated
- Premiums and losses settled individually
- Free and unlimited reinstatements

Advantages

- Coverage is closely allied to original policy
- Total cost of reinsurance is based on usage
- Substantial risk coverage
- Can be used to insulate/protect treaty

Disadvantages

- Labor/document intensive
- Relatively expensive
- ECO/XPL coverage difficult to get

Two Reinsurance Forms: Pro-Rata & Excess of Loss

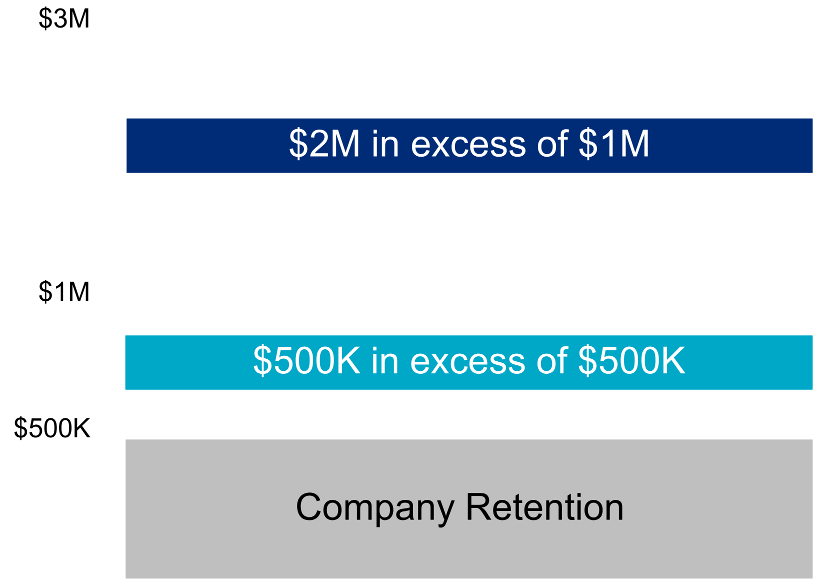
Pro-Rata Reinsurance
(Proportional)

- *Sharing Concept* - Ceding company and reinsurer share premiums and losses in a determined percentage
  - Starting with the first dollar of loss, 40% of the loss is ceded to the reinsurer, and the company retains 60% of the loss. The same is true of the premiums.

Pro-Rata Loss Example – 40% Quota Share

	Gross	Ceded	Net
Policy Limit	$500,000	$200,000	$300,000
Premium	$12,500	$5,000	$7,500
Loss	$275,000	$110,000	$165,000

Excess of Loss Reinsurance
(Non-Proportional)



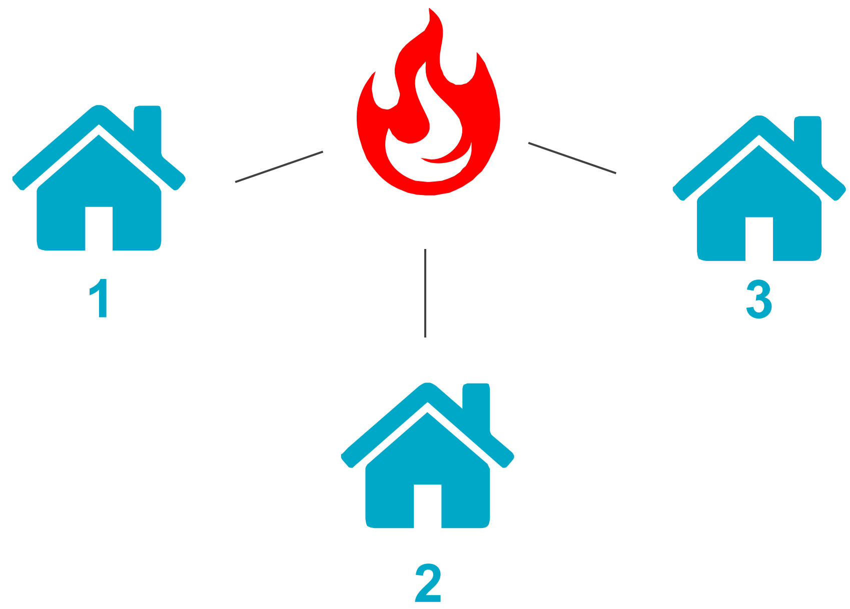
- For a part of the premium, reinsurers cover losses above a specified retention up to a predetermined limit
  - Losses are only ceded to the reinsurer after the retention amount is exhausted. In the example, loss in excess of $500k and up to $3m are covered by the reinsurer.

Per Risk Excess of Loss

- Ceding company retention applies separately to each risk, each loss
  - Fixed premium is negotiated at inception of contract
  - Occurrence caps protect the reinsurers from large risk losses and catastrophe losses that effect multiple risks

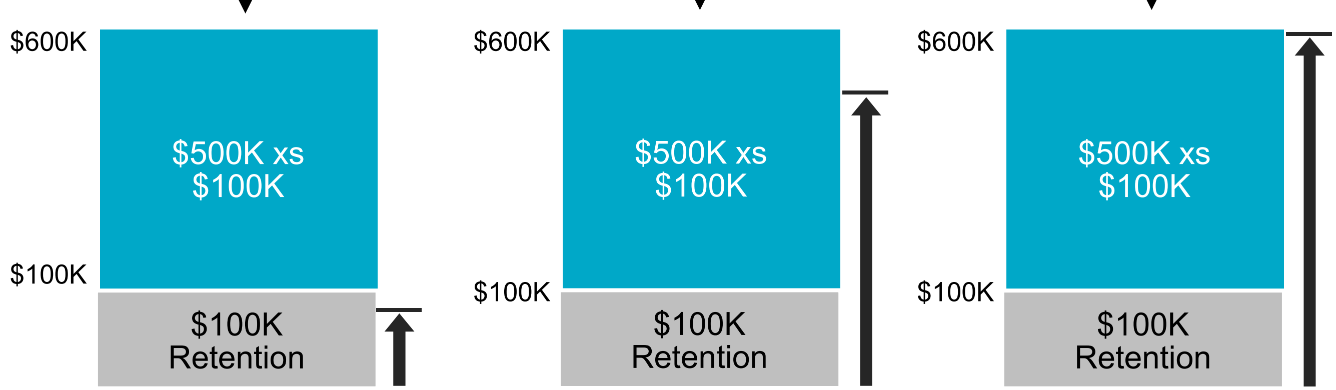
Example: *Company Name* insures three buildings under three separate policies for three separate insureds. A single explosion destroys all three buildings.

- The ceding company needs to satisfy the retention separately for each of the three buildings



Per Risk Excess of Loss – Loss Example

Property #1 Claim	Property #2 Claim	Property #3 Claim	Total loss to cedant (before reinsurance):
$80,000	**$500,000**	**$600,000**	**$1,180,000**

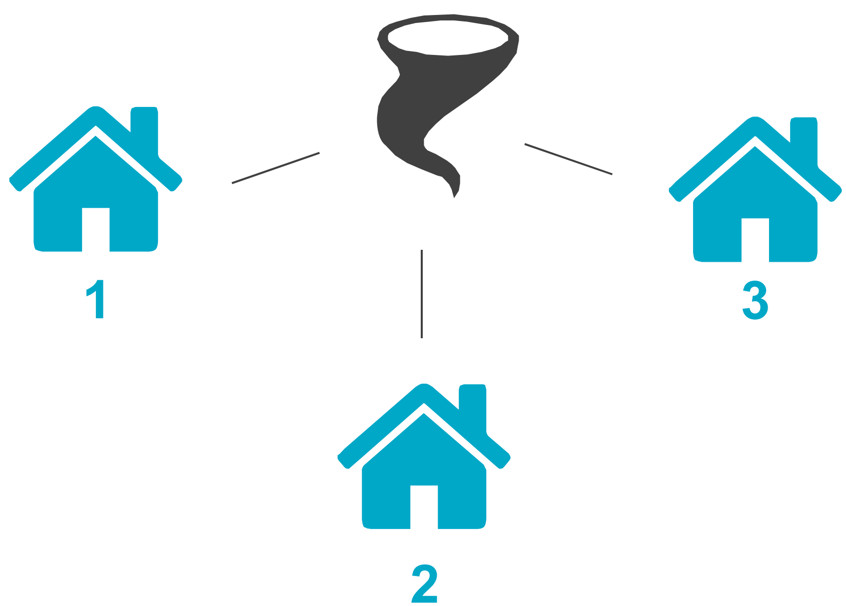


Property #1	Property #2	Property #3	Total recovery from reinsurers
$80,000	$500,000	$600,000	
– $100,000	– $100,000	– $100,000	
No recovery	**$400,000** Recovered from reinsurers	**$500,000** Recovered from reinsurers	**$900,000**

Total loss to cedant (after reinsurance): $280,000

Per Occurrence Excess of Loss

- Ceding company retention applies to total loss from occurrence
  - Occurrence is defined as the sum of all individual policy losses directly occasioned by any one disaster, accident or loss or series of disasters, accidents or losses arising out of one event
    - Example: Hurricane, earthquake, tornado, terrorism
  - The duration of an occurrence is often limited to hours or days
  - Typically at least two risks must be involved to constitute an occurrence



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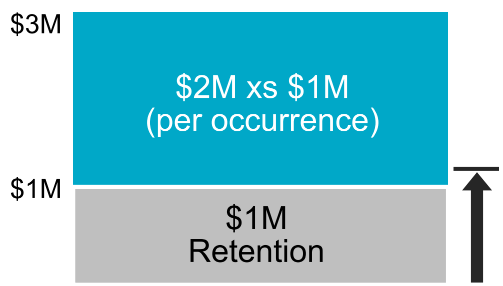


$1,180,000
– $1,000,000

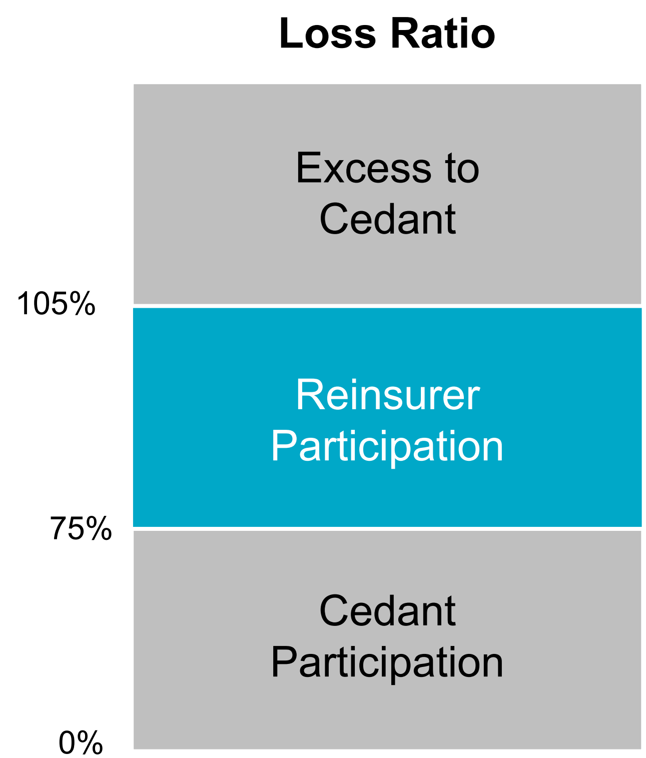
$180,000
Recovered from reinsurers

Total recovery from reinsurers **$180,000**

Total loss to cedant (after reinsurance): **$1,000,000**

Aggregate Excess or Stop Loss Reinsurance

- Aggregate Excess or Stop Loss
  - As discussed previously, many companies use reinsurance to protect against adverse losses. A company's *Loss Ratio* is the amount of loss it incurs versus the amount of premium it earns.
  - In order to protect from adverse losses, some insurance companies will buy a "Stop Loss" treaty, which pays for losses past a certain threshold of loss ratio, in this case 75%
  - In order to protect themselves, the reinsurer will have a limit to their payment, in this case a 105% loss ratio. This ensures that the insurer still has a stake in the results.



Why Risk Pooling is still Critical for Captives and JPAs

- Risk Pooling is when a company exchanges a portion of its own risk for a percentage of the combined losses of all Pool members.

- This is an important, if not critical, practice for many Captives and JPAs

Types of Risk Pooling

- Pooling arrangements can include different lines of coverage and generally fall within two broad risk categories
  - More predictable long-tail lines such as Workers Compensation, General / Products Liability, Auto Liability (High Frequency / Low Severity)
  - Less predictable high severity / low frequency risks such as earthquake, wind storm, excess liability and other property lines

Why do Captives Participate in Risk Pools?

- Diversification of its underwriting portfolio
- Reduction in the variability of retained captive losses by trading its own losses for a smaller portion of a large Pool of more diversified losses
- Stabilization of Cash Flow
- Access to Third Party premium in support of the captives status as an Insurance Company for tax purposes

What makes a Pooling Arrangement Successful?

- A proven, long term track record
- A facility large enough to provide sufficient level of risk diversification and unrelated premium
- A structure that supports stable underwriting results
- A structure that mitigates credit risk
- Clear governance based on contractual guidelines and transparency with active member participation
- Clearly established exit provisions