CARE Seminar

Retroactive Reinsurance and Recent Transactions

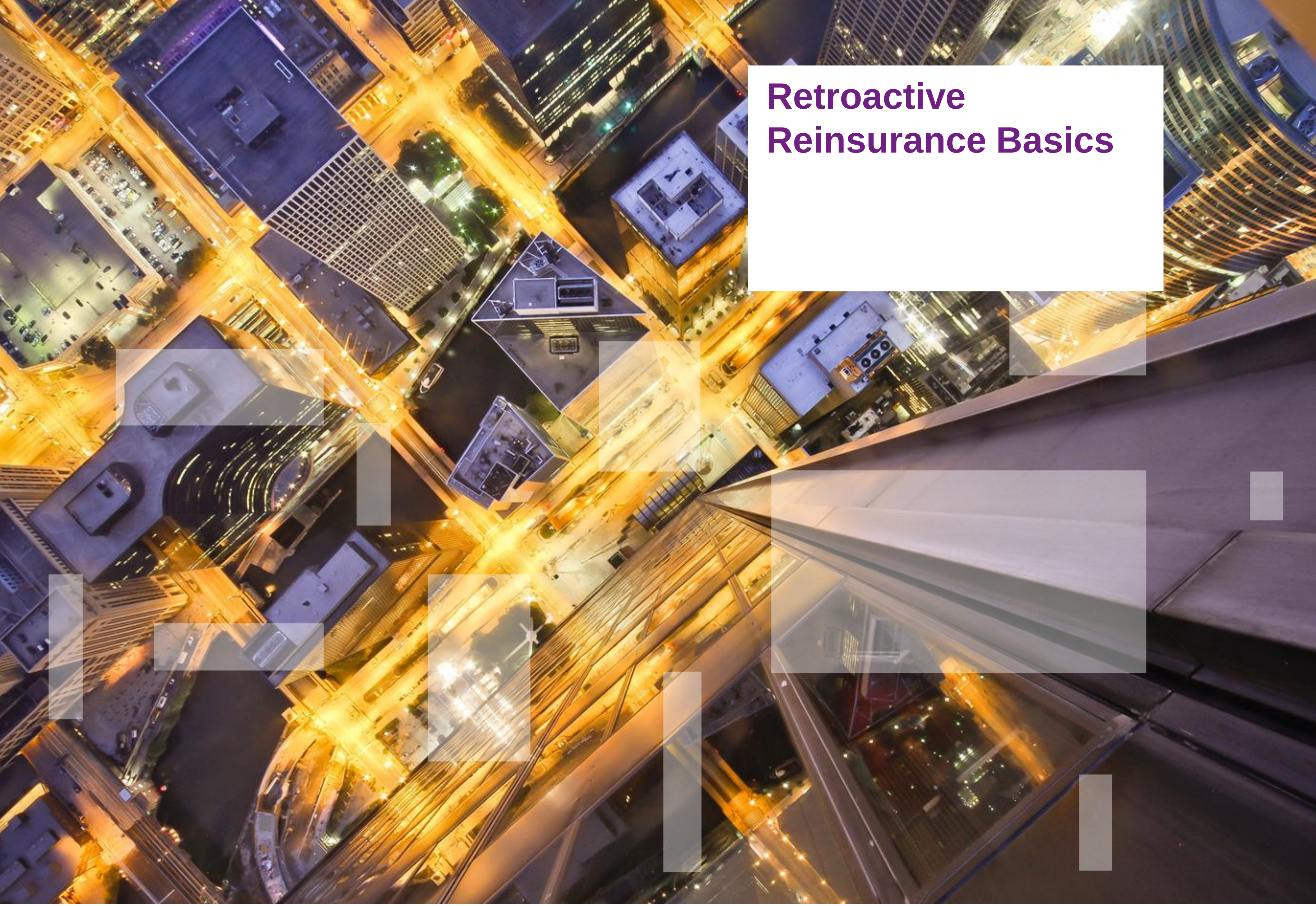
Willis Re

Agenda

Retroactive Reinsurance Basics & Pricing

Recent Transactions

Rhode Island Reg. 68



Retroactive Reinsurance Basics

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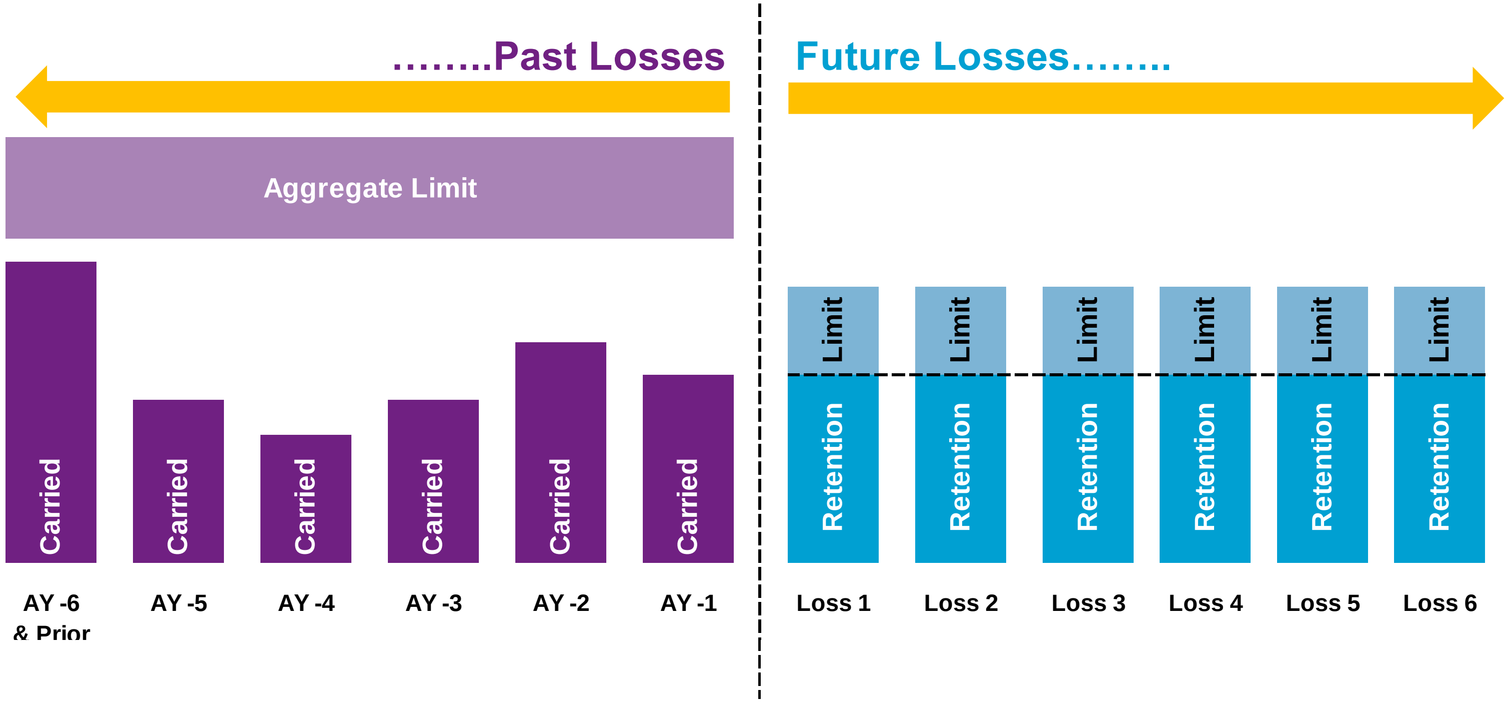
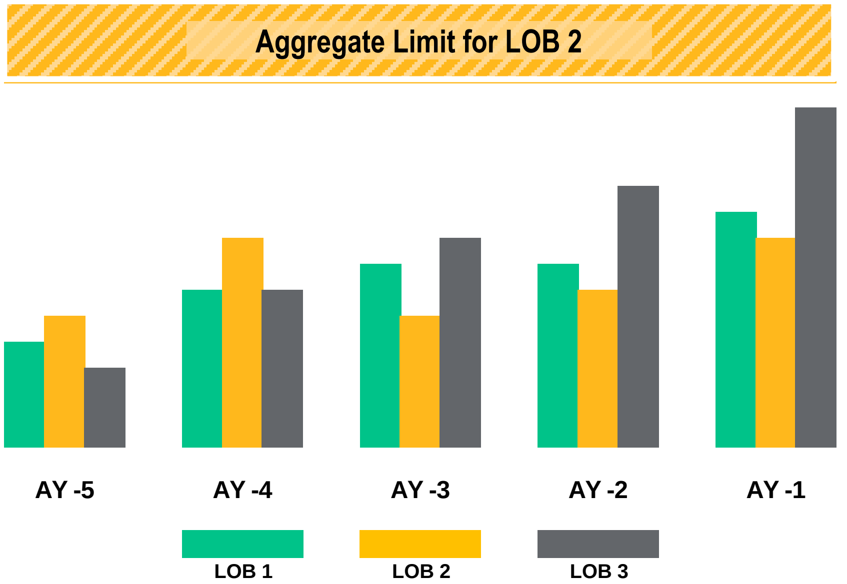
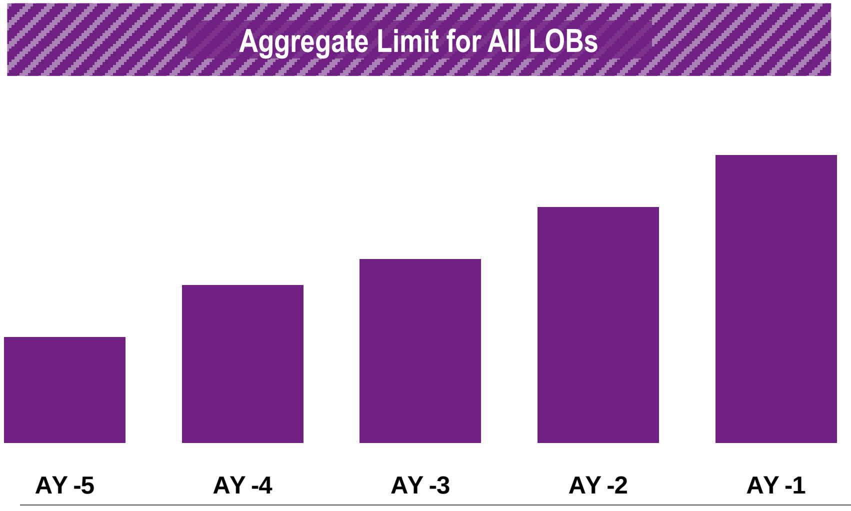
Retroactive Reinsurance vs. Prospective Reinsurance

- The vast majority of reinsurance placed is **prospective**, providing protection against future losses (premium risk), and is part of the annual reinsurance program placement
- **Retroactive** reinsurance covers provide protection against past losses (reserve risk) and are most frequently used by companies exiting a line of business or geographic region, to provide a degree of assurance to stakeholders regarding future results or to improve rating agency capitalization



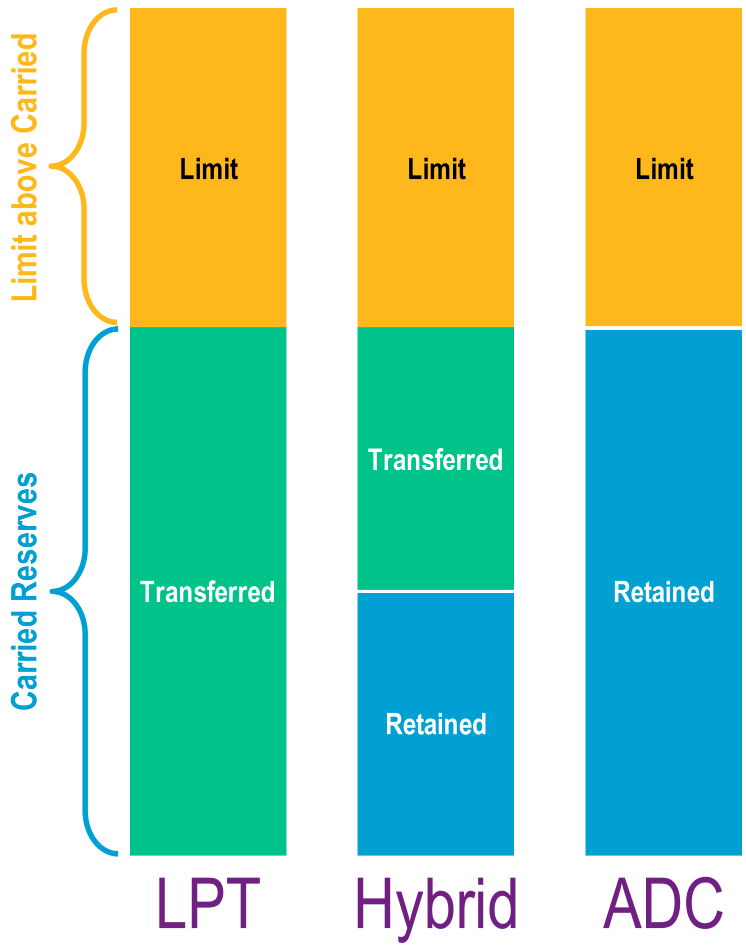
Scope of Coverage





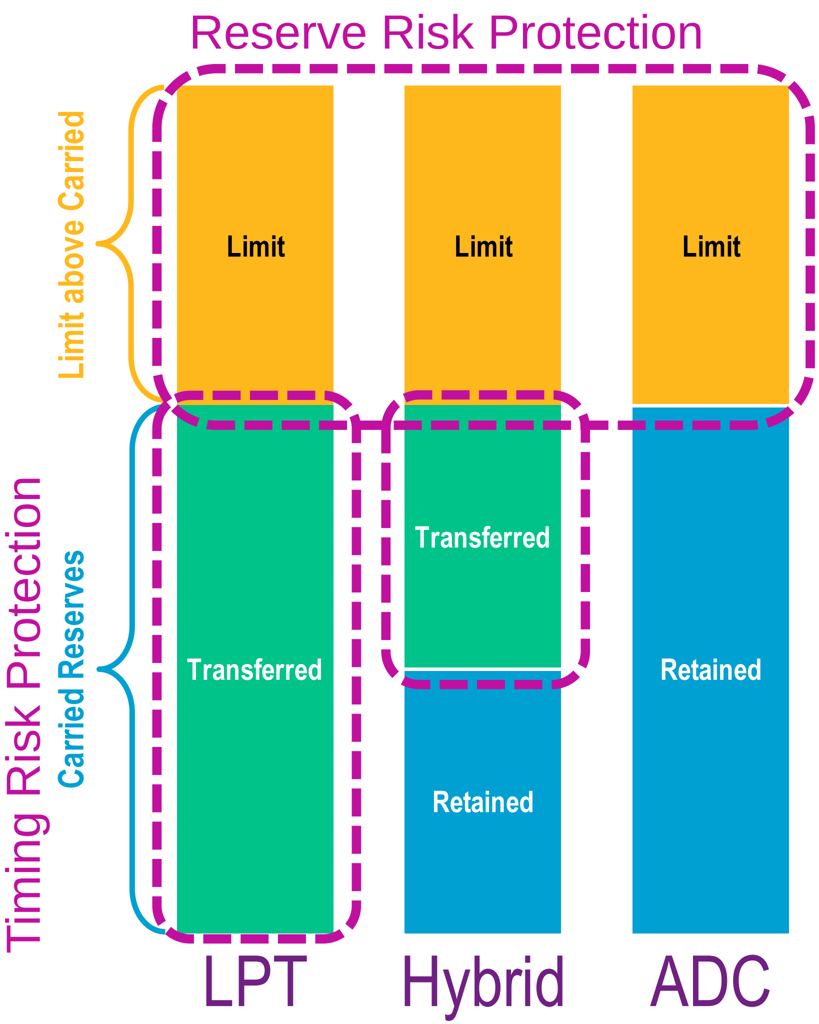
- Retroactive reinsurance typically covers:
  - Multiple AYs within the subject lines (although the most recent and "greenest" AY is sometimes excluded), and
  - The presentation of "new" claims within the covered LOBs/AYs (although coverage can be restricted to a "known" claim portfolio)
- Retroactive reinsurance can cover single or multiple lines of business
- Single-line covers are best at addressing specific concerns:
  - A line that has experienced excessive volatility
  - A decision to exit a specific line
- Multiple line retroactive covers are better at addressing general concerns:
  - Surplus protection
  - Rating Agency Capital

Forms of Coverage



- Retroactive reinsurance is an aggregate cover that varies primarily with respect to where it attaches compared to carried reserves
  - **Loss Portfolio Transfers** (“LPTs”) attach at the first dollar of carried reserves and act like Quota Shares with respect to losses
  - **Adverse Development Covers** (“ADCs”) attach at or above the carried reserves and act like Aggregate Stop Losses with respect to losses
  - **Hybrid ADCs** split the difference and attach within carried reserves but above first dollar

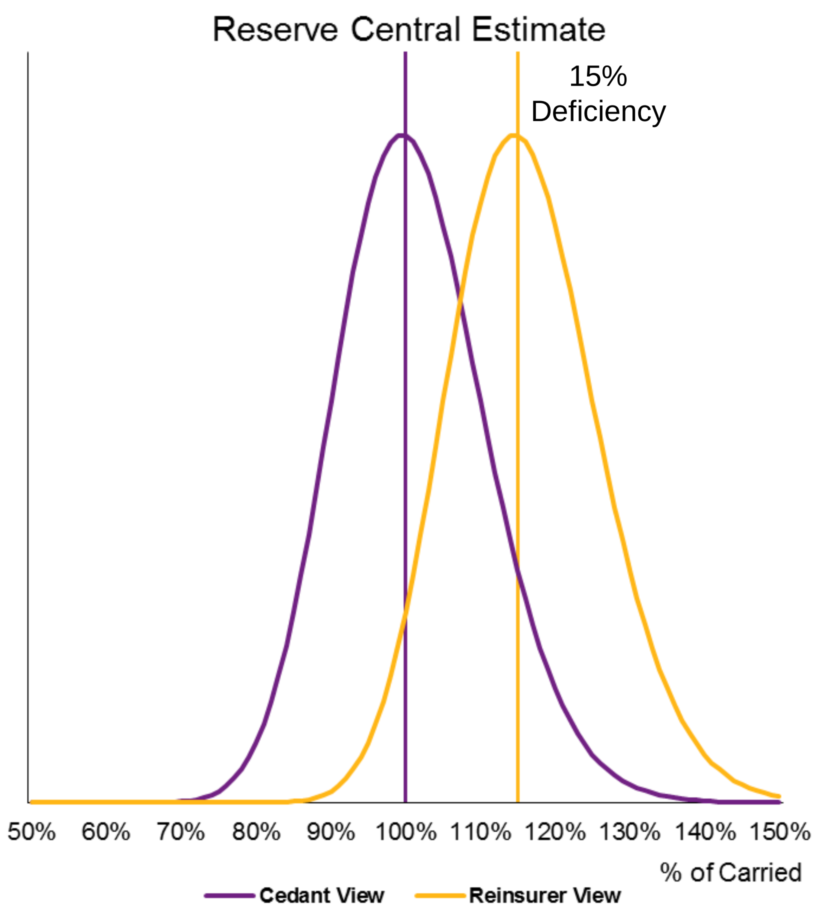
Reserve & Timing Risk



- All three forms of retroactive reinsurance provide protection against reserve risk – the possibility that the ultimate amount to be paid will exceed current estimates either due to development of known losses or discovery of unknown losses
- LPTs and Hybrid LPTs can also provide protection against timing risk – the possibility that carried reserves may pay out more quickly than anticipated
- The degree of protection from each risk depends on the structure:
  - LPTs provide the greatest degree of protection,
  - ADCs the least

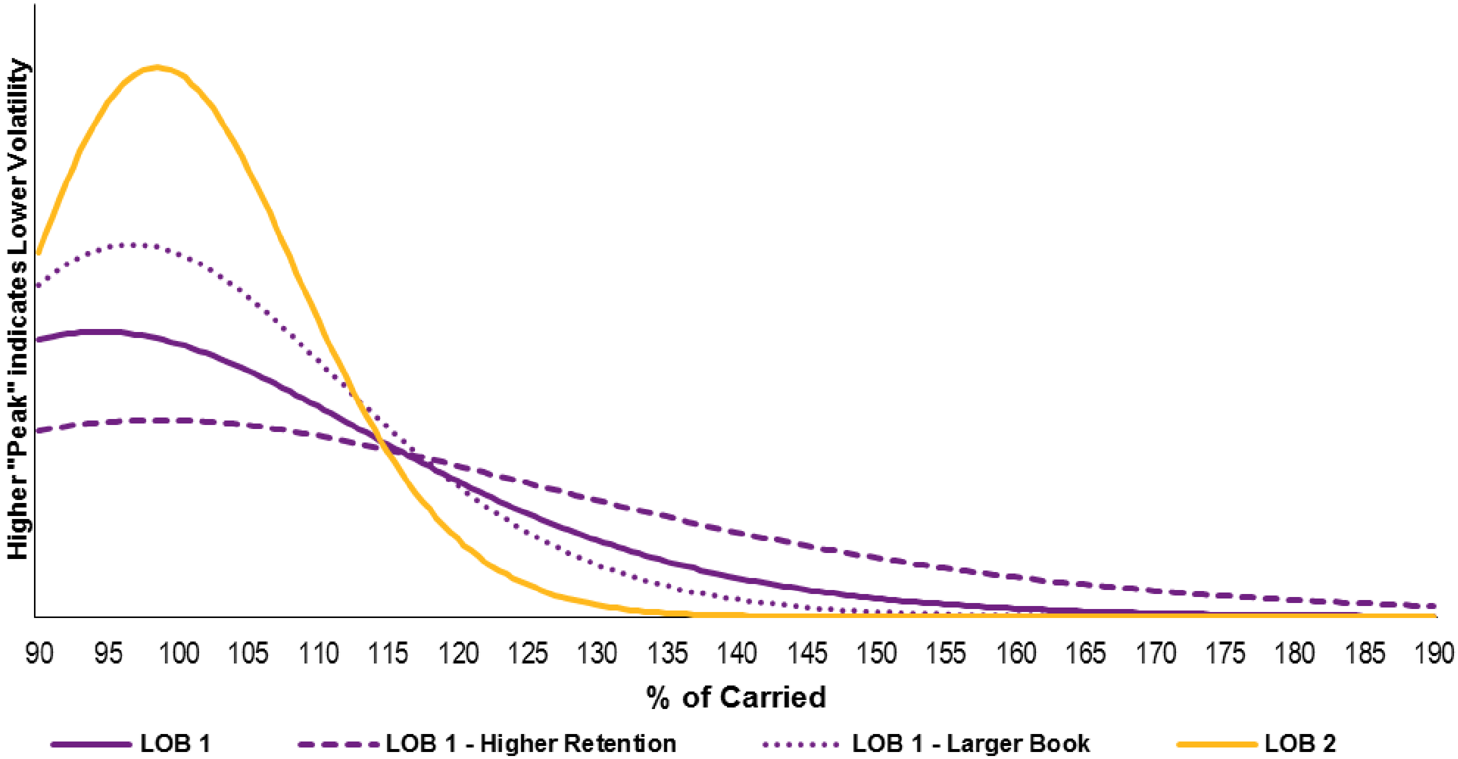
Retroactive Reinsurance Pricing

Adequacy of Carried Reserves



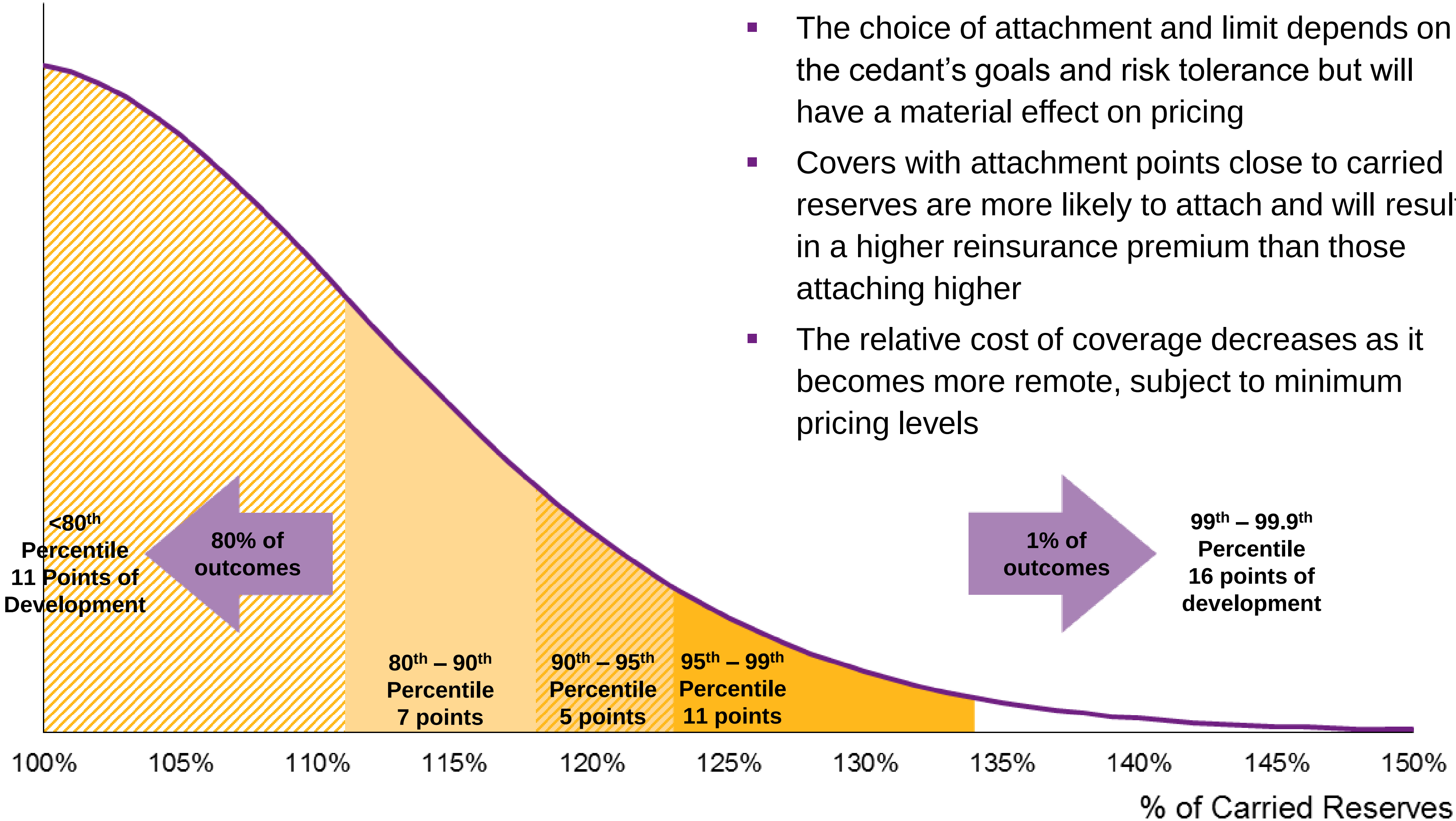
- The first component of pricing is a determination of the adequacy of carried reserves through:
  - Actuarial analysis
    - Paid and Incurred Triangles
    - External Actuarial Reviews
  - Claims analysis
    - Review of open and closed claims
  - Where we are in the Industry Cycle
    - Is the Line understood to be over or under reserved?
  - Company History
    - Past adverse development
    - Changes in exposure
    - Changes in claims handling procedures
    - Data quality
    - Gross vs. Net

Volatility of Carried Reserves



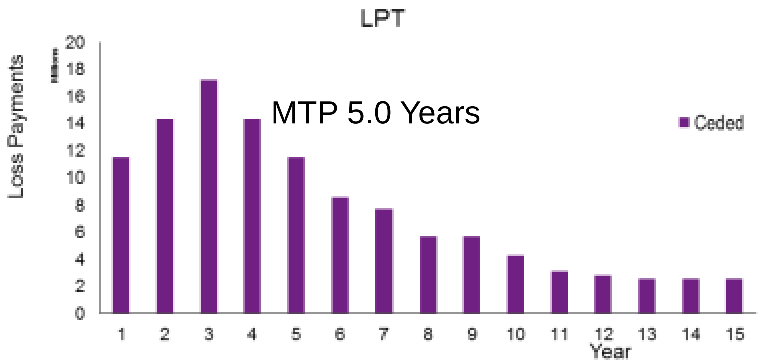
- The primary driver of volatility is the LOB covered (i.e., compare NSA to Umbrella)
- Volatility *within* a line of business is also driven by retention and by the size of the book
  - Higher retentions increase severity risk and lead to higher volatility in net results
  - Larger books of business will generally experience lower volatility than smaller books

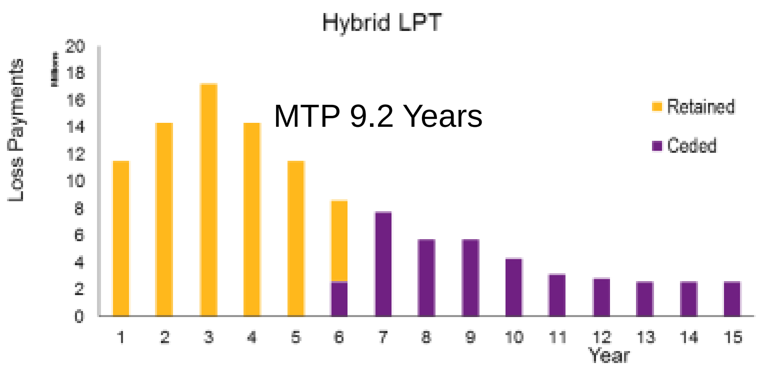
Attachment and Limit

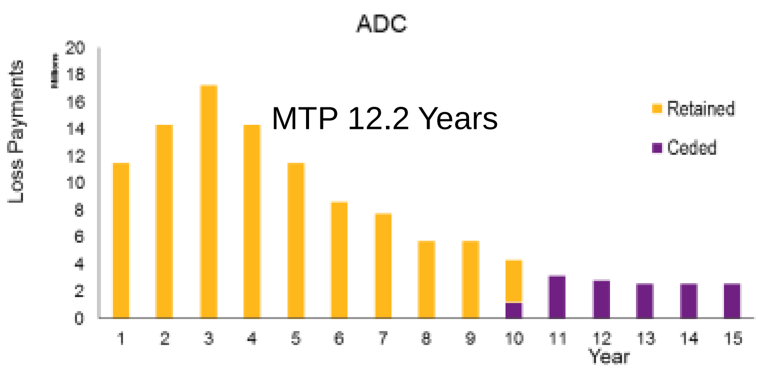


- The choice of attachment and limit depends on the cedant's goals and risk tolerance but will have a material effect on pricing
- Covers with attachment points close to carried reserves are more likely to attach and will result in a higher reinsurance premium than those attaching higher
- The relative cost of coverage decreases as it becomes more remote, subject to minimum pricing levels

Pay-Out Period





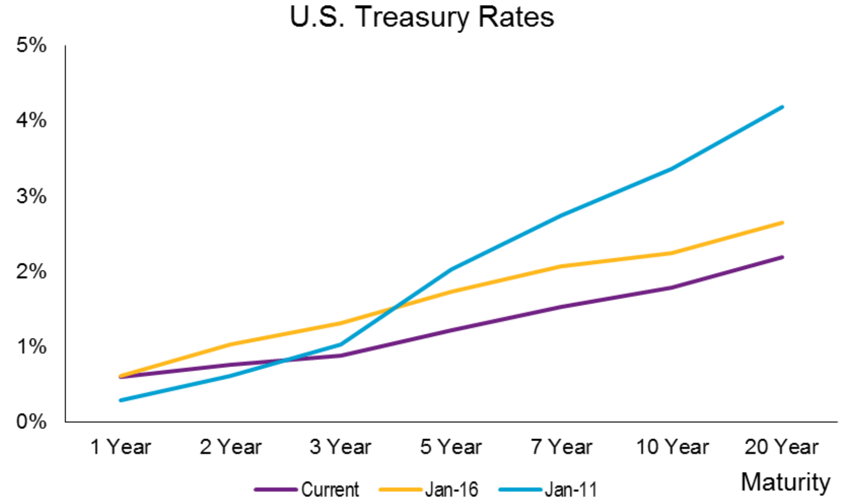


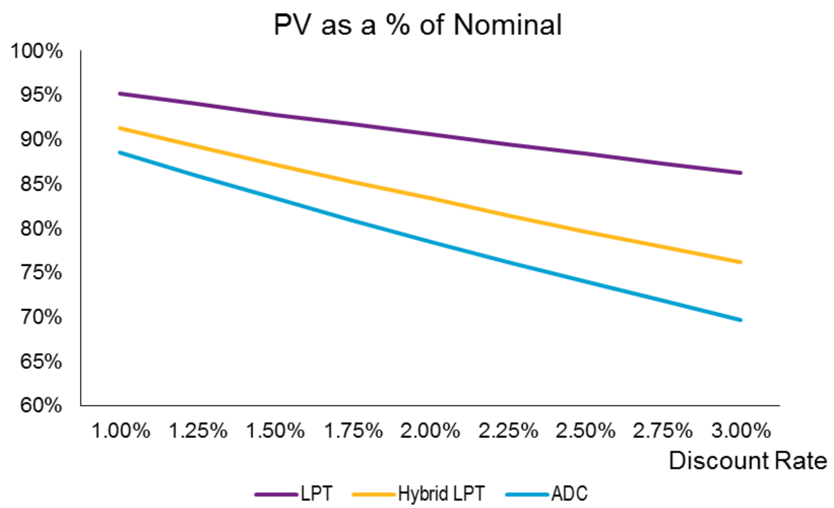
- Retroactive reinsurance takes advantage of discounting - the adverse protection excess of carried reserves is the “last to pay” further maximizing the effect
- The duration of reserves covered (mean time to pay) depends on:
  - The characteristics of the underlying business (LOB and retention)
  - The attachment point of the retroactive cover – higher attachment points result in longer MTPs
- Adverse development can result in a acceleration of loss payments and a substantial decrease in MTP
  - This has a leveraged effect on “excess” attachments – i.e., those attaching above first dollar: the relative decrease in MTP for a high attaching layer (>75% of carried) is much greater than the decrease in MTP for the entire portfolio

Interest Rates

Present Value as a % of Nominal

Discount Rate	LPT 5 Year MTP	Hybrid 9.2 Year MTP	ADC 12.2 Year MTP
1.00%	95.1%	91.3%	88.6%
1.25%	94.0%	89.2%	85.9%
1.50%	92.8%	87.2%	83.4%
1.75%	91.7%	85.2%	80.9%
2.00%	90.6%	83.3%	78.5%
2.25%	89.5%	81.5%	76.2%
2.50%	88.4%	79.7%	74.0%
2.75%	87.3%	77.9%	71.8%
3.00%	86.3%	76.2%	69.7%





- The amount of discount embedded in carried reserves also depends on the discount rate used
- Reinsurers typically use a risk free rate, such as U.S. Treasuries for US$ liabilities, matched to the expected duration of the reserves
- The current historically low rate environment has eroded this benefit, but long duration reserves can still generate significant discount

Components of Pricing

	Reserve Adequacy	Reserve Volatility	Pay-Out Period	Interest Rates	Attachment Point	Limit Required
Higher Premium	Deficient	High	Short	Low	Lower	More
Lower Premium	Conservative	Low	Long	High	Higher	Less

Recent Retroactive Transactions

Recent Retroactive Transactions

Liberty Mutual — Excess exposure to U.S. Workers Compensation line

Solution

"In-the-money" Adverse Development Cover with Berkshire Hathaway on 2013 and prior WC liabilities (July 2014)

Outcomes - Repositioning in the Market

- **Substantially reduced capital charge for prior AY WC liabilities (WC made up 7% of premium but 45% of liabilities) in conjunction with reduction in forward premium**
- Led to immediate ratings upgrade from S& P and A.M. Best
- Was able to include pre-2005 A&E liabilities in the coverage reducing another source of legacy risk

Aviva — Capital drag and volatility from long-tail liabilities (UK employers' liability)

Solution

Reinsurance transaction transferring £700m of latent exposure to Swiss Re (September 2015). Reduced cost compared to Part VII transfer and allowed Aviva to retain conduct risk

Outcomes - Decreased Earnings Volatility

- **Reduced required capital and volatility (approx. £40m per year)**
- "We cannot have long-tail liabilities eating up billions of pounds' worth of capital….I am a firm believer in active balance sheet management. It is essential for the success of a company. For too long insurance companies have ignored the balance sheet because of a focus on the P&L, and that will change."

Allianz — Continuing distraction of handling legacy liabilities

Solution

50% placed Loss Portfolio Transfer with Enstar covering a $2.2b portfolio of Asbestos & Environmental, Construction Defects and Workers Compensation (January 2016)

Outcomes - Improved Result due to Superior Claims Handling

- Enstar brings claims handling best practices to bear through joint management of claims
- **Allianz realizes benefits of improved claims handling through 50% co-participation**
- "We are pleased with the implementation of this transaction with Enstar, a leading player in the run-off business. The co-operation with ARM US will combine our own strong claims management capabilities with Enstar's experience and proven track record. The reinsurance agreement ensures that both parties will benefit from the combined team's efficient claims handling. This enables us to actively manage the business and support our strategic goal of building a Group run-off operation,"

Recent Retroactive Transactions

RSA | Capital drag from legacy liabilities (75% asbestos, 25% abuse, deafness, marine & aviation)

Solution

LPT to be followed by Part VII transfer to Enstar of £834m of UL legacy liabilities (December 2016)

Outcomes - Improved Capital Position & Efficiency

- **Added 17-20 points of Solvency II coverage**
- Benefited earnings and capital quality by allowing additional debt to be retired
- Viewed positively by analysts and the market: £145m net IFRS charge characterized as “noise” by one analyst who focused on likelihood of higher EPS and DPS as well as a possible capital return

The Hartford | Continued volatility from legacy A&E liabilities

Solution

Placed an “at-the-money” ADC with Berkshire Hathaway providing $1.5b of limit excess $1.7b of carried reserves (January 2017)

Outcomes – Decreased Earnings Volatility

- Follows a July 2016 transaction with Catalina covering UK exposures.
- **Eliminates persistent adverse development (averaging $240m per annum over the past three years**.
- The Hartford retains both claims handling responsibility and the credit risk for uncollectible reinsurance.

AIG | Turning the page on legacy operations

Solution

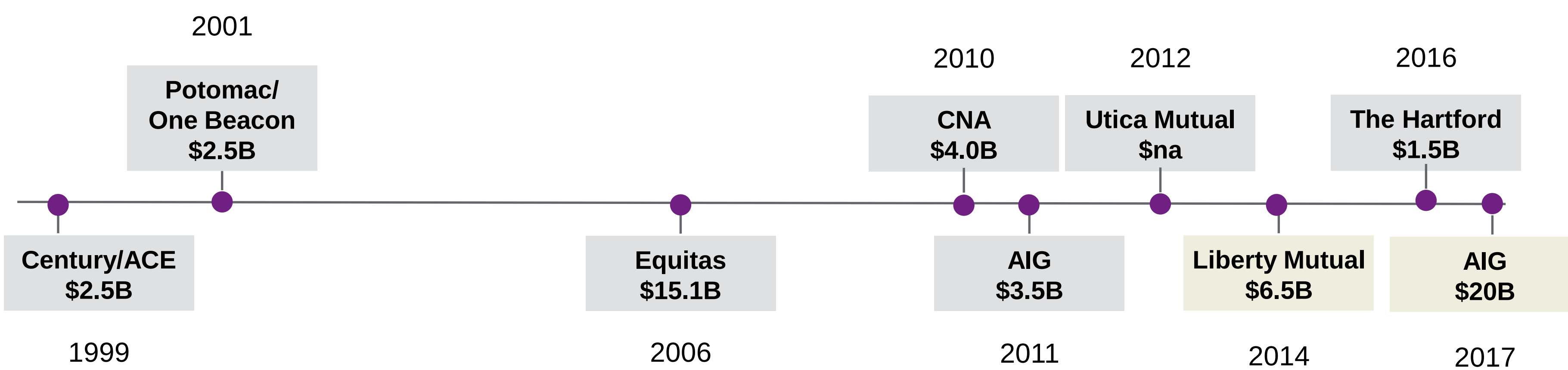
Placed 80% Adverse Development Cover attaching “in-the-money” on U.S. long-tail casualty business with Berkshire Hathaway (January 2017 retroactive to January 2016)

Outcomes

- Retroactive cover immediately responded to subsequent disclosure of approximately $5.8b of adverse development in 2016.
- Magnitude and scope of development (following approximately $4.1b in 2015) cast doubt on AIG’s ability to successfully execute on its turnaround strategy and ability to return capital to shareholders and led to the departure of CEO.
- **ADC was a factor in A.M. Best recently removing AIG’s ratings from under review.**

Time Series – Single Reinsurer

- Where there is more uncertainty regarding pricing, or where there are additional qualitative concerns (e.g., reassuring stakeholders) benchmarking against prior transactions may provide guidance
- The timeline below lists some large retroactive reinsurance transactions (limits provided) that have been executed in the past by Berkshire Hathaway



Key: Lines Covered: **A&E** **Other Lines**

Adjusting for Changing Interest Rates

Past Retroactive Transactions - Berkshire Hathaway

Transaction Parameters	Century/ Ace Jun-99	Potomac/ OneBeacon Jun-01	Equitas Nov-06	Equitas Option Jun-09	Equitas Combine Jul-09	CNA Jul-10	AIG Apr-11	Utica Mutual Sep-12	Liberty Mutual Jul-14	The Hartford Jan-17	AIG Announced Jan-17 retroactive to Jan-16 As of YE 15	AIG Announced Jan-17 retroactive to Jan-16 As of YE 16	
Form of Transaction	HYBRID	LPT	LPT	ADC	LPT	LPT	LPT	LPT	HYBRID	ADC	Hybrid - 80% Placed	Hybrid - 80% Placed	
Lines Covered	A&E	A&E	A&E	A&E	A&E	A&E	A&E	A&E	WC + A&E	A&E	Casualty ex A&E	Casualty ex A&E	
Cedant Net Reserves	3,550	955	8,100		8,100	1,600	1,850	236	15,800	1,700	35,700	41,000	(a)
Attachment	2,300	0	0	13,800	0	0	0	0	12,500	1,700	25,000	25,000	
Attachment as a % of Reserves	64.8%	0.0%	0.0%	170.4%	0.0%	0.0%	0.0%	0.0%	79.1%	100.0%	70.0%	61.0%	
Limit Provided	2,500	2,500	13,800	1,300	15,100	4,000	3,500	na	6,500	1,500	25,000	25,000	(b)
Limit as a % of Reserves	70.4%	261.8%	170.4%	16.0%	186.4%	250.0%	189.2%	na	41.1%	88.2%	70.0%	61.0%	(b)
Exhaustion	4,800	2,500	13,800	15,100	15,100	4,000	3,500	na	19,000	3,200	50,000	50,000	(b)
Exhaustion as a % of Reserves	135.2%	261.8%	170.4%	186.4%	186.4%	250.0%	189.2%		120.3%	188.2%	140.1%	122.0%	(b)
Reinsurance Premium	1,250	1,322	7,100	66	7,166	2,000	1,650	241	3,000	650	12,250	12,750	(b), (c)
Premium as a % of Reserves Transferred	100.0%	138.4%	87.7%	0.8%	88.5%	125.0%	89.2%	102.1%	90.9%	na	114.5%	79.7%	(b)
Nominal ROL	**50.0%**	**52.9%**	**51.4%**	**5.1%**	**47.5%**	**50.0%**	**47.1%**	**na**	**46.2%**	**43.3%**	**49.0%**	**51.0%**	
Estimated Pricing Metrics													
Reserves Ceded	1,250	955	8,100	0	8,100	1,600	1,850	236	3,300	0	10,700	16,000	(b)
Treasury Rate as of Transaction Date	6.0%	5.4%	4.6%	na	4.6%	3.0%	3.5%	1.6%	3.0%	2.45%	2.62%	2.62%	
Present Value of Ceded Reserves	519	565	5,181		5,181	1,195	1,317	202	1,824	na	7,265	10,863	(b)
Implied Risk Premium (RP less PV of Ceded)	731	757	1,919		1,985	805	333	39	1,176	650	4,985	1,887	(b)
Limit Provided Excess of Carried Reserves	1,250	1,545	5,700		7,000	2,400	1,650	na	3,200	1,500	14,300	9,000	(b)
Implied Adjusted ROL	**58.5%**	**49.0%**	**33.7%**		**28.4%**	**33.5%**	**20.2%**	**na**	**36.8%**	**43.3%**	**34.9%**	**21.0%**	

All figures USD Millions

All figures based on publlicly available data from Annual Statement filings and press releases.

(a) Carried Reserves at YE 15 of $35.7b + 2016 adverse development of $5.3b

(b) Figures presented on a 100% basis

(c) Includes $0.5b of interest from January 1st, 2016 and December 31st, 2016.

- While nominal ROLs have remained constant at approximately 50% across this 17 year period adjusting pricing for the estimated discount in transferred reserves during this period of falling interest rates reveals more variation in the implied risk margin for the coverage provided excess of carried reserves
- Compared to other transactions, CNA looks relatively expensive and has since developed significantly
- Exhaustion was much lower on Liberty Mutual due to the greater certainty regarding the WC reserves included

Rhode Island Reg. 68

Achieving Finality

- Degrees of finality
  - ADC attaching at-the-money
  - LPT attaching at first dollar
  - Unlimited LPT attaching at first dollar
  - Unlimited LPT attaching at first dollar with transfer of claims handling

- All of these are still reinsurance transactions – legal liability for the covered policies still remains with the cedant if the reinsurer is unable to perform

- How to achieve true finality?

Achieving Finality

- Voluntary novation of original policies
  - Requires each original policyholder to agree – impractical

- Department of Insurance ordered novation of original policies
  - Usually requires the original entity to be under DOI supervision

- Sale of entity
  - May not be possible if covered policies represent only a portion of the legal entity’s business

- Better options available outside the U.S.
  - UK – Part VII Transfer

Part VII Transfers

- Process under Part VII of the Financial Services and Markets Act of 2000

- Court approved transfer of policies from one company to another
  - Report by an Independent Expert describing the proposed transaction and its effect on policyholders
  - Policyholder notification (objections are allowed)
  - Requires approval by the Court

- Achieves legal finality

Part VII – Yes or No

RSA | Capital drag from legacy liabilities (75% asbestos, 25% abuse, deafness, marine & aviation)

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Rhode Island Reg. 68 – Insurance Business Transfers

- An attempt to replicate Part VII Transfers in the U.S.
- Provides for a court approved novation of the covered liabilities to a Rhode Island domiciled reinsurer
- Originally enacted in 2007
- Amended in mid-2015 to allow for protected cell structures
- First application filed in June 2016 by Pro Global, a UK based insurance outsourcing firm
  - Approved in March 2017
- At least one other application pending

How it would work

- The business covered must be commercial lines insurance or reinsurance
  - Excludes life, workers' compensation and personal lines
- Must have a natural expiration more than 60 months prior to filing
- Transfer must be approved by domiciliary state of cedant and the Rhode Island Department of Insurance
- Requires a report by an outside expert on the impact on policyholders
- Requires an independent actuarial evaluation of the reserves being transferred
- Must be reviewed and approved by the Providence County Superior Court

Will it work?

- Provides an option for companies that want absolute finality
- Can be used within a group to separate out books of business
- Characterization as a novation rather than reinsurance leads to more favorable accounting treatment under stat and GAAP
- Scope limited and may be further limited in practice (more difficult liabilities such as A&E, very large transactions)
- State based regulation may prove a roadblock compared to national regulation in the UK
- More expensive than a reinsurance transaction
- Competing legislation
  - Oklahoma Senate Bill 606
  - Connecticut Substitute House Bill 7025 (reverse merger)

Questions?

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