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2024 SOA VALUATION ACTUARY MEETING

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Asset Intensive Offshore Reinsurance Considerations

Moderator:

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Panelists:

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Fred Andersen, MAAA, FSA

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Presenters

Bruce Friedland is Principal at Friedland Consulting Services, LLC. The company focuses on expert witness testimony and analysis; annuity suitability; digital transformation, including strategic planning, product design/pricing, process improvements and the customer journey; actuarial talent evaluation and leadership training; and other actuarial services from product design/pricing review to cash flow testing review and controls evaluation/improvements. Previously, Mr. Friedland was a member of the senior leadership team, Chief Actuary, and Chief Product Officer for a life insurance and annuity company.

Presenters

Emily Lorentzen leads the US institutional markets business for Kuvare, focusing on providing innovative reinsurance solutions to companies. She has over 15 years of experience in actuarial modeling, financial reporting, and project leadership. Most recently, she was with KPMG as a manager in Advisory services assisting insurance clients with large scale transformations, risk management, and providing actuarial audit support.

Presenters

Fred Andersen serves as Chief Life Actuary of the Minnesota Department of Commerce. Fred reviews financial models related to the reserves and capital of Minnesota's life insurers and also leads activities in solvency protection and market efficiency at the National Association of Insurance Commissioners in areas including asset adequacy analysis and long term care. He previously served as the Acting Deputy Commissioner at the Minnesota Department from 2016 to 2019 and prior to joining the Minnesota Department in 2014, he served as Assistant Chief Life Actuary for the Insurance Division of the New York Department of Financial Services, where he worked for 16 years.

Setting the Stage

Motivations to use offshore reinsurance

- Risk Management
  - Reserves held onshore may not accurately reflect the risks held
- Capital Relief
  - Enhanced Capacity to write more business or invest in growth opportunities
- Expertise and Resources
  - Bermuda based reinsurers have significant expertise and resources given the quantities of premiums already being reinsured.
- Financial Flexibility
  - Assets that cannot be used to back liabilities onshore may be allowed offshore, leading to greater flexibility.

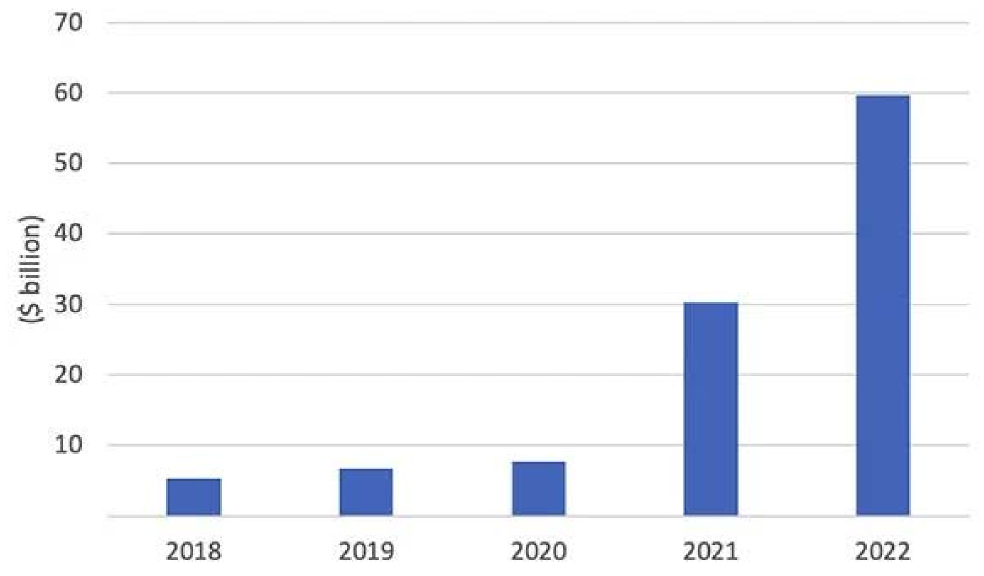
Benefits of offshore reinsurance

- Favorable Regulatory Environment
  - Bermuda's capital regime can lead to a reduction in required capital.
  - Bermuda's Economic Balance Sheet (EBS) is a principles-based regime, meaning that the regulator is open to (re)insurers reflecting their risks in the most appropriate way.
    - Section 6D allows adjustments to the EBS regulations for this purpose
- Tax Efficiency
  - Bermuda has a 0% corporation tax rate, leading to tax efficiencies.
- Economic Stability & Infrastructure
  - Bermuda is a blue-chip jurisdiction with a deep talent pool of highly qualified professionals.

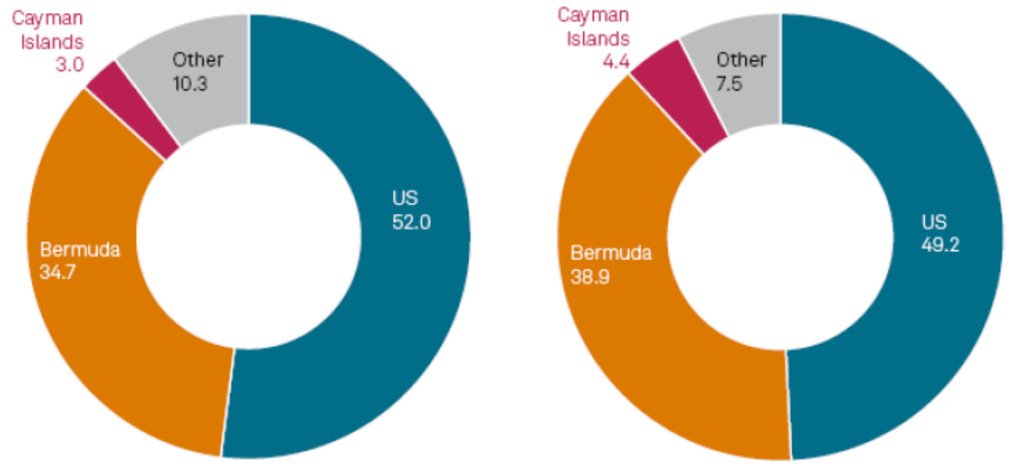
Trends

- The Bermuda life insurance market has grown rapidly. Assets increased to $1.1 trillion as of YE 2022 from $496 billion in 2018, and the number of life insurance licenses increased 10% over the same period to 180.

Cayman:



Growth in affiliated, unaffiliated reinsurance elevates Bermuda's prominence in assuming US life and annuity liabilities (%)



Data compiled April 26, 2024.

Results reflect the aggregation of cedant-reported reinsurer domiciles on Schedule S, Part 3, Section 1 of 2023 annual statements.

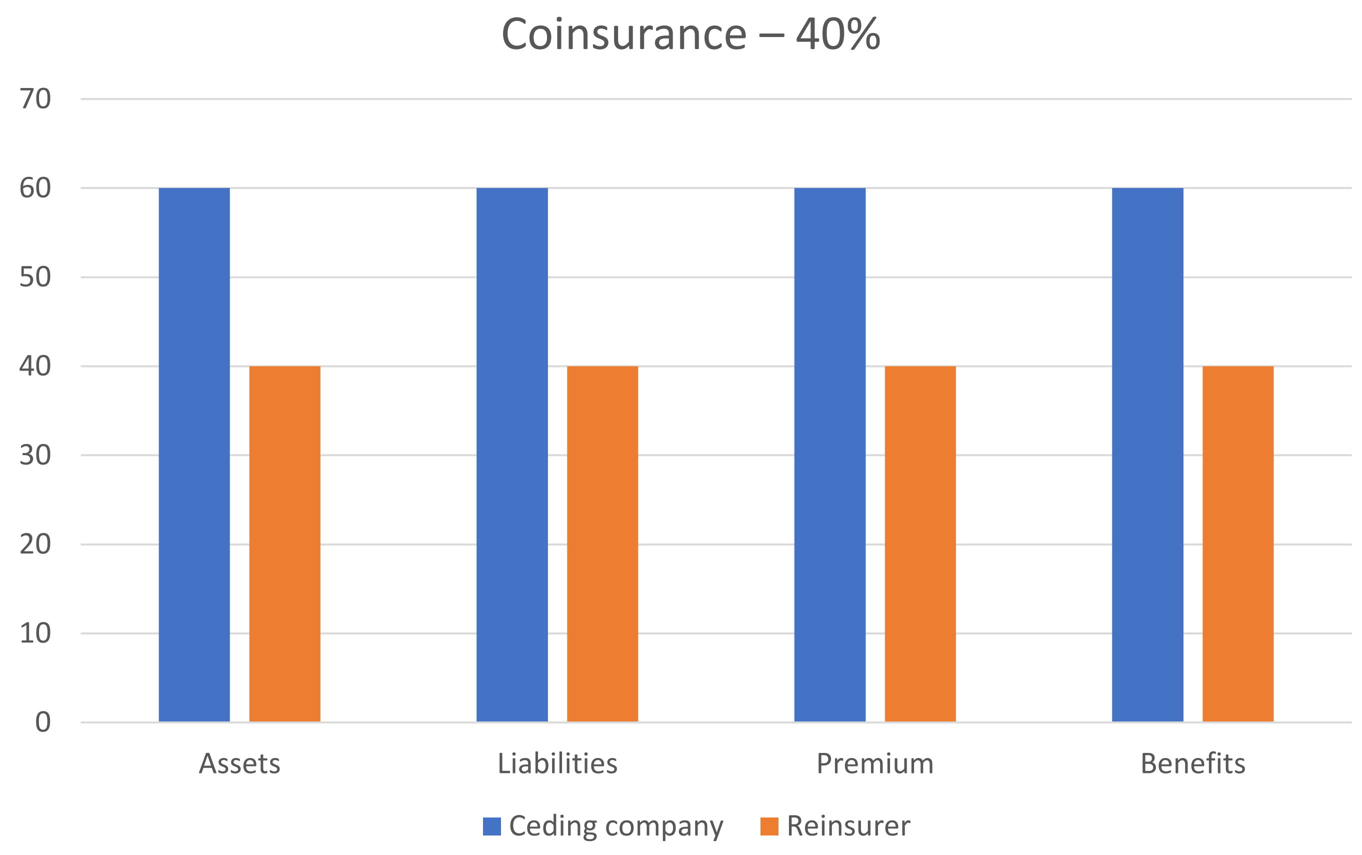
Source: S&P Global Market Intelligence.

Structures

- Coinsurance
- Coinsurance Funds Withheld
- Modified Coinsurance

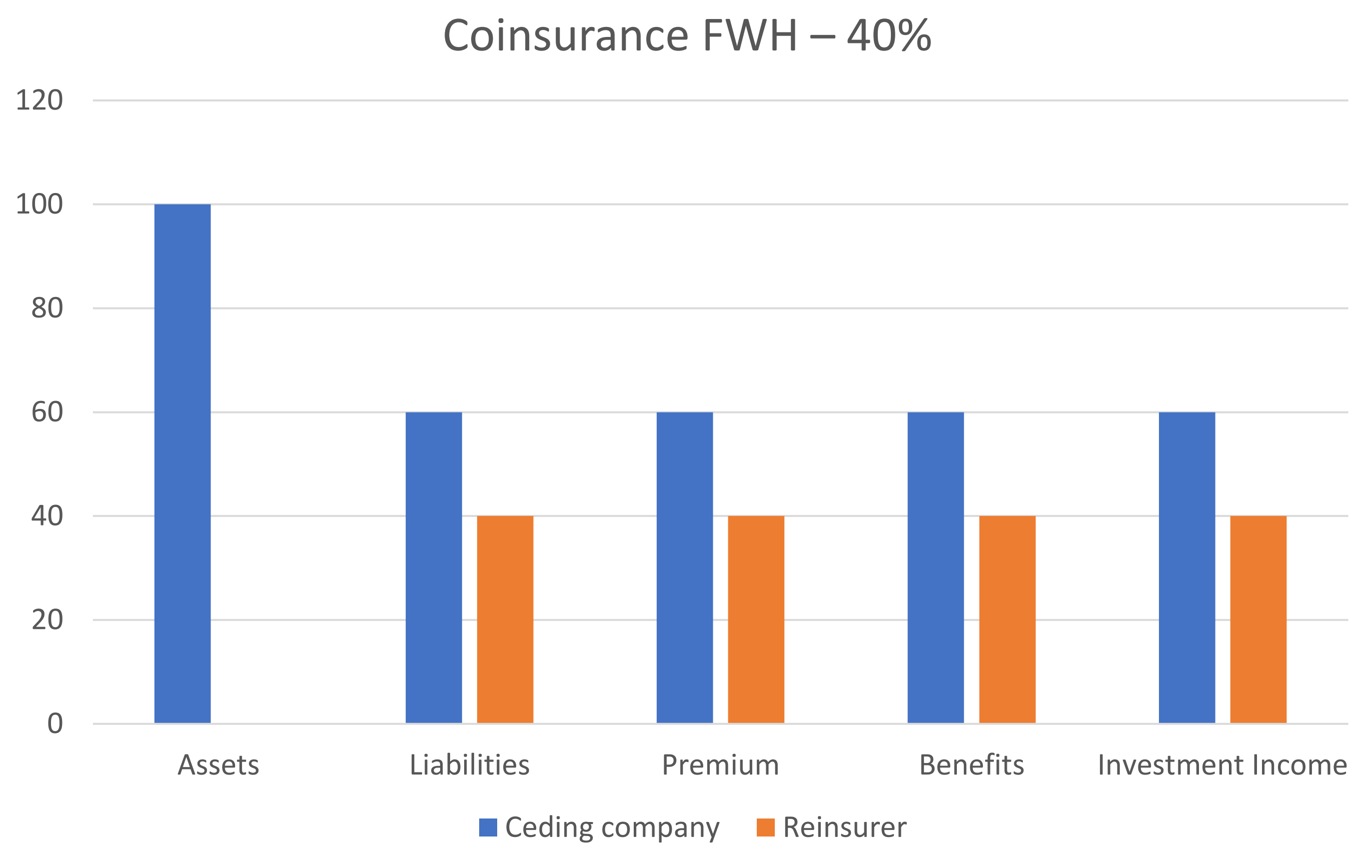
Coinsurance

- Share everything!
- All policy cashflows are shared including premium and benefits.
- Ceding company transfers assets & liabilities to the reinsurer.
- A ceding commission for the business may be positive or negative
- Expense allowances are generally paid to the ceding company for maintaining administration of the business
- Coinsurance of 100% is "selling" a block of business.



Coinsurance Funds Withheld

- Assets remain on the ceding company's balance sheet
- All policy cashflows are shared including premium and benefits.
- Ceding company retains assets and passes along reinsurer's share of the investment income as part of the settlement process.
- Reinsurer may manage assets which includes operational considerations to build the capabilities for the reinsurer to direct investments on the ceding company's balance sheet

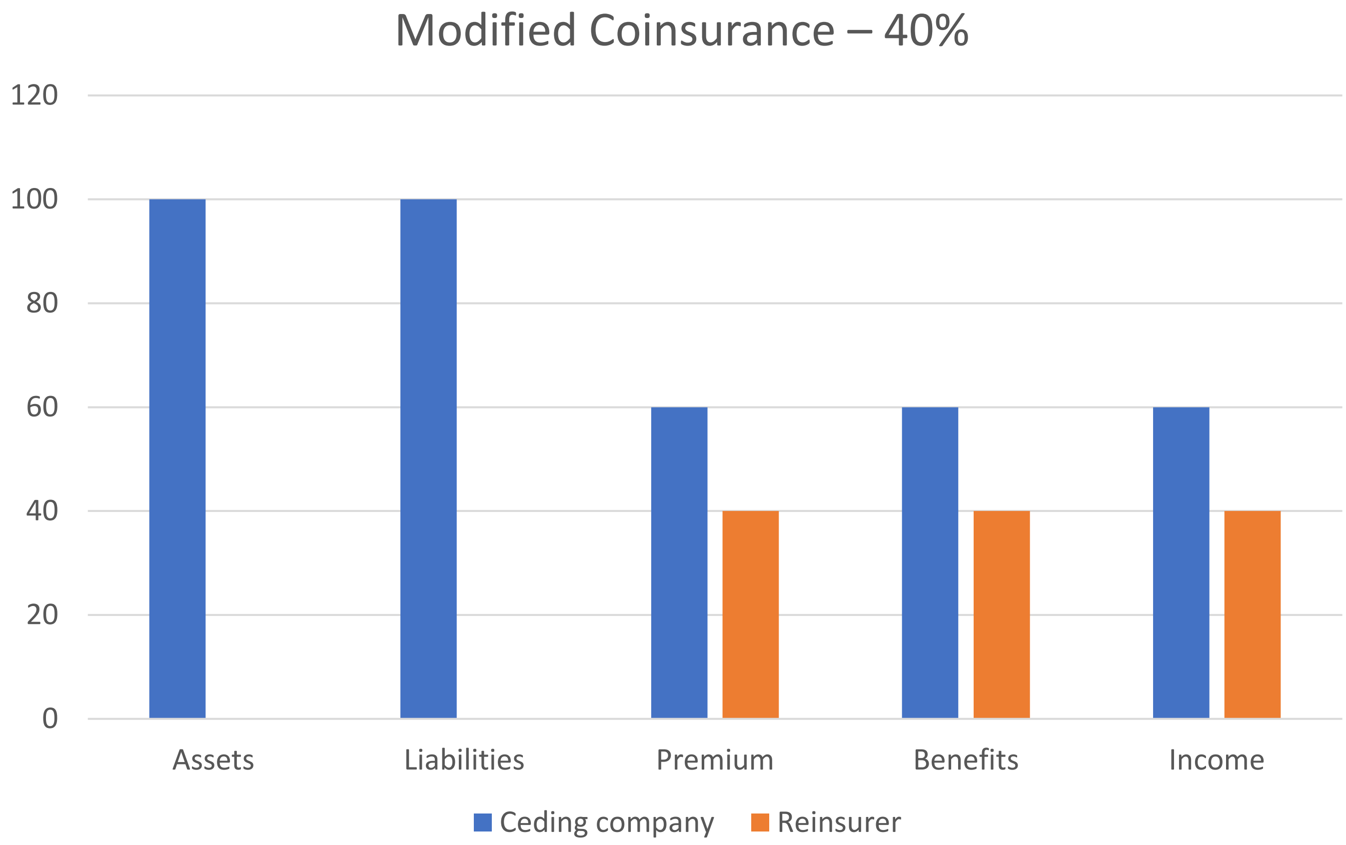


Asset holding provision: funds withheld account

- Ceding company gives some of its risk to the assuming company
- Assets normally paid to a reinsurer are withheld by the ceding company
- The amounts withheld are recorded as a liability by the ceding company
- Permits statutory credit for non-admitted reinsurance
- The ceding company retains the assets supporting the reinsured liabilities

Modified Coinsurance

- Assets and liabilities remain on the ceding company's balance sheet
- All policy cashflows are shared including premium and benefits.
- No assets or reserves are transferred.
- The periodic settlement statement accomplishes the transfer with the change in reserves, liability experience, and asset performance.



Protections

- Trusts
  - Trusts are commonly used in Bermuda to segregate the assets and therefore protect both parties.
  - The cash-like assets held in the trust can only be used for the specific purpose of paying off reinsurance obligations.
- Over-collateralization
  - Reinsurers in Bermuda often over-collateralize and hold an additional margin of prudence on the collateral.
    - This tends to be a % of reserves
  - This provides greater security for the onshore insurer
- Investment Guidelines
- Parental Guarantee
- Recapture Provisions

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Structure

- Asset Intensive Products
- US Cedant, Offshore Reinsurer, Alternative Asset Manager
- Different Reserve and Capital Requirements
- Often More Investment Flexibility
- More Competitive Products

Academy Issue Brief

- Asset Adequacy and Reinsurance Issues Task Force (AARITF) Formed 2023
  - Charge 1 – AG53 Support
  - Charge 2 – Offshore Asset Intensive Reinsurance and Evolving Guidance
    - Including Reserve Adequacy Considerations for Offshore Business
- *Asset Intensive Reinsurance Ceded Offshore From US Life Insurers*
  - *(With Focus on Bermuda)*
- Big Topic
  - Focus on Bermuda First

Academy Issue Brief

- Significant Increase Asset Intensive Cede
- US Regulatory Concerns and Obligations
- Reserving Differences
  - US Statutory vs. IFRS or GAAP
  - Economic Balance Sheet (EBL)
- Reciprocal Jurisdiction
  - Also Solvency II Equivalence
- Investment Flexibility

Academy Issue Brief

- Regulator Reinsurance Comparison Worksheet
  - Optional
  - Could be Helpful
- Balance Sheet Comparison
  - US Stat Pre, Impact, Post vs. Other Jurisdiction
- Transaction Details
  - Type of Reinsurance, Parties, LOB, Reinsurance Jurisdiction, Covered Risks, etc.
- Asset Listing Backing Cede
  - Description, BV, MV, Rating, admitted/non-admitted

Academy Issue Brief

- Relevant Guidance
  - VM-30
  - ASOP Nos. 7, 11 and 22 and others
- Approaches
  - Cash Flow Testing, Gross Premium Reserve Test, Conservatism Demonstration
- Leverage Reinsurance Data
  - If Available
  - E.g, Scenario Based Approach, Other Stress Tests

Academy Issue Brief

- Cash Flow Testing
- Challenges
  - Data Availability
  - Isolation of Assets
  - Other Reinsurer Risks

Academy Issue Brief

- Sufficient?

- Considerations
  - Reinsurer Ratings
  - Reinsurance Treaty Terms/Protections
  - Required Collateral
  - Subsequent Retrocession

- Negotiate Reporting Requirements

Regulatory Focus – 2 issues

- Reinsurance collectability
- Reserve adequacy

Offshore versus Onshore

- Offshore reinsurance, compared to traditional onshore, potentially involves:
  - Less transparency
    - e.g., assuming company may not perform VM-30 asset adequacy analysis for US regulators
  - Compliance with different reserve & capital standards than US
    - Business moving to entity with perceived weaker standards…
    - US regulators focused on protecting policyholders

Reinsurance Collectability

Reinsurance collectability

- Offshore assuming reinsurer, with potentially less transparency and solvency protection
- Means more responsibility on US ceding company's Appointed Actuary to help ensure claims will be paid
- Clarification in Actuarial Guideline 53 & Guidance Document
  - Tied into ASOP No.11 exposures

Reinsurance collectability / ASOP No. 11

- Section 4.1 of ASOP No. 11, includes these required disclosures:
  - Features of the reinsurance program and financial impact
  - Description of model and assumptions, mentioning any inconsistencies
  - Any unresolved actuarial concerns
  - Impact of risks
    - Assumption variation over time
    - Non-guaranteed reinsurance elements
    - Counterparty risk
    - Termination of program
  - Any need for additional reserves
  - Reliances

Reinsurance collectability / ASOP No. 11

- AG 51 Guidance: ASOP # No. 11 disclosures should be provided for arrangements with counterparties that do not undergo asset adequacy analysis
  - e.g., captives and foreign jurisdictions

Reinsurance collectability / AG 53 Review

- Stated goals – help ensure:
  - There are enough quality assets at the reinsurer to pay reinsurance claims in moderately adverse conditions
  - Significant risks associated with reinsurance ceded are appropriately addressed in asset adequacy analysis projections, which will help ensure the ceding insurer’s balance sheet is accurate.
  - A ceding company does not act like they’ve wiped their hands and balance sheet of the risk if the assuming company will be some combination of:
    - Weakly capitalized,
    - Under-reserved, or
    - With risky assets supporting reserves

Reinsurance collectability / AG 53 Review

- YE 2022 focus
  - Targeted around a dozen US ceding companies with potential significant exposure to reinsurance collectability risk, including offshore

Reinsurance collectability / AG 53 findings

1. How do protections such as assets in trust or funds withheld lower the ceding company's risk?
2. How do supporting assets and key assumptions compare between analysis provided to different jurisdictions
   - Re: assets, any US non-admitted or non-primary security assets?
   - Re assumptions, e.g., index rider utilization, mortality, and alternative asset return / risk
3. What are some differences in protections and comfort regarding reciprocal jurisdiction reinsurers versus other non-US reinsurers
4. What are types of key metrics that can be used to assess reinsurance collectability?
5. Differences in concern between affiliated and non-affiliated transaction?

Company practices re: reinsurance collectability risk

- Monitoring
  - Monitors the reinsurer's credit rating / financial strength and other measurements
    - A committee with governance responsibility is often involved
  - References triggering events, including collateral and recapture
- Quantitative Analysis
  - Performs additional testing, sometimes going beyond minimum standards
- Asset Protections
  - Institutes asset holding provisions for the reinsurer
  - Establishes investment policies with the reinsurer
  - Reinsurer secures access to credit

Examples of other asset holding provisions

- Some reserves are backed by a reserve credit trust or comfort trust
- Assets are held in a collateral account equal to the Statutory reserve of the ceded liabilities
- Reinsurer is required to maintain a trust account in an amount equal to 100% of the gross reserves ceded
- Treaty requires overcollateralized trusts that are more than 100% of the statutory reserve
- US GAAP loss recognition testing is used on a quarterly basis to develop a funds withheld required amount based upon underlying assumptions with extra margins
- Ceding company seeks to negotiate collateral whenever material reserves are transferred to the reinsurer
- Ceding company retains the assets supporting the ceded reserves as security in a separate asset portfolio account

Reserve Adequacy

What is the issue? What are state regulators trying to accomplish?

- State regulators oversee the reserves and solvency of US insurers.
- Reinsurance activity is taking place where reserves are held lower than US statutory standards.
- In some cases, reserves are substantially lower or disappear
- It is important to know if the lower reserve amounts are adequate.

One way to evaluate reserve adequacy

- Asset adequacy analysis using appropriate assumptions.
- For example, is reserve adequacy achieved only with aggressive asset return, policyholder utilization of product guarantees, or mortality / longevity assumptions?
- Whether reserves are adequate using appropriate assumptions is important for US regulators to know when the reserves and supporting assets are impacting US insurers.

NAIC public process

- Established goals with high consensus:
  - Provide US state regulators what is needed to review the reserves & solvency of US life insurers.
  - Steer clear of conflict with reciprocal jurisdiction / covered agreement issues.
    - Regarding treating certain reinsurance arrangements differently than others.
  - Prevent work by US ceding companies where there's immaterial risk.
- Considering various concepts to align with these goals
  - Related to terminology, materiality, aggregation, retroactivity, methodology

Current NAIC status

- Attempting to gain consensus regarding several considerations:
  - Materiality threshold for determining need for additional analysis
  - Alignment of analysis rigor and level of risk
  - Considerations for analysis, aggregation, and attribution testing
  - Scope / inclusion of past treaties
  - Analysis of risk associated with non-traditional assets

Potential risks perhaps leading to more analysis

- Assuming company does not submit a VM-30 memorandum to a state regulator
- Assuming company holds reserves significantly lower than US statutory reserves
- Significant collectability risk related to the assuming company

Analysis type – cash-flow testing

- The required asset adequacy analysis method with asset-intensive products
  - Such as annuities and permanent life insurance
- Project asset and liability cash flows across multiple scenarios
  - AG 53 requires consideration of all key risks, not just Treasury rate movements
    - Work in progress in some cases;
    - If model does not address risks, conservatism should be added to assumptions

Analysis type – attribution analysis

- Provides insight into reserve decrease resulting from reinsurance
- Start with the pre-reinsurance reserve
- Show adjustments for (where relevant):
  - Assumption differences from baseline
    - E.g., investment returns, policyholder behavior, mortality / longevity
  - Removal of cash surrender value floor
  - Market value versus book value differences
  - Differences in assumption margins
- Result is the post-reinsurance “economic reserve”

Spectrum of analysis after risk identification

- Annual rigorous cash-flow testing
- One-time cash-flow testing with annual attribution analysis update
- One-time attribution analysis with annual monitoring
- Low risk: minimal analysis over typical reinsurance collectability requirements
  - AG 53 and ASOP No. 11

Cash-flow testing issues re: reinsurance ceded

- What if there's limited information about assets?
  - One goal for regulators is to see if reserves are adequate using reasonably conservative asset return assumptions
    - Should be fairly easy to demonstrate in most cases
  - Another goal is to ensure risks associated with complex assets are appropriately modeled to reflect all key risks
    - May be more difficult to demonstrate to the extent the ceding company has limited information on the assuming company's assets

Other potential risks and issues

- Total asset requirement differences between jurisdictions
  - Do reserves meet different purposes in different countries?
- Any portion of the reserve not backed by primary security
  - As defined in Section 4.D of Actuarial Guideline 48
- Aggregation impact
- Retrocession impact

Questions?

For more information, please contact Amanda Barry-Moilanen (barrymoilanen@actuary.org)

- Add Evaluation link