

# Economics of Bermuda captives and sidecars

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# Agenda

## 01

Market overview

20 min

- Latest developments
- Overview of affiliate and sidecar structures
- Bermuda as an offshore jurisdiction, and key players

## 02

Economics of captives  
and  
sidecars

20 min

- Financial rationale and accounting implications
- Bermuda reserving and capital framework

## 03

Q&A

10 min

- Open forum

Today's presenter:



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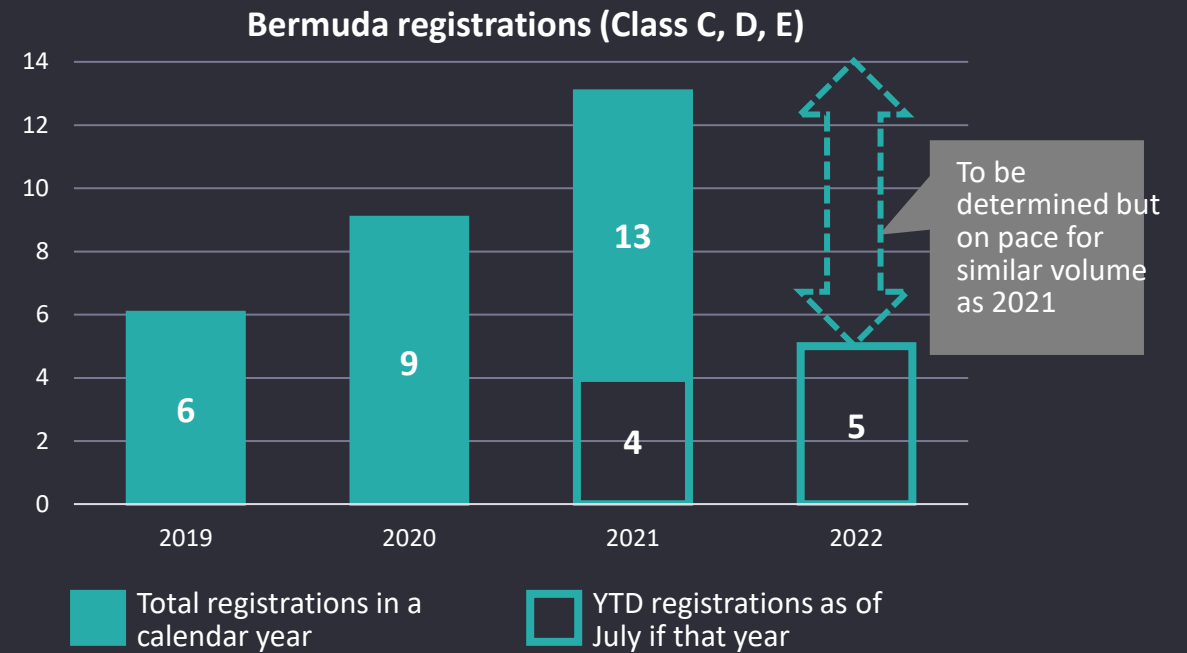
# Market overview

Offshore (re)insurance activities continue to grow and are increasingly part of the strategy of many US insurers

## Latest developments in offshore market

### Offshore reinsurance strategies continue to gain popularity in the US insurance industry for a few key reasons:

- Increased activity and competition from the industry, including private equity firms
- Economic-based reserving frameworks that better align to certain insurers' risk management practices
- Greater value proposition as yields rise and greater flexibility in investment strategies
- Strong reputation (National Association of Insurance Commissioners (NAIC) qualified, Solvency II equivalent)
- Access to established insurance professionals and talent



Source: <https://www.bma.bm/statistics/monthly-registration-statistics>

# Introduction to reinsurance

## What is reinsurance?

Reinsurance is the transfer of all or part of the risks that a direct insurer assumes by way of insurance contract on behalf of an insured party to a second insurance carrier, the reinsurer, who has no direct contractual relationship with the insured.

## Reasons to use reinsurance:



### Risk transfer

- Allows the ceding company to write and assume risks that are greater than its capital size would allow
- Risks transferred:
  - Traditional insurance risk
  - Financial risk
  - Investment risk
  - Market risk
- Protects against catastrophic losses
- Limits total claims



### Expertise

- Reinsurers often provide expertise to ceding companies in areas such as:
  - Entering new markets
  - Underwriting assistant for complicated cases
  - Product pricing
  - Product design



### Transfer business

- Pass the entire business to reinsurers (e.g., assumption reinsurance, acquisition by a reinsurer)
- Motivations:
  - Exit product line or sell block of business to reduce risk/cost
  - Sell problematic blocks to make remaining business more attractive for a future company sale
  - Required due to insolvency



### Financial planning and capital management

- Increase statutory surplus or utilize idle capital
- Reduce earnings volatility
- Earn more competitive rate of return (both ceding company and reinsurer)
- Lower capital costs
- Raise capital and debt
- Increase sales/profits
- Improve tax efficiency

# Market overview

## Reinsurance strategy dimensions

There are several important dimensions to consider when assessing a reinsurance strategy, including the **type of reinsurance, jurisdiction, asset management, rating and deal structure**. Evaluating these dimensions will help to identify the preferred permutations to meet the reinsurance strategy objectives.

### Dimensions

Options

Reinsurance type	Jurisdiction	Asset management	Rating	Deal structure
<b>Third party</b> <ul style="list-style-type: none"> <li>Leverage reinsurer capacity, capital/tax advantages, investment expertise for greater competitiveness</li> </ul>	<b>Onshore — US</b> <ul style="list-style-type: none"> <li>Large, highly capitalized and highly rated reinsurers</li> <li>Strong treaty and facultative capabilities</li> <li>Customized capital optimization strategies</li> </ul>	<b>Internal asset manager</b> <ul style="list-style-type: none"> <li>Leverage internal investment functions and capabilities</li> <li>More control in investment strategies</li> </ul>	<b>Strong rating</b> AAA to AA	<b>Coinsurance</b> <ul style="list-style-type: none"> <li>Reinsurer assumes full risk transfer for quota-share</li> <li>No separate investment guidelines</li> <li>Limited transparency in reinsurer approach</li> </ul>
<b>Internal affiliate</b> <ul style="list-style-type: none"> <li>Leverage captive or affiliated reinsurer for potential capital, tax, economic benefits and investment flexibility</li> </ul>	<b>Offshore — Bermuda</b> <ul style="list-style-type: none"> <li>Regulatory system, capital and potential tax efficiencies</li> <li>Greater investment flexibility</li> <li>Reserve efficiencies</li> <li>NAIC-qualified jurisdiction</li> </ul>	<b>External asset manager</b> <ul style="list-style-type: none"> <li>Leverage investment expertise for greater competitiveness compared to internal</li> <li>Greater investment choices and flexibility</li> <li>Potential for higher returns</li> </ul>	<b>Good rating</b> A to BBB	<b>Modified coinsurance</b> <ul style="list-style-type: none"> <li>Assets and reserves remain with ceding company</li> <li>Less counterparty risk and qualifies for reserve credit</li> <li>Greater GAAP earnings volatility</li> </ul>
<b>Sidecar</b> <ul style="list-style-type: none"> <li>Similar to internal affiliate but with limited participation in the offshore entity</li> <li>Tax and other competitive advantages with partnerships</li> </ul>	<b>Offshore — other</b> <ul style="list-style-type: none"> <li>Regulatory system, capital and potential tax efficiencies</li> <li>Investment flexibility</li> <li>Potential tax efficiencies</li> </ul>	<b>Private equity partner</b> <ul style="list-style-type: none"> <li>Similar to asset manager but often a more specialized approach while sharing in the deal economics</li> <li>Sophisticated asset origination capabilities</li> </ul>	<b>Marginal rating</b> BB and below	<b>Coinsurance funds withheld</b> <ul style="list-style-type: none"> <li>Assets remain with ceding company</li> <li>Reinsurer must set up reserves</li> </ul>
			<b>Unrated or non-admitted</b>	

# Market overview

## Reinsurance type

The increased share of annuities backed by private equity firms and the move of the industry toward offshore entities is creating significant competitiveness for traditional insurers. We highlight a few reinsurance-based strategies that we've seen utilized in the industry to help an insurer maintain its competitive position.

Third party	Internal affiliate	Sidecar
<p>Leverage external reinsurance, either by ceding in-force business and/or through active partnership(s) to gain pricing power for new business.</p> <ul style="list-style-type: none"><li><b>✓ Speed, cost and simplicity</b> This option is, comparatively, the easier and faster option to increase your competitiveness and/or improve your financial performance by leveraging (renting) structures and capabilities already established by those reinsurers.</li><li><b>✓ Availability</b> Multiple onshore and offshore reinsurers are actively seeking annuity liabilities that can be matched to their investment strategies.</li><li><b>✓ Risk management</b> Benefit from typical reinsurance risk-sharing.</li><li><b>✗ Share economics</b> You will lose access to future anticipated distributable earnings by ceding a portion of your business to external reinsurers.</li><li><b>✗ Counterparty risk</b> You will increase your exposure to counterparty risk, especially if you establish an active partnership (e.g., flow reinsurance) that grows your exposure over time.</li></ul>	<p>Establish your own offshore entity to leverage the benefits of regimes outside the US (e.g., Bermuda, Caymans).</p> <ul style="list-style-type: none"><li><b>✓ Financial benefits</b> Gain greater flexibility in your investment strategy backing your liabilities, which will result in greater expected yield and profitability. Use Bermuda's economic-based reserving framework.</li><li><b>✓ Control and retain economics</b> This option provides your company the most control over the offshore entity as well as direct control over the investment strategy. You will also retain the earnings from your business.</li><li><b>✗ Cost and complexity</b> You will be responsible for establishing the operational capabilities of the offshore entity, navigating tax and regulatory considerations and working through the filing application process in the offshore regime.</li></ul> <p><b>Legend:</b> ✓ Positive impact ✗ Negative impact</p>	<p>Establish your own offshore entity but share in the ownership, opening the door to potential partners.</p> <ul style="list-style-type: none"><li><b>✓ Financial benefits</b> Gain greater flexibility in your investment strategy backing your liabilities, which will result in greater expected yield and profitability. Use Bermuda's economic-based reserving framework.</li><li><b>✓ Benefit from additional parties</b> The sidecar option introduces outside investors who may actively participate in the offshore entity and lend their expertise. You can use this opportunity to partner with an investment firm that could help you achieve greater yields on your assets.</li><li><b>✗ Cost and complexity</b> Costs and complexity considerations remain. You will also be responsible for finding additional investors.</li><li><b>✗ Share economics</b> You will have to share economics with the other investors.</li></ul>

# Market overview

## Common jurisdictions for internal reinsurance for US insurers

### Offshore jurisdictions

#### 1 Bermuda

- ✓ Qualified and reciprocal jurisdiction<sup>1</sup> by the NAIC
- ✓ Reserving on economic basis; reserving methodology tied to assets
- ✓ Established with 100-plus insurers
- ✓ Sovereign credit rating: A1
- ✗ Mark-to-market creates potential for capital volatility on mismatched asset liability management (ALM) products

#### 2 Cayman Islands

- ✗ Non-qualified jurisdiction (NAIC)
- ✗ Less established with a smaller number of licensed insurers
- ✓ Sovereign credit rating: Aa3
- ✓ Flexibility in accounting standards applied, in accordance with internationally recognized accounting standards

#### 3 Barbados

- ✗ Non-qualified jurisdiction (NAIC)
- ✓ Established with 100-plus insurers
- ✗ Sovereign credit rating: B-
- ✓ Flexibility in accounting standards applied, in accordance with internationally recognized accounting standards

#### 4 Bahamas

- ✗ Non-qualified jurisdiction (NAIC)
- ✗ Less established with a smaller number of licensed insurers
- ✗ Sovereign credit rating: Ba2
- ✓ Flexibility in accounting standards applied
- ✓ IFRS basis, but may apply for US GAAP basis

### Key considerations

#### Key considerations when evaluating a jurisdiction for US insurers:

- Strength of the regulatory environment and controls
- Is there an attractive business case? Potential capital efficiencies, investment synergies, tax considerations (e.g., excise tax, base erosion and anti-abuse tax)?
- What are the accounting standards and reporting requirements?
- What are the alternatives?
  - US jurisdictions are still utilized for specific objectives, e.g., more favorable reserve treatments in Vermont/Ohio for fixed indexed annuities (FIAs) with guaranteed minimum withdrawal benefits and Arizona for variable annuities.
  - Companies that want to be close to European clients will consider regimes such as Switzerland.

<sup>1</sup> The NAIC allows insurers to claim full reserve credit when ceding liabilities to a qualified and reciprocal jurisdictions with reduced or no collateral requirements.



# Market overview

## Deal structure

The following are typical deal structures observed for reinsurance deals in the market today:

- **Coinsurance** – Assets and liabilities transfer from the ceding to the assuming entity.
- **Coinsurance funds withheld (Co-FWH)** – Assets remain with the ceding entity; liabilities transfer to the assuming entity.
- **Modified coinsurance (ModCo)** – Assets and liabilities remain with the ceding entity.

Item transferred at treaty initiation (US Statutory view)	Ceding company			Assuming company		
	Coinsurance	Co-FWH	ModCo	Coinsurance	Co-FWH	ModCo
Ceding commission*	+	+	+	–	–	–
Assets transferred/(premium)	–			+		
Reserves transferred	–	–		+	+	
Other liabilities	–	–		+	+	
Capital gains on assets transferred	+**			***		

\* A ceding commission from the ceding company to the assuming company is possible, generally when unprofitable business is reinsured.

\*\* Assuming fair value is greater than book value for assets transferred.

\*\*\* Assets would transfer at fair value to the assuming company under a coinsurance structure.

– Transfer from  
+ Transfer to

### Additional deal structure consideration:

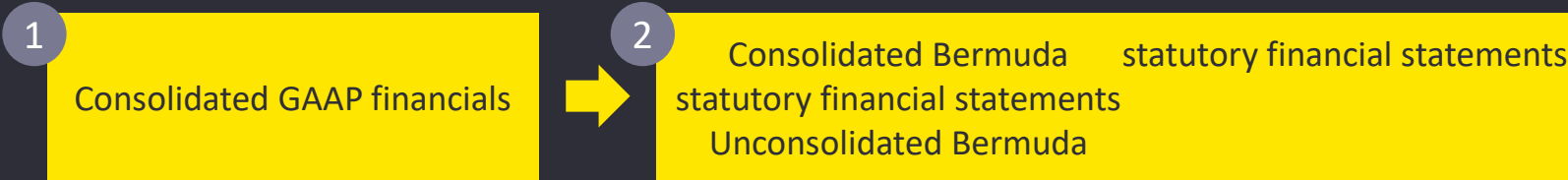
- Co-FWH and ModCo are the more common deal structures for reinsurance deals with an offshore reinsurer, as coinsurance involves the transferring of assets across boundaries that can further trigger additional steps/restrictions, e.g., setting up a reserve credit trust, overcollateralization, mark-to-market of assets transferred, and potential tax impacts based on entity tax election.

# Economics of captives and sidecars

## Reporting requirements

Commercial insurers will need to prepare three sets of financial statements annually as a part of their ongoing reporting requirements in Bermuda:

### Audited financial statements

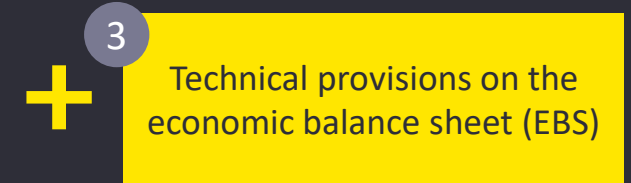


Insurers can choose to report under US GAAP, IFRS, Canadian GAAP, UK GAAP or other GAAP that BMA may recognize.

Bermuda statutory financial statements apply prudential filters to the consolidated GAAP financials, which include:

- **Goodwill:** valued at 0
- **Other similar intangible assets:** only recognized if they can be sold separately and the expected future economic benefits will flow to the insurer and the assets can be reliably measured
- **Prepays/deferred expenses:** valued at 0
- **DAC:** valued consistently with GAAP
- **Contingent liabilities:** expected present value of future cash flows, using risk-free rate
- **Deferred tax assets and liabilities:** valued consistently with GAAP

### Actuarial opinion



Commercial insurers will also need to prepare an actuarial opinion on the reasonableness of EBS technical provisions. The approved actuary will need to discuss:

- Commentary on the data underlying the EBS technical provisions
- Discussion of how the actuary arrived at the actuarial estimates
- Description of ALM and investment strategies if the scenario-based approach was elected

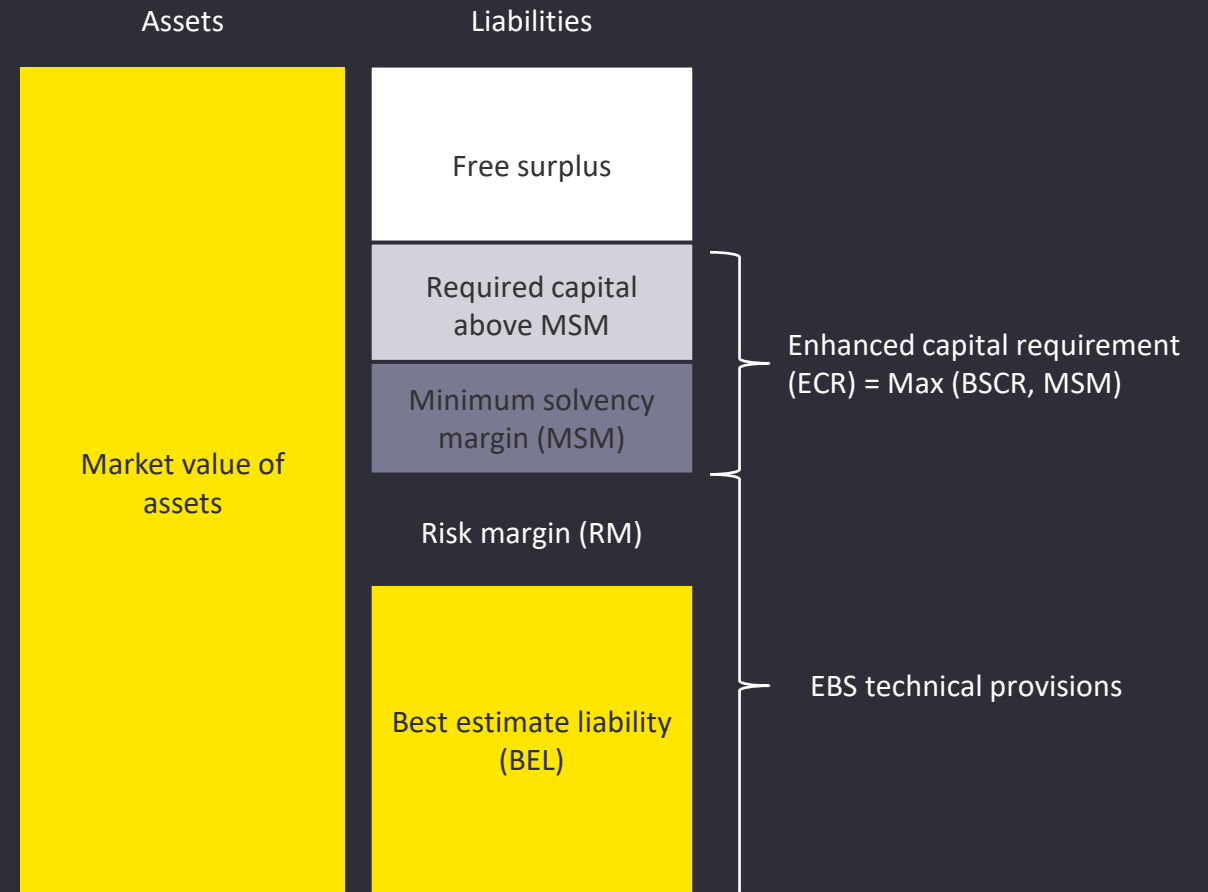
Source: Bermuda Monetary Authority

# Economics of captives and sidecars

## Bermuda EBS

Below is an overview of the EBS framework under Bermuda for long-term life insurers and a highlight of each component of the balance sheet:

- The EBS technical provision is established as the sum of the best estimate liability (BEL) and a risk margin (RM).
- The BEL represents the present value of best estimate cash flows (i.e., without prudency margins or PADs as commonly referred to under US GAAP).
- The RM represents an additional margin associated with uncertainty in liability cash flows (comparable in certain respects to a PAD) and is typically determined using a cost-of-capital approach.
- The ECR is the maximum of the Bermuda solvency capital requirements (BSCR) and the minimum solvency margin (MSM):
  - The BSCR is calculated using the BMA's prescribed risk-based capital model (or an approved internal model).
  - The MSM is prescribed by the Insurance Account Rules 2016.
- The target capital level is 120% of the ECR, where companies will be subject to additional scrutiny and enhanced monitoring from the BMA if they fall below 120%.



Source: BMA long-term instructions handbook

# Economics of captives and sidecars

## Best estimate liability — scenario-based approach

Under Bermuda EBS framework, cash flows can be discounted using one of two different approaches (standard approach or scenario-based approach (SBA)). Where the SBA is used, alternative asset investments can be used to back the 30-plus-year best estimate liability to capture both the sensitivity to interest rates and the degree to which the assets and liabilities are cash flow matched.

### Discount rates

- The standard approach uses a discount curve published by the BMA that reflects a risk-free curve with a liquidity adjustment derived from a notional portfolio.
- The SBA approach uses the actual portfolio of assets assigned to the block of business as well as any projected reinvestments. This effectively means the liabilities are discounted at the portfolio asset rate adjusted for any impact from mismatch.
- The SBA approach typically results in lower BEL for well-matched asset and liability cash flows.

### Use of alternative assets

- Under the Bermuda EBS framework, alternative asset investments, including equity, can be used to back the 30-plus-year best estimate liability when applying the SBA to discounting.
- Their use is based on the percentage of discounted cash flows at 30-plus years, evaluated and approved by the BMA annually.
- Approval is required and there have been restrictions in a number of forms, including a set monetary limit, a percentage of the entity's funds (such as 10%), or a limit on the level the BSCR ratio can fall when the benefit is removed (such as 120% BSCR).

Example liability cash flows (\$m)



Can be supported by alternative asset investments



# Economics of captives and sidecars

## Eligible capital under EBS

The BMA has a three-tiered capital system to assess the quality of capital resources that a (re)insurer can use to meet its capital requirements.

- The capital system effectively buckets all capital instruments based on their "loss absorbency" characteristics, with the highest-quality capital classified as Tier 1 capital. Only Tier 1 and Tier 2 capital is admissible to cover the minimum solvency margin, whereas all tiers of capital are admissible to cover the ECR, subject to the limits defined below:

Constraints		General criteria for eligibility	Examples
Tier 1	<ul style="list-style-type: none"> <li>≥ 80% of MSM</li> <li>≥ 50% of ECR</li> </ul>	<ul style="list-style-type: none"> <li>Highest level of subordination, paid-up</li> <li>Undated or estimated maturity of not less than 10 years from issuance</li> <li>Non-redeemable, noncallable</li> <li>Unencumbered, with exceptions noted below*</li> </ul>	<ul style="list-style-type: none"> <li>Statutory economic surplus</li> <li>Capital stock and contributed surplus, excluding preference shares</li> </ul>
Tier 2	<ul style="list-style-type: none"> <li>≤ 20% of MSM</li> <li>≤ 50% of ECR</li> </ul>	<ul style="list-style-type: none"> <li>Subordinated to policyholder obligations</li> <li>Undated or estimated maturity of not less than five years from issuance</li> <li>Non-redeemable</li> <li>Unencumbered*</li> </ul>	<ul style="list-style-type: none"> <li>Would otherwise qualify as Tier 1 but are callable on demand and unpaid</li> <li>Letters of credit with maturity in excess of five years</li> <li>Subordinated debt instruments</li> </ul>
Tier 3	<ul style="list-style-type: none"> <li>≤ 15% of ECR</li> </ul>	<ul style="list-style-type: none"> <li>Subordinated to policyholder obligations</li> <li>Undated or maturity of not less than three years from issuance</li> <li>Unencumbered*</li> </ul>	<ul style="list-style-type: none"> <li>Excludes capital instruments and other amounts included in Tier 1 and Tier 2</li> </ul>

\*Except for encumbered assets that:

- Back the policyholder obligations of the insurer
- Back the capital requirements applicable for the policyholder obligations
- Back the capital requirements applicable to the encumbered assets for the policyholder obligations

# Q&A



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