

An aerial photograph of a vast, clear turquoise ocean. In the lower-left quadrant, a small white motorboat is moving towards the right, leaving a white wake. The water is exceptionally clear, revealing dark, irregular patches of coral or seabed beneath the surface. In the far distance, a small, low-lying island with some buildings is visible on the horizon. The sky is a pale blue with scattered, soft white clouds.

Deloitte Insurance Week

Where Reinsurance Meets

Regulatory Comparison of
Different Jurisdictions

May 12, 2025

Panelists



Timothy Gasaatura
Chief Actuary
Oceanview Secure Reinsurance



Clayton Chuah
Director
Deloitte CBC



Lloyd Balshaw
Director
Deloitte CBC



Moderator - Rory Spiller
Manager
Deloitte CBC

Agenda

1	Current State in Regulation	4
2	Regulatory Trends	8
3	Regulatory Comparison	13
4	Closing Discussion	28
5	Questions	29

An aerial photograph of a vast, clear turquoise ocean. In the lower-left quadrant, a small white motorboat is moving towards the right, leaving a white wake. The seabed is visible through the shallow water, showing numerous dark, irregular patches of coral or rocks. In the far distance, a small island with some buildings and vegetation is visible on the horizon. The sky is a pale blue with scattered white clouds.

Current State in Regulations

Brief Overview

US Risk-Based Capital (RBC)

In the US, insurance is regulated at the state level. The National Association of Insurance Commissioners develops model laws and regulations to promote uniformity among state regulators.



Reserving requirements

Statutory reporting is used as the starting point where most assets and liabilities are held at book-value.

Liabilities are determined using prescribed assumptions and valuation methodologies which can either be formulaic or principle-based.

Capital Requirements

$$ACL\ RBC = 0.5 \times [C_0 + C_{4a} + \sqrt{(C_{1o} + C_{3a})^2 + (C_{1cs} + C_{3c})^2 + C_2^2 + C_{3b}^2 + C_{4b}^2}]$$

$$Total\ adjusted\ capital = stat\ surplus + AVR + \frac{1}{2} policyholder\ dividend\ liability$$

Where:

C_0 = Asset Risk (affiliated amounts)

C_{1o} = All other asset risk

C_2 = Pricing (Insurance) risk

C_{3a} = Interest rate risk

C_{3b} = Health credit risk

C_{3o} = Market risk

C_{4a} = Business risk (non – health portion)

C_{4b} = Business risk (health portion)

C_{1cs} = Asset Risk (unaffiliated common stock)

Cayman Prescribed Capital Requirements (PCR)

In Cayman, most companies elect to use internal capital models in place of the regulator's prescribed framework. US RBC with adjustments and modified GAAP are common elections.



Reserving requirements

Cayman has flexible accounting treatment with insurers having to adopt an internationally recognized accounting standard. GAAP or modified GAAP is typically used by insurers where liabilities are valued using a market consistent approach and assets are held at either book-value or market value.

Capital Requirements

The Cayman Islands Monetary Authority (CIMA) permits insurers to determine solvency capital requirements based on either the standard prescribed capital model or an approved internal capital model (ICM). Many Cayman insurers using ICM determine their PCR based on a factor of US RBC.

Bermuda Solvency Regulatory Requirements (BSCR)

The Bermuda Authority (BMA) oversees the regulation of insurers using a risk-based regulatory framework that focuses on financial strength and risk management practices



Reserving requirements

Similar to Solvency II, an economic balance sheet is used as the starting point where assets and liabilities are marked to market.

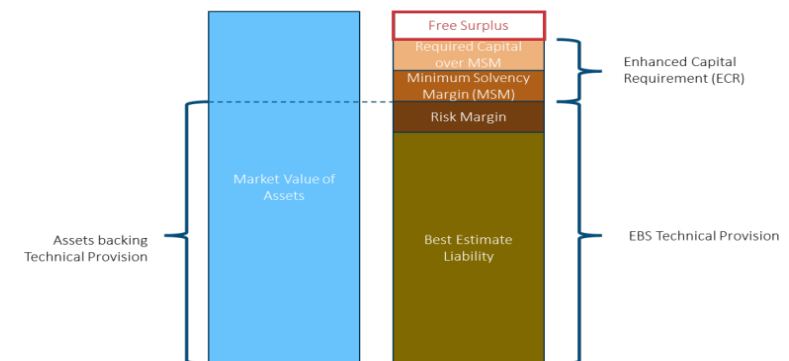
Insurance Liabilities are determined using best estimate assumptions plus a risk margin to estimate the current exit value.

Capital Requirements

The BSCR capital model is risk-based and is based on factors relating to an insurer's net exposure to the following risk modules:

Risk Categories and capital composition

- Market risk
- Insurance risk
- Credit risk
- Operational risk
- Capital Adjustments



An aerial photograph of a tropical ocean scene. The water is a vibrant turquoise color, revealing a complex coral reef structure with various shades of brown and green. A small white boat is visible in the lower-left quadrant, leaving a white wake. In the distance, a small island with buildings is visible on the horizon under a blue sky with scattered white clouds.

Regulatory Trends

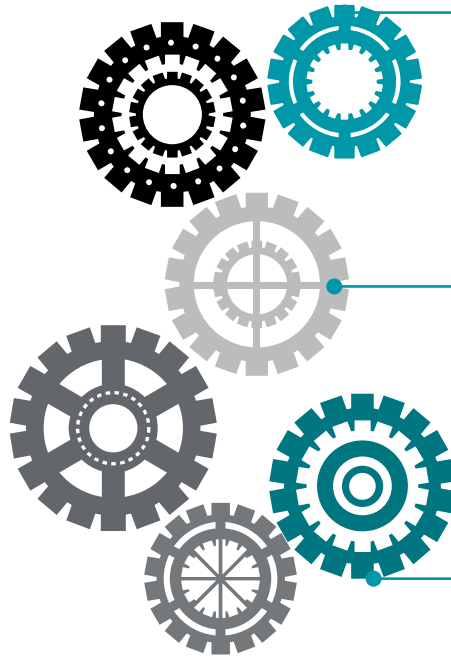
Brief Overview

Recent Bermuda Regulatory Changes

A summary of the recent changes in the Bermuda Regulatory Regime

Scenario Based Approach

- **Reapproval requirements** where there has been a material change to existing SBA models
- **Fungibility** of assets between collateral is not permitted without BMA approval Single notch rating downgrade of all assets
- Release of **prescribed default and downgrades (D&D)** rates and requirements governing the use of internal model and internal ratings as alternatives to the prescribed D&D assumptions
- Strengthened **asset modeling requirements** and restrictions including:
 - Restriction on the sale of **258E (restricted)** assets assumed in SBA modeling
 - Requirement to explicitly model **assets with optionality** or behavioral components
 - An additional **spread cap** was introduced on 258E assets that receive approval for use in the SBA.
- An additional cost for lapses was introduced. **Lapse cost** looks at historical actual and expected lapse rates and considers the 1 standard deviation of lapse rate differences. The difference is then compared to the BSCR lapse up/down shock parameters to determine the proportion of the BSCR shock seen in the volatility of the lapse experience



BSCR and Risk Margin

'Other insurance risk' charge broken down into separate lapse and expense risk components

Updated **Risk margin** calculation for Insurance Groups to be on an unconsolidated basis. Second order impacts from transitioning to updated BSCR calculations.

Governance and Disclosures

Introduced risk management and SBA **governance requirements** relating to liquidity, affiliate investments, outsourcing, model documentation and data requirements.

Prudent person principle proposed for strengthening of investment specific governance and enhanced investment risk management framework.

Introduced additional annual public **disclosures** for long-term insurers covering assets, liabilities and asset liability management

Tax Regime

Bermuda enacted a 15% corporate income tax (CIT) effective for years beginning on or after January 1, 2025. CIT applies to Bermuda Constituent Entities (Bermuda CE) in a multinational entity (MNE) group with annual revenue of at least EUR 750m in at least two of the four preceding fiscal years.

Recent US and Cayman Regulatory Changes and Updates

A summary of the recent changes in the US Regulatory Regime relating to offshore reinsurance and regulatory updates relating to Cayman's insurance market

Asset adequacy analysis

In 2023, asset adequacy testing performed under Actuarial Guideline 53 required disclosure of:

- a capped reinvestment-sensitivity measure,
- collectability-risk reporting, and;
- the required supplementary information for assets and reinsurance.

Further discussions are ongoing on increasing the transparency of business that it is reinsured offshore for asset adequacy testing purposes.

Principles-based reserves

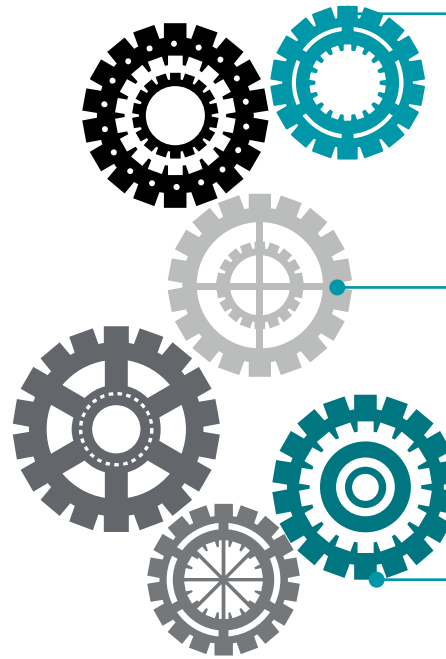
VM22 proposals relating to non-variable annuity products adoption delayed until 1/1/2026.

Offshore Reinsurance – Work in Progress

In 2023, the NAIC Macroprudential Working Group adopted a reinsurance comparison sheet as an optional disclosure form to increase the transparency of offshore reinsurance transactions

Cayman Qualified Jurisdiction

CIMA is working towards obtaining 'qualified jurisdiction' status from the US NAIC



Recent Developments

There has been growing discussion in the media over the use of offshore reinsurance

The Royal Gazette

US concern over growing offshore life reinsurance



Public consultation on draft Issues Paper on structural shifts in the life insurance sector



Increased offshore reinsurance use raises concerns for life insurance sector



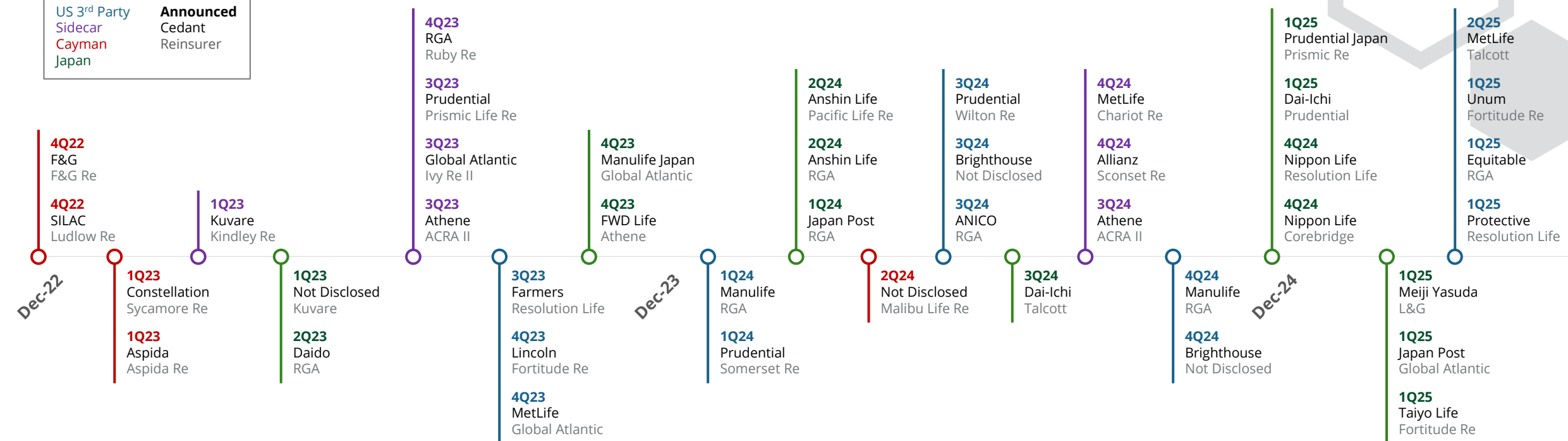
Bank of England plans to stress test insurers on exposure to reinsurance firms

Market Activity

Recent developments in the US, Cayman and Bermuda Market

Legend

US 3 rd Party	Announced
Sidecar	Cedant
Cayman	Reinsurer
Japan	



Cayman Themes | The L&A segment has reinsured approximately \$100B of reserves in the Cayman Islands, with over half of the activity backed by private equity: some stakeholders see risk in the lack of transparency, but the territory's attractiveness for U.S. business has it poised for continued growth

Sidecar Themes | Billions of dollars have flooded the L&A segment as outside capital providers look to increase their exposure to (re)insurance growth, with carriers welcoming the investment, deploying funds to increase new business capacity as asset-intensive sales boom

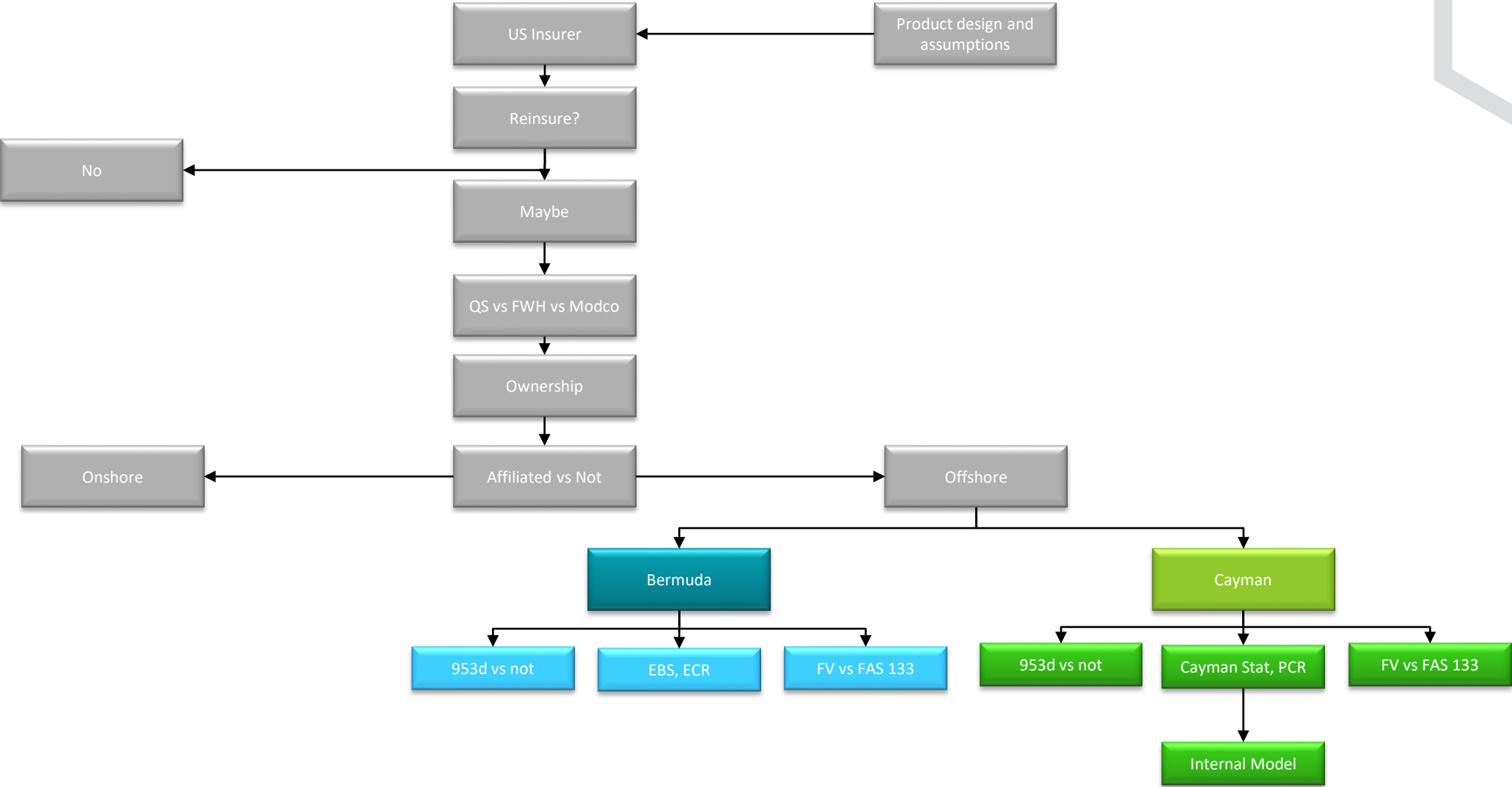
US 3rd Party Themes | Over the last three years, the transfer of tens of billions in inforce liabilities has become the norm: indicative of the L&A segment's transition to less-volatile, balance sheet-light business models as market demand for asset-intensive products climbs

Japan Themes | An estimated \$3T in Japanese insurance liabilities are ripe for reinsurance at a time when US (re)insurers are starving for high quality blocks of business: deal activity is expected to increase ahead of new Japanese solvency regulation, effective in April 2025

Regulatory Comparison

An aerial photograph of a vast, clear turquoise ocean. In the lower-left quadrant, a small white motorboat is moving towards the right, leaving a white wake. The seabed is visible through the shallow water, showing numerous dark, irregular patches of coral or rocks. In the far distance, a small island with some buildings and trees is visible on the horizon. The sky is a pale blue with scattered white clouds.

Offshoring Decision Tree



Modules in cross-jurisdictional analysis

Cashflow model



flow of inputs right to left
flow of data left to right

Capital, ALM, Reporting

[illegible]

User interface

Formula		PV range		GAP		ISA			
Use most recent - best change									
General Inputs		Asset Inputs		Accounting Options - Parent		Tax			
Valuation Date 12/31/2020 Capital G % 1.0% Portfolio to Target 30% By Accounting Credited rate P/E Ratio 18.0 Years of Hold operation 3 Asset Type Pharmaceutical US Return on Cost 100%		Expected Forward Rates @10 Risk-free Rate 1% US Swap 2% US Cash 2% Asset Return Spread (Insurer) 2% Asset Return Spread (Reinsurer) 2% PV Value of Interest 0% Best Contract GAP @ 10 (Select) 0%		Assets Book Value US GAP 10% Book to Market Value Ratio 110%		P/E % 2% P/B on Accrual Basis? No Div % 1.0% AI Corporate Tax % 2% Bermuda Corporate Tax % 10%			
Policy Info		Bond Inputs - Insurer		Reinsurance Programme		Regulatory Capital			
Best Policy for US Risk Amount 100,000,000 Top 1000 Annual 10,000,000 Top 1000 (in US\$) 10,000,000 Annual Income Excluded 0 Annual Best Period 12/31 Surrender Charge Period 12/31 Return on Asset 1%		Bond Inputs - Insurer Risk Bond 1 Bond 2 Rating Aaa Aaa Term 448 442 Issuance 100,000,000 100,000,000 Asset Type CORPORATE CORPORATE Coupon 4% 4% Maturity Date 12/31/2021 12/31/2023 Issuance Amount 100,000,000 100,000,000		Reinsurance proportion 30% Reinsurance type P&W Reinsurer Accounting FAIR Reinsurer Accounting - Costs FAIR Reinsurer Capital Bermuda Reinsurer on US No Capitalized Expense % 25% Rate CAC 1% Reinsurance Commission No		AML Best Conference value 200 RBC Multiple of Capital 200 RBC Multiple of Capital 20% GA Reserve 1 GA Lease on 0 GA Lease on 0 GA Asset Loan 0 GA Asset Loan 40% Number of members to run 0			
Guarantees & Riders		Bond Inputs - Reinsurer		only if GA - see FAIR					
Guaranteed Account Value For Rate 1% Guaranteed Account Value Top Yield 1% GUL (GAIR) (see top selection) No GUL (GAIR) Change % 0% GUL (GAIR) Benefit % 10% GUL (GAIR) Type COLLATERAL GUL No GULB Change 0% GULB amount 0		Bond Inputs - Reinsurer Risk Bond 1 Bond 2 Rating Aaa Aaa Term 442 448 Issuance 100,000,000 100,000,000 Asset Type CORPORATE CORPORATE Coupon 4% 4% Maturity Date 12/31/2021 12/31/2023 Issuance Amount 100,000,000 100,000,000		macro output 0 0 0 0					
GAIRB payment is proportion Payment GULB/GULB GULB Fixed is Fixed crediting rate Fixed		Crediting rate spread 3%							

Consistent, linked ALM dynamics and simple user experience

The cashflow model produces the projected account value, benefit base, cashflows and reserves under the various reporting and statutory bases.

The reporting solution works for different capital and reporting regimes, as well as different asset strategies.

The user interface aggregates information from the previous two models, creating a single input and output interface for the user.

Integrated modelling solution

MYGA Results Dashboard

Overview

USA

Regulatory Basis
Assets
Book Value
Liabilities
US Stat

Cayman

Parent setup remains unchanged

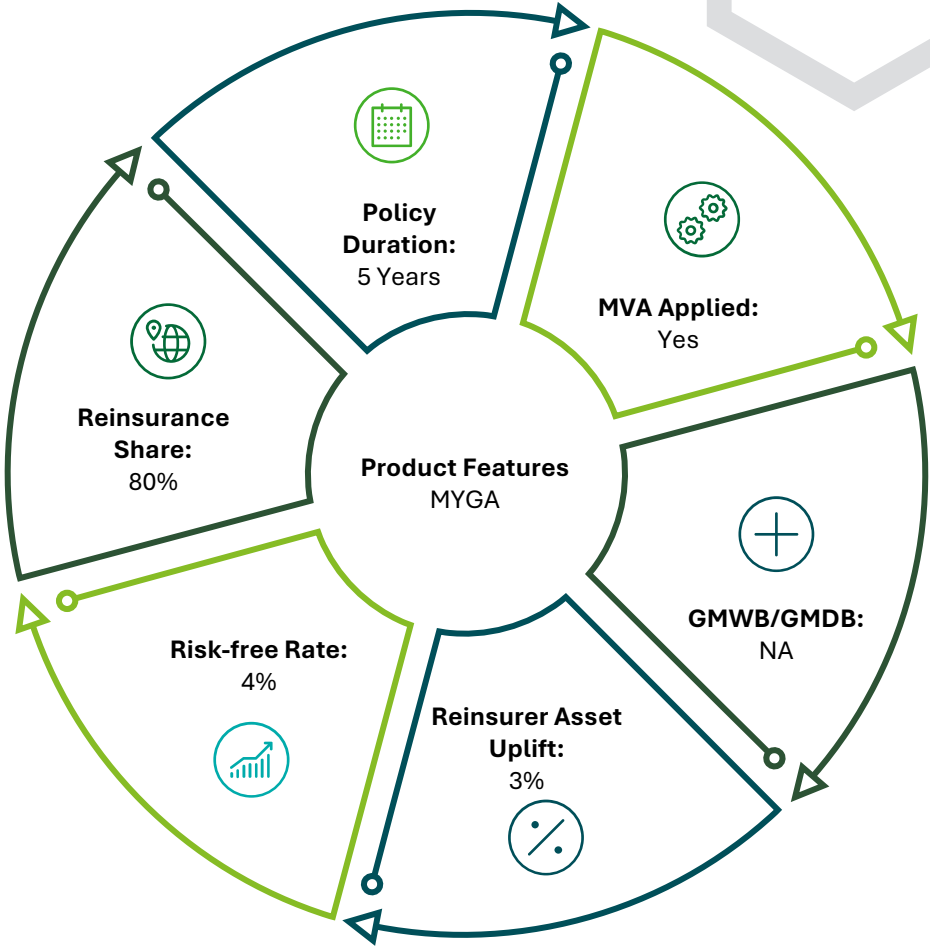
Capital Basis
Capital framework
US RBC
Assets
Book Value
Liabilities
US Stat

Regulatory Basis
Assets
Market Value
Liabilities
ASC825 Higher Yield

Bermuda

Parent setup remains unchanged

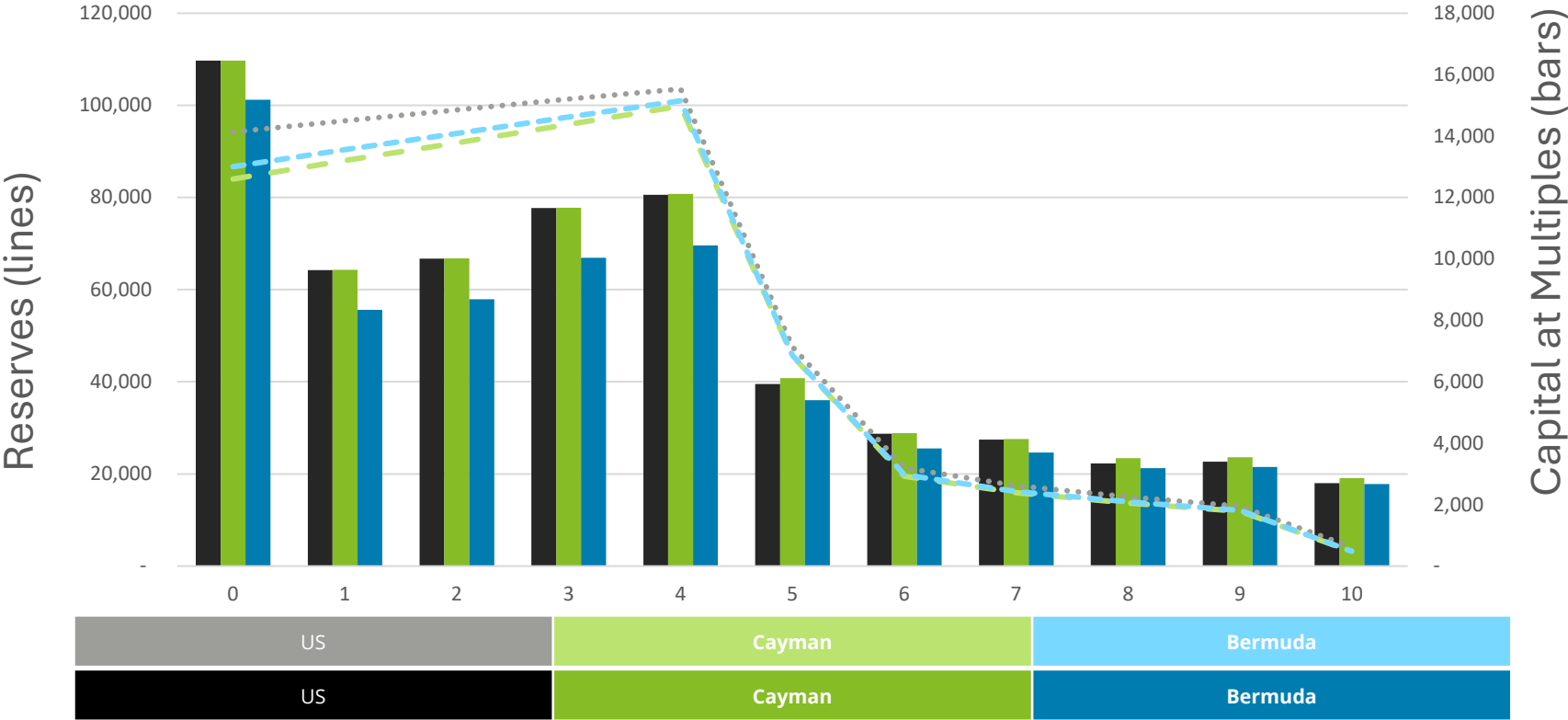
Regulatory Basis
Capital framework
BSCR
Assets
Market Value
Liabilities
EBS (SBA)



MYGA Results Dashboard

Reserves and Capital

Group Reserves and Capital

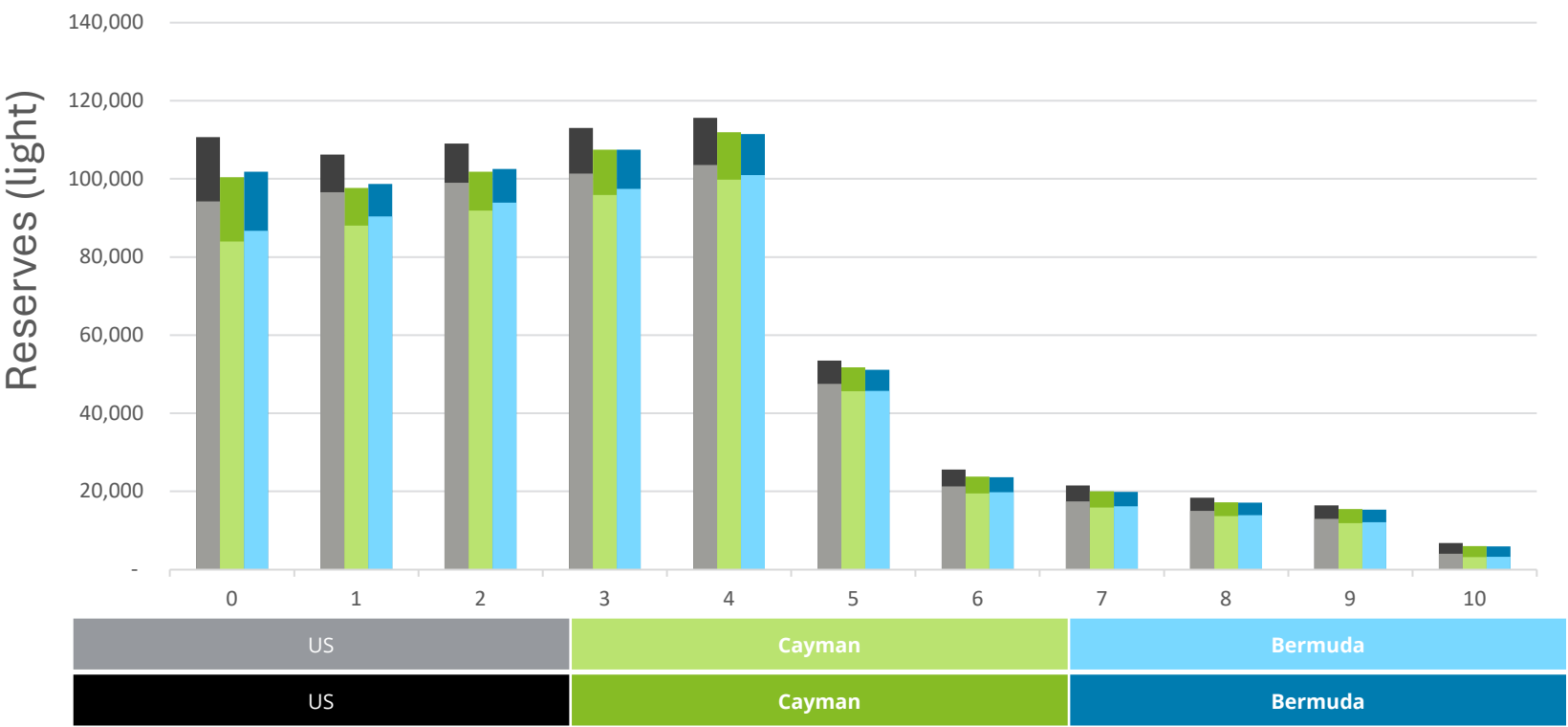


- US: US STAT Liabilities, RBC Capital
- Cayman: ASC825 Higher Yield, RBC Capital
- Bermuda: EBS (SBA), BSCR Capital

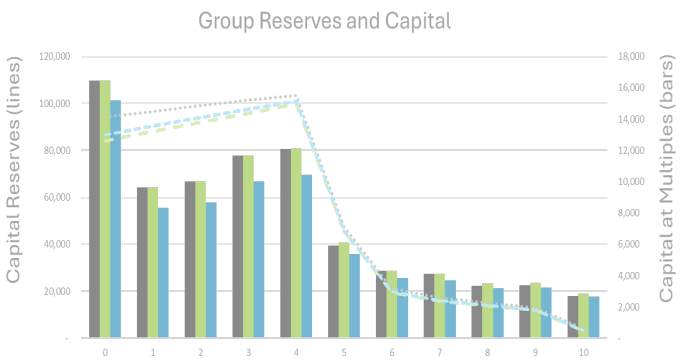
MYGA Results Dashboard

Reserves and Capital

Total Asset Requirement



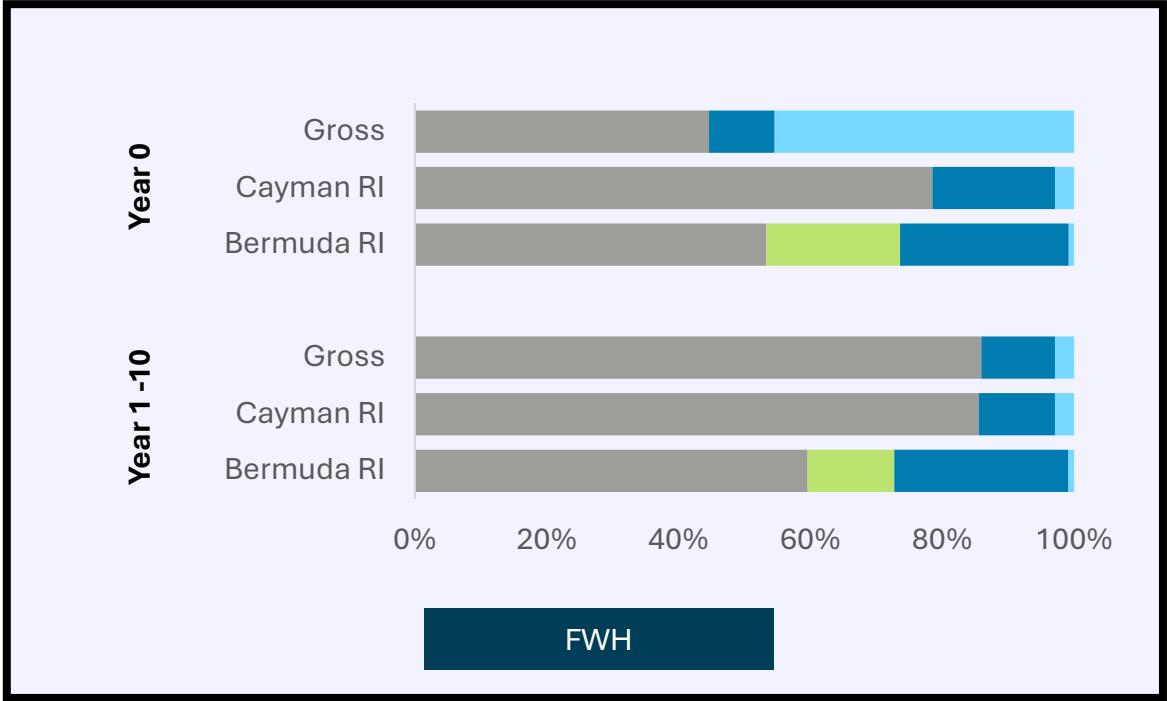
Capital at Multiples (dark)



- US: US STAT Liabilities, RBC Capital
- Cayman: ASC825 Higher Yield, RBC Capital
- Bermuda: EBS (SBA), BSCR Capital

MYGA Results Dashboard

Capital Contributors



US RBC



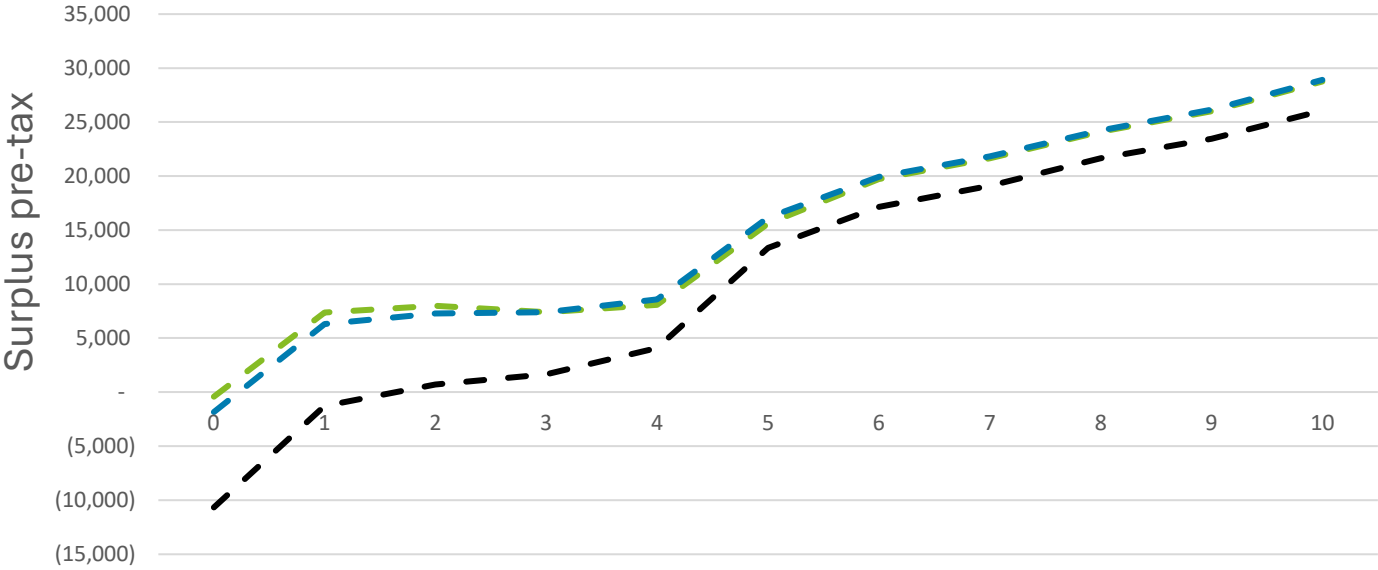
US RBC



BSCR

MYGA Results Dashboard

Surplus (before tax) over first 10 years



US	Cayman	Bermuda
US	Cayman	Bermuda



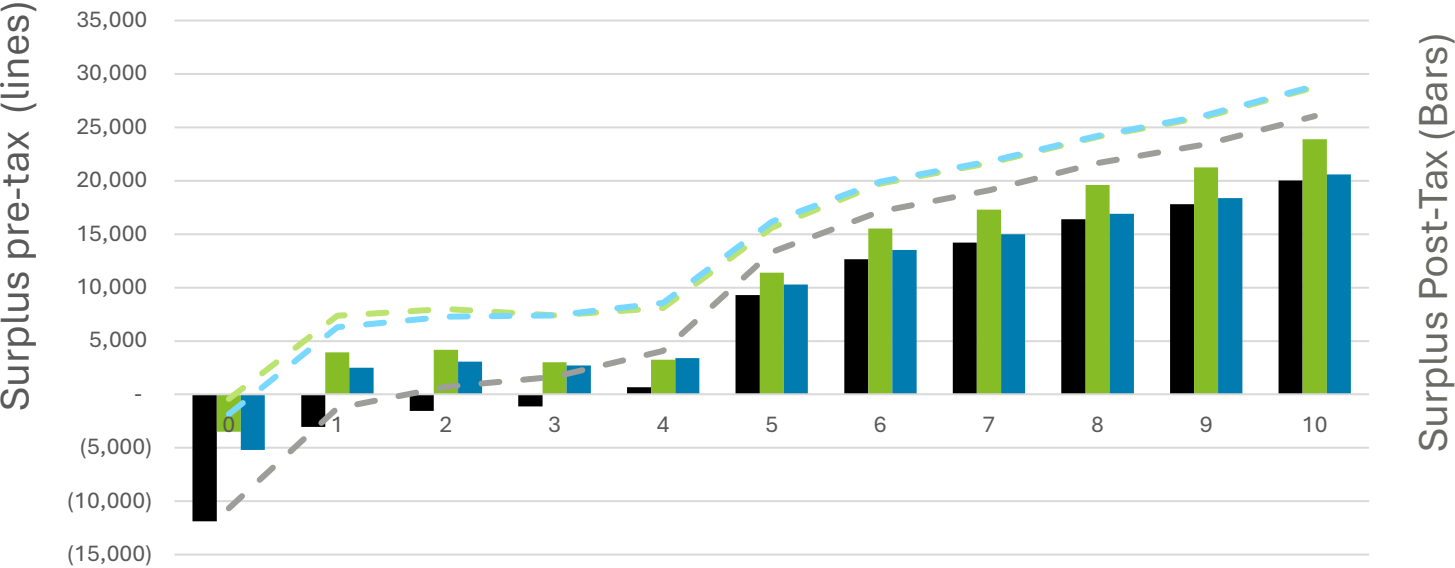
Statutory Balance Sheet

ASC825 Higher Yield

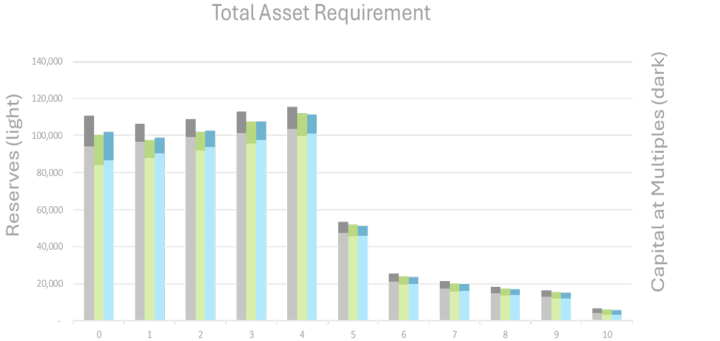
Economic Balance Sheet

MYGA Results Dashboard

Surplus over first 10 years



US	Cayman	Bermuda
US	Cayman	Bermuda



US Corporate Tax



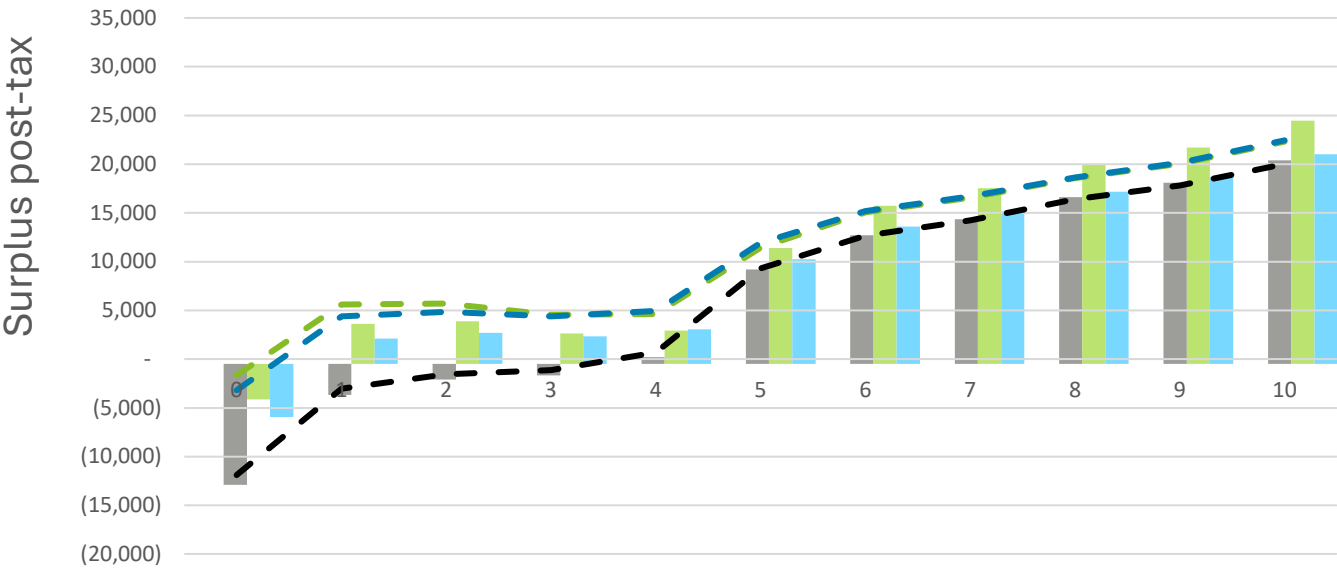
Affiliated reinsurer (BEAT) & FET, NO 953d election



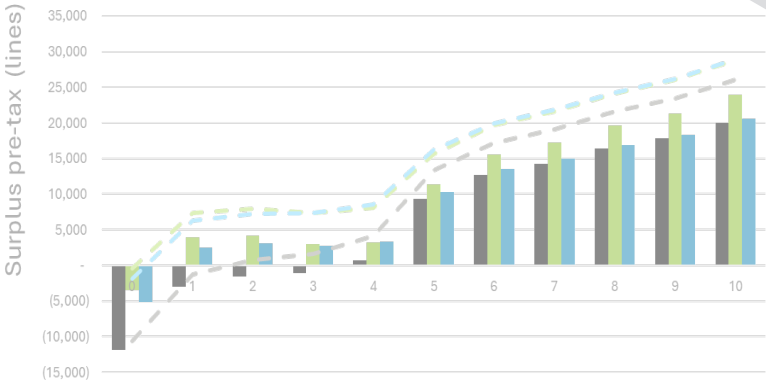
Affiliated reinsurer (BEAT) & FET, NO 953d election, subject to Bermuda Corporate Income

MYGA Results Dashboard

Case 1: Reinsurer elects 953(d)



US	Cayman	Bermuda
US	Cayman	Bermuda



US Corporate Tax



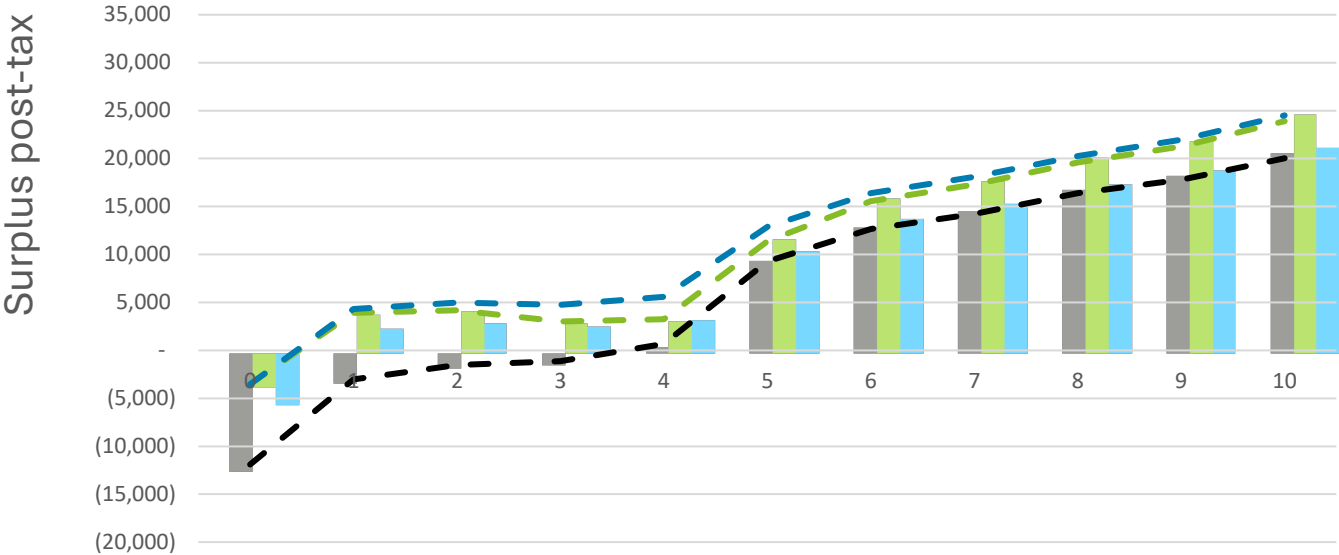
Affiliated reinsurer (BEAT) & 953d election



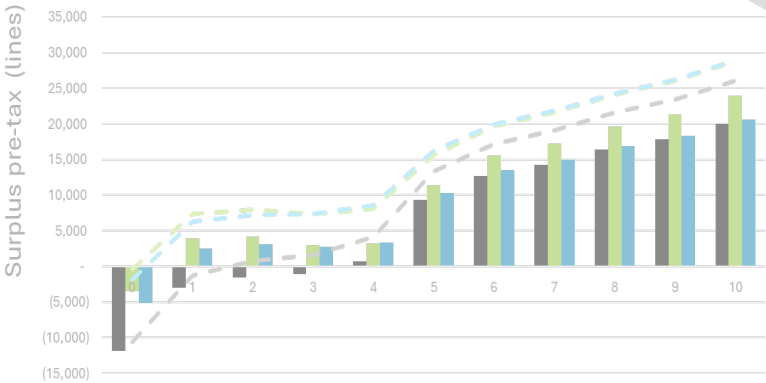
Affiliated reinsurer (BEAT) & 953d election,
subject to Bermuda Corporate Income Tax

MYGA Results Dashboard

Case 2: Prior lapse and expense calc for BSCR



US	Cayman	Bermuda
US	Cayman	Bermuda



US Corporate Tax



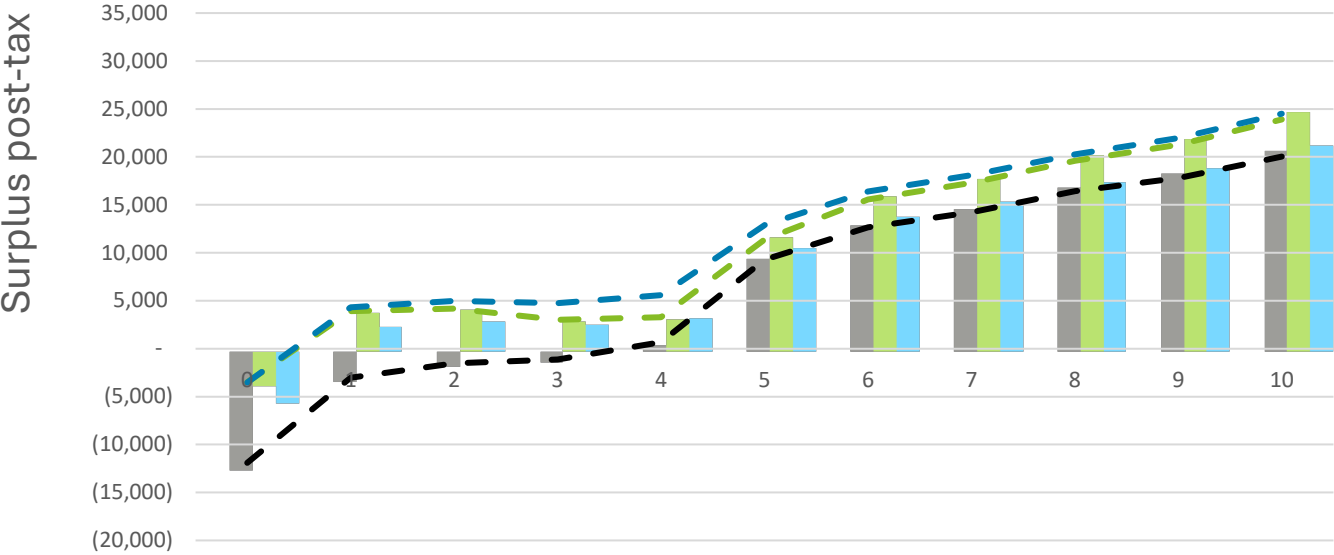
Affiliated reinsurer (BEAT) & FET, NO 953d election



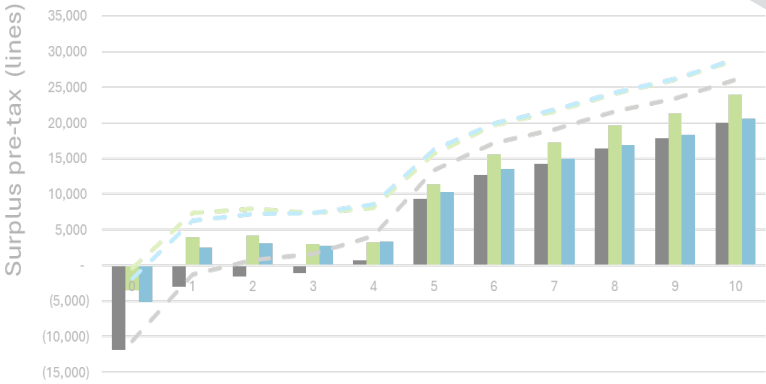
Affiliated reinsurer (BEAT) & FET, NO 953d election, subject to Bermuda Corporate Income

MYGA Results Dashboard

Case 3: No BCIT



US	Cayman	Bermuda
US	Cayman	Bermuda



US Corporate Tax



Affiliated reinsurer (BEAT) & FET, NO 953d election



Affiliated reinsurer (BEAT) & FET, NO 953d election, subject to Bermuda Corporate Income

FIA Results Dashboard

Overview

USA

Regulatory Basis
Assets
Book Value
Liabilities
US Stat

Cayman

Parent setup remains unchanged

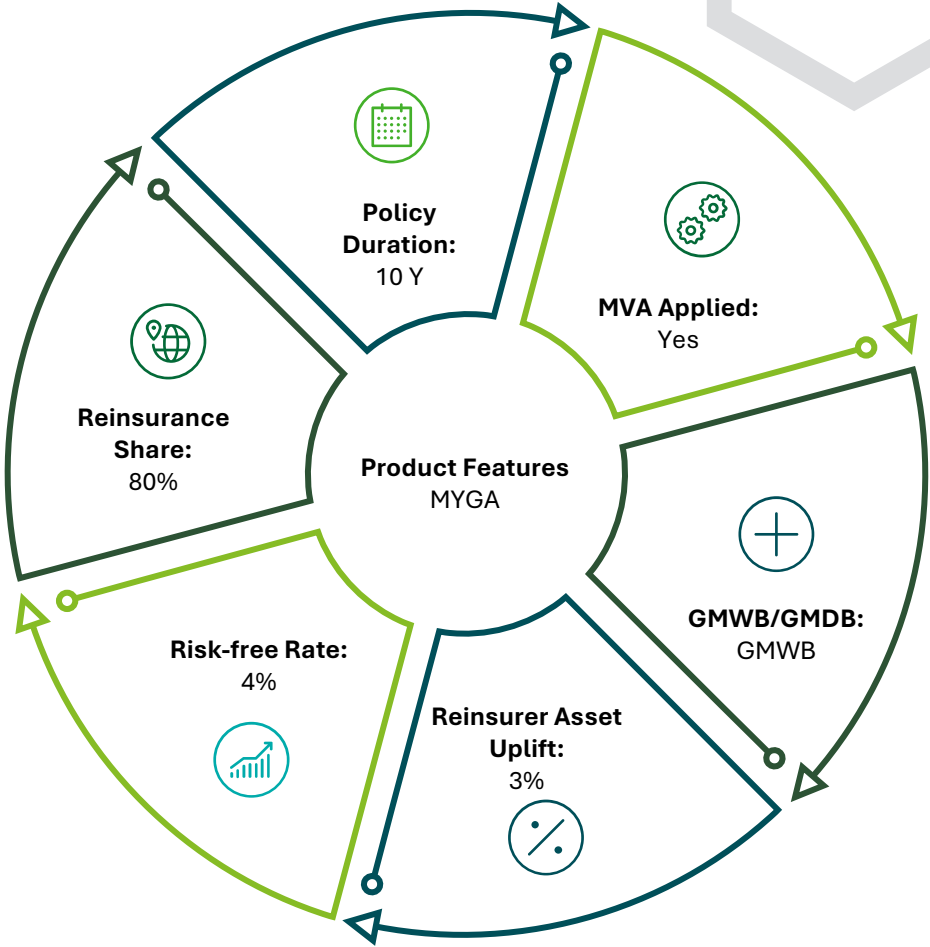
Capital Basis
Capital framework
US RBC
Assets
Book Value
Liabilities
US Stat

Regulatory Basis
Assets
Market Value
Liabilities
ASC825 Higher Yield

Bermuda

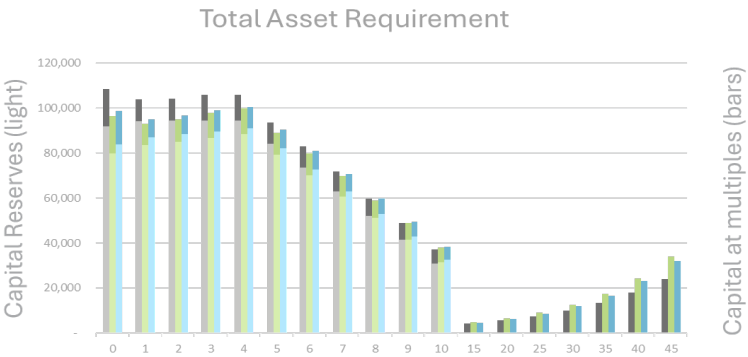
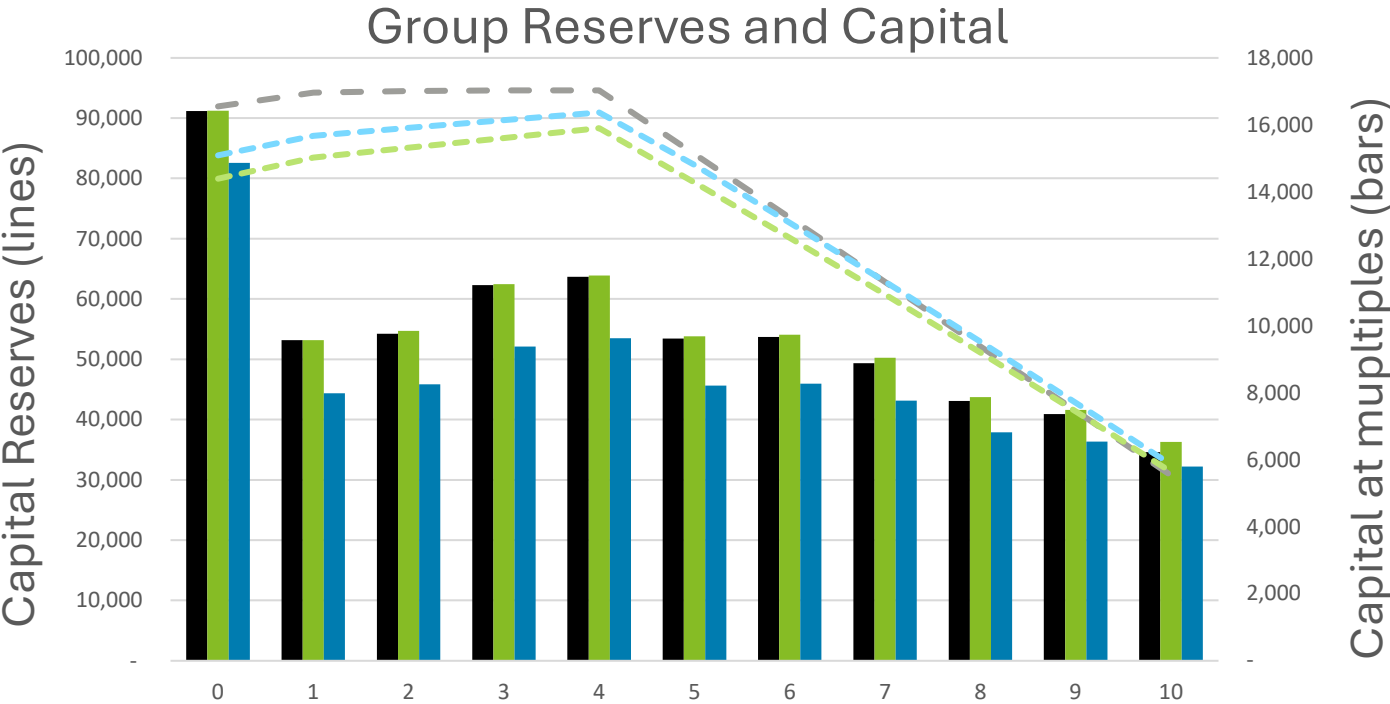
Parent setup remains unchanged

Regulatory Basis
Capital framework
BSCR
Assets
Market Value
Liabilities
EBS (SBA)



FIA Results Dashboard

Reserves and Capital

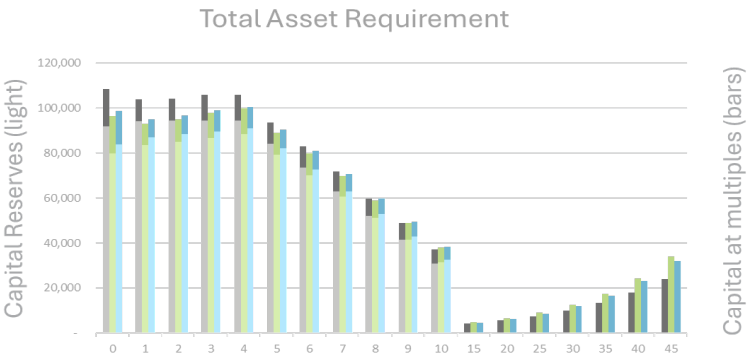


US	Cayman	Bermuda
US	Cayman	Bermuda




- US: US STAT Liabilities, RBC Capital
- Cayman: ASC825 Higher Yield, RBC Capital
- Bermuda: EBS (SBA), BSCR Capital

FIA Results Dashboard

Surplus (before and after tax) over first 10 years



US	Cayman	Bermuda
US	Cayman	Bermuda

-  US Corporate Tax
-  Affiliated reinsurer (BEAT) & FET, NO 953d election
-  Affiliated reinsurer (BEAT) & FET, NO 953d election, subject to Bermuda Corporate Income

Closing Discussion



An aerial photograph of a vast, clear turquoise ocean. In the lower-left quadrant, a small white motorboat is moving towards the right, leaving a white wake. The seabed is visible through the shallow water, showing numerous dark, irregular patches of coral or rocks. In the far distance, a small island with some buildings and trees is visible on the horizon. The sky is a pale blue with scattered white clouds.

Questions?



Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited (DTTL), its global network of member firms, and their related entities (collectively, the “Deloitte organization”). DTTL (also referred to as “Deloitte Global”) and each of its member firms and related entities are legally separate and independent entities, which cannot obligate or bind each other in respect of third parties. DTTL and each DTTL member firm and related entity is liable only for its own acts and omissions, and not those of each other. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. DCB Holding Ltd is a member firm of Deloitte Touche Tohmatsu Limited.

Deloitte provides industry-leading audit and assurance, tax and legal, consulting, financial advisory, and risk advisory services to nearly 90% of the Fortune Global 500® and thousands of private companies. Our people deliver measurable and lasting results that help reinforce public trust in capital markets, enable clients to transform and thrive, and lead the way toward a stronger economy, a more equitable society, and a sustainable world. Building on its 175-plus year history, Deloitte spans more than 150 countries and territories. Learn how Deloitte’s approximately 457,000 people worldwide make an impact that matters at www.deloitte.com.

This communication contains general information only, and none of Deloitte Touche Tohmatsu Limited (DTTL), its global network of member firms or their related entities (collectively, the “Deloitte organization”) is, by means of this communication, rendering professional advice or services. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser. No representations, warranties or undertakings (express or implied) are given as to the accuracy or completeness of the information in this communication, and none of DTTL, its member firms, related entities, employees or agents shall be liable or responsible for any loss or damage whatsoever arising directly or indirectly in connection with any person relying on this communication. DTTL and each of its member firms, and their related entities, are legally separate and independent entities.

Deloitte has a strong presence in the countries of the Caribbean and Bermuda marketplace, with more than 500 professionals dedicated to bringing their talents to bear on our clients’ unique issues. The Deloitte Caribbean and Bermuda Countries member firm has practices located in The Bahamas/Turks and Caicos Islands, Barbados, Bermuda, British and United States Virgin Islands, Cayman Islands, Jamaica, and Trinidad & Tobago, covering the English-speaking Caribbean. Though we operate in multiple countries, our professionals have a single focus: to help clients navigate their business challenges and achieve success.