

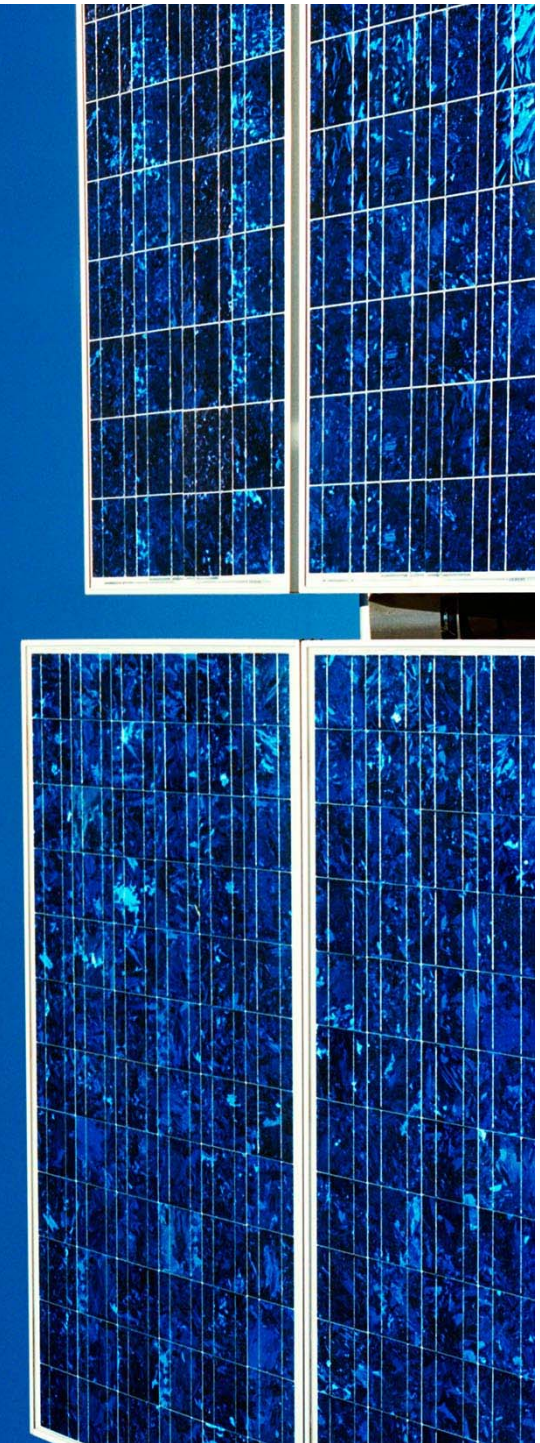


Bermuda EBS Technical Provisions

Kyle Vrieze

—

May, 2019



Agenda

Introduction to EBS Technical Provisions

Components of the Technical Provisions

Guidance note on Actuary opinion requirements

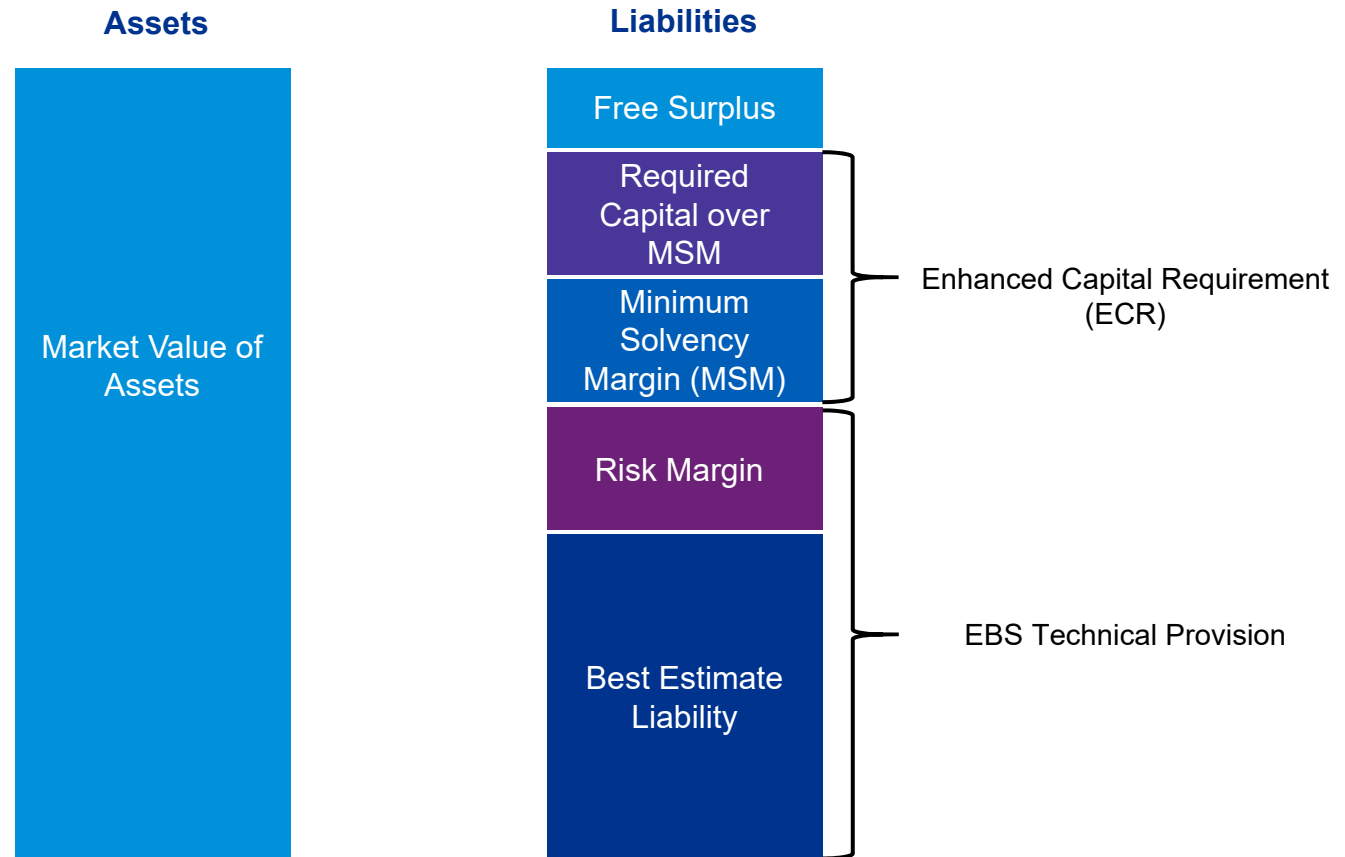
Market Feedback on EBS Actuarial Opinions

BSCR: Overview and updates



Introduction to EBS Technical Provisions

Economic Balance Sheet

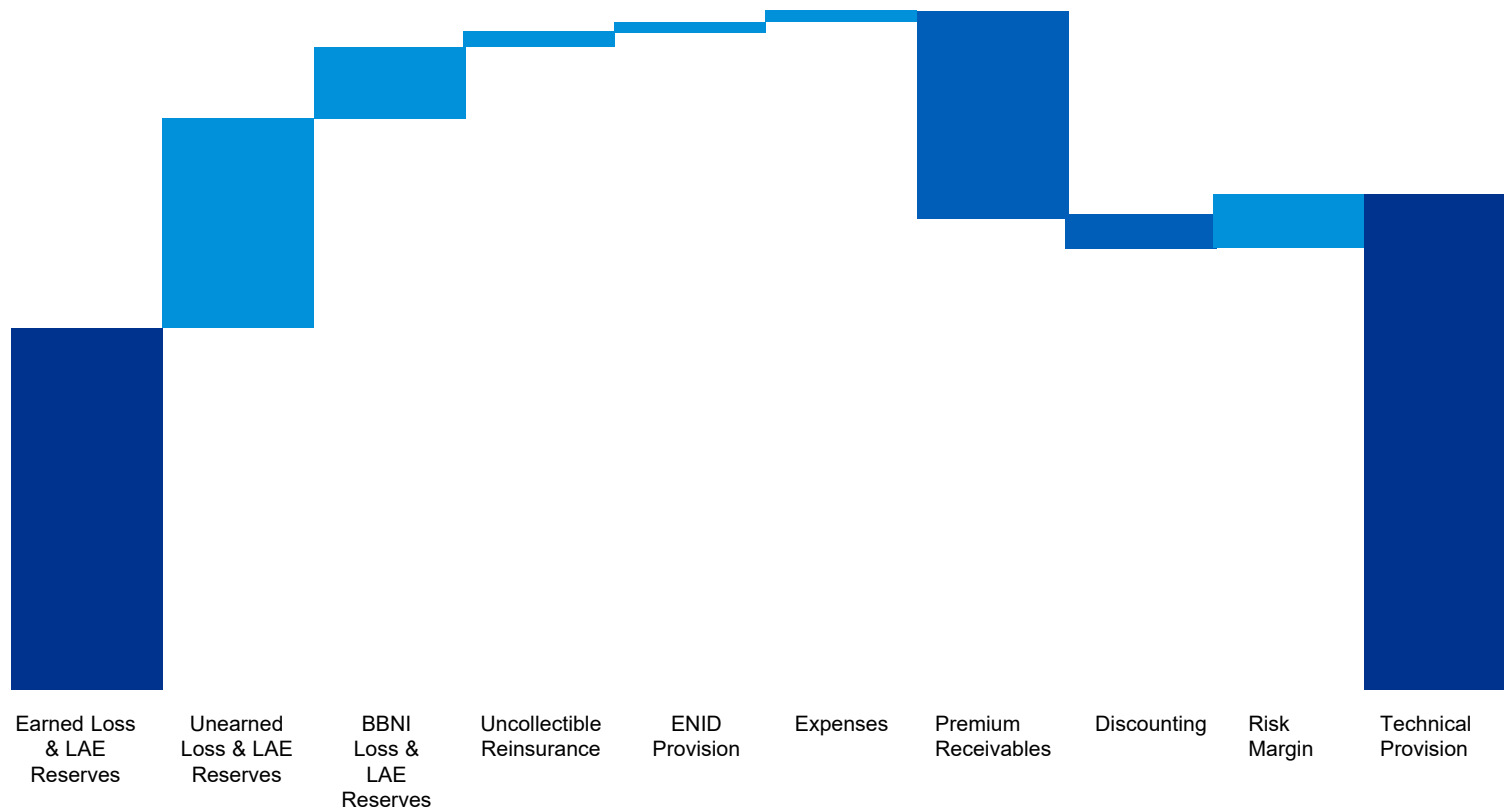




Components of the Technical Provisions

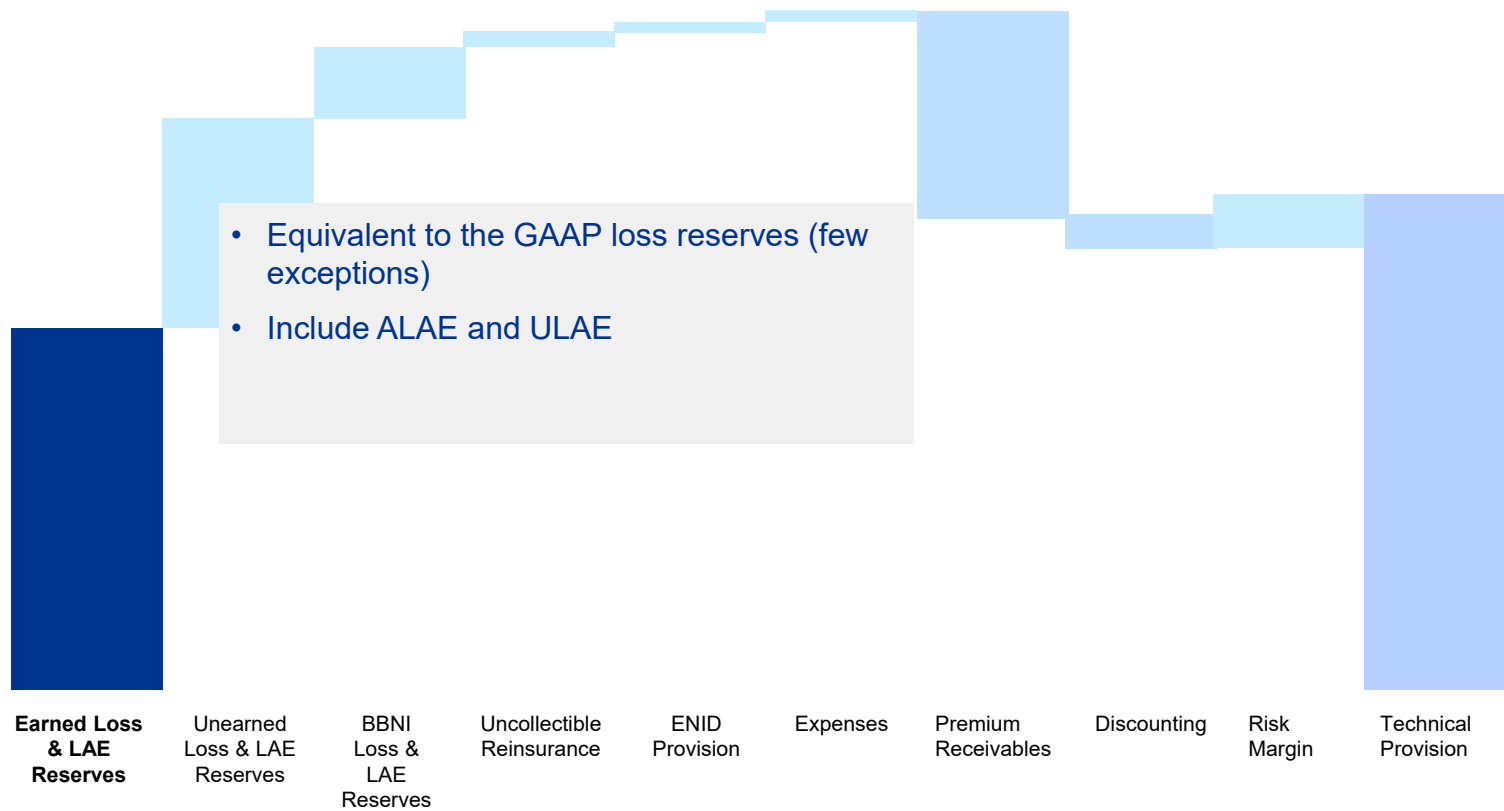
Bermuda EBS

Technical Provision Components



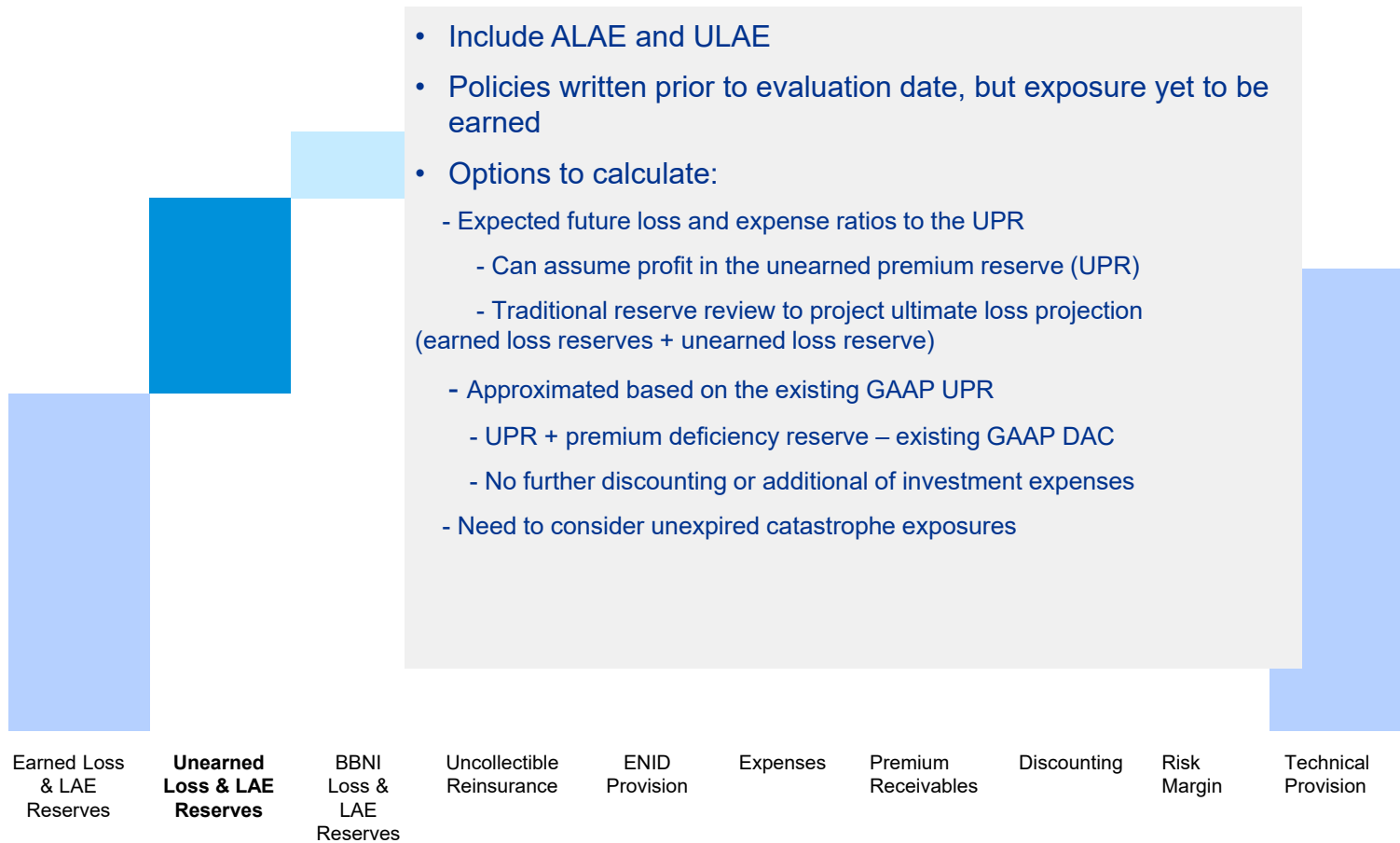
Bermuda EBS

Technical Provision Components: Earned Loss Reserves



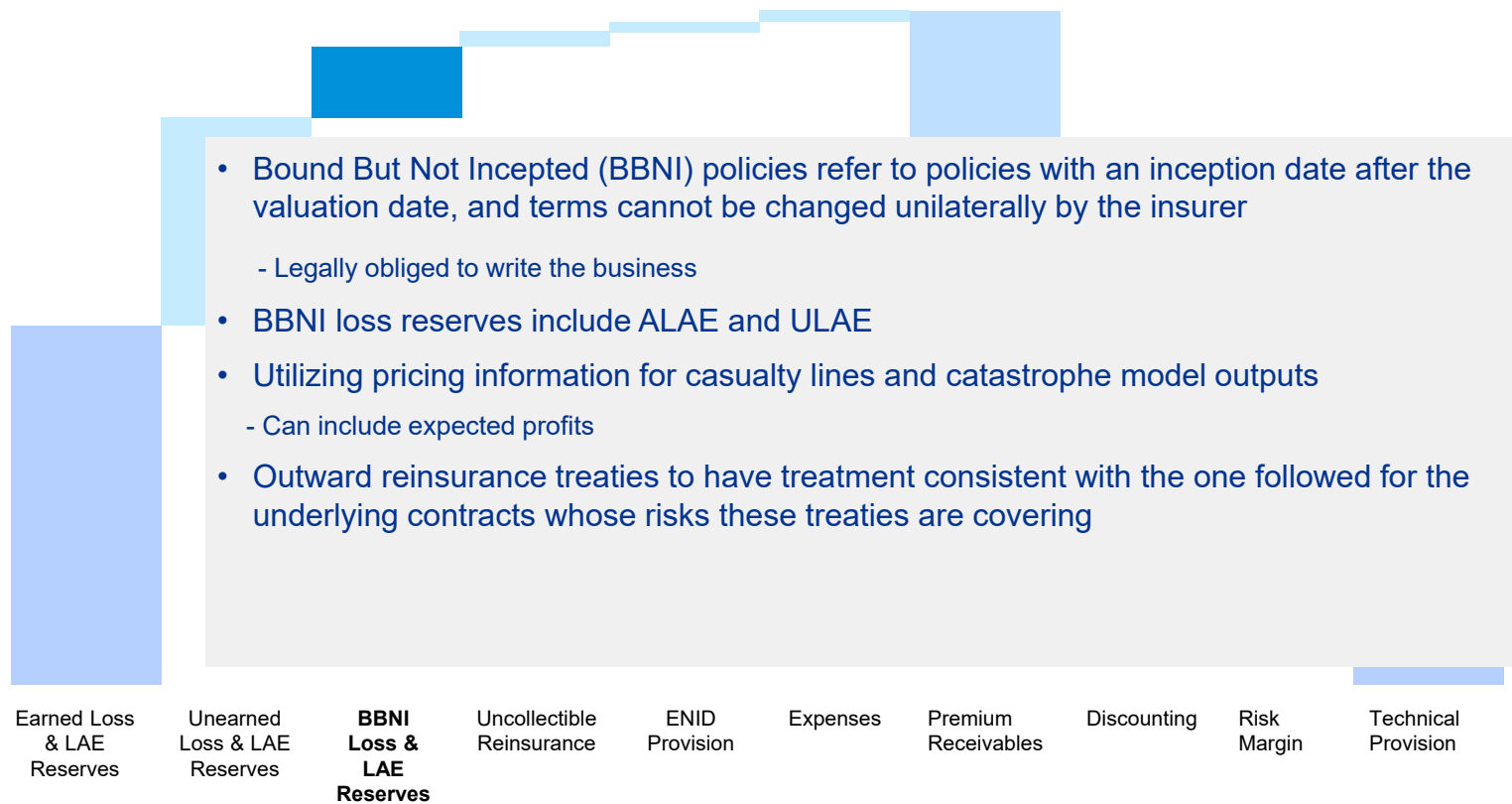
Bermuda EBS

Technical Provision Components: Unearned Loss and LAE Reserves



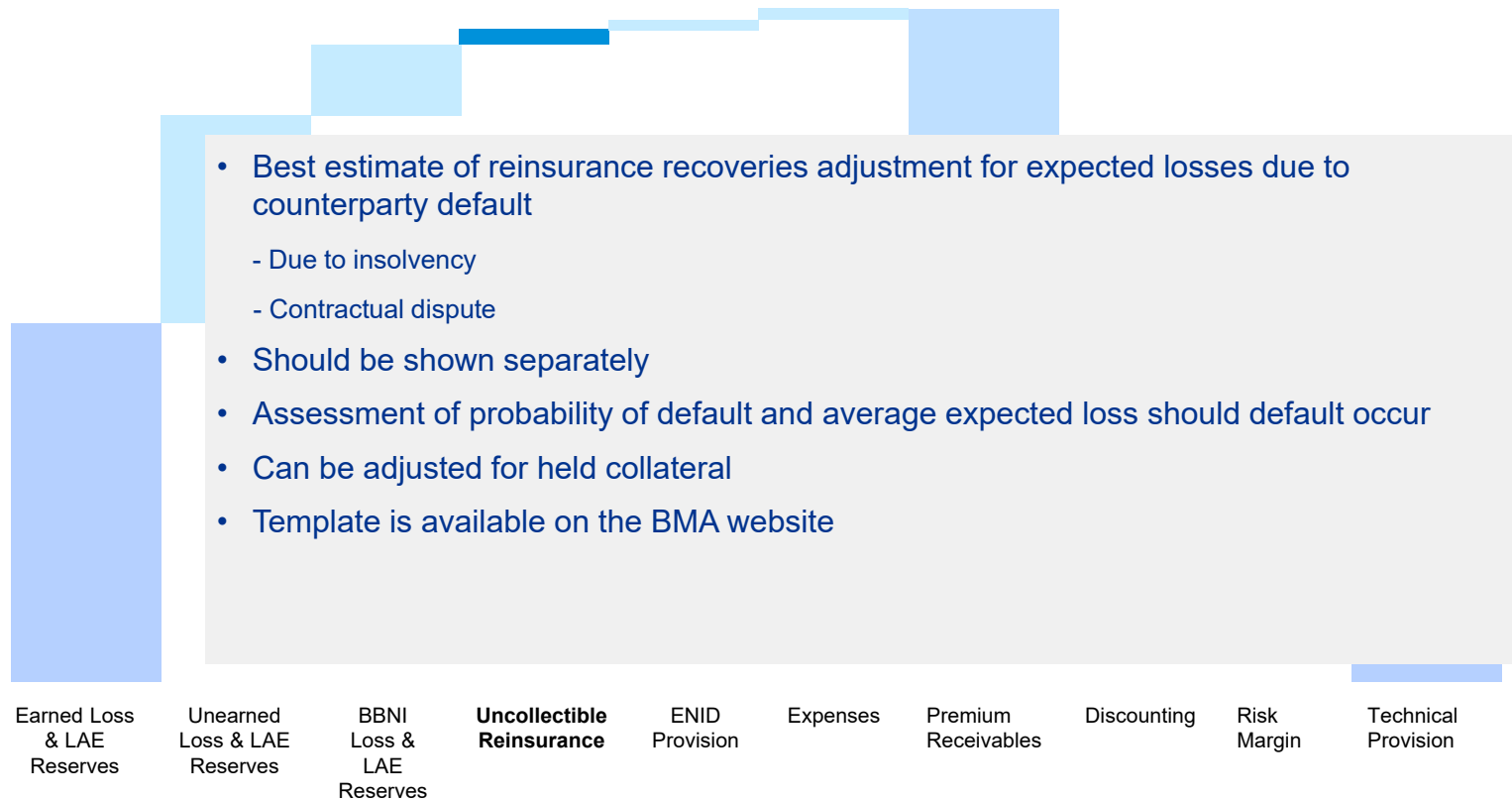
Bermuda EBS

Technical Provision Components: BBNI Loss & LAE Reserves



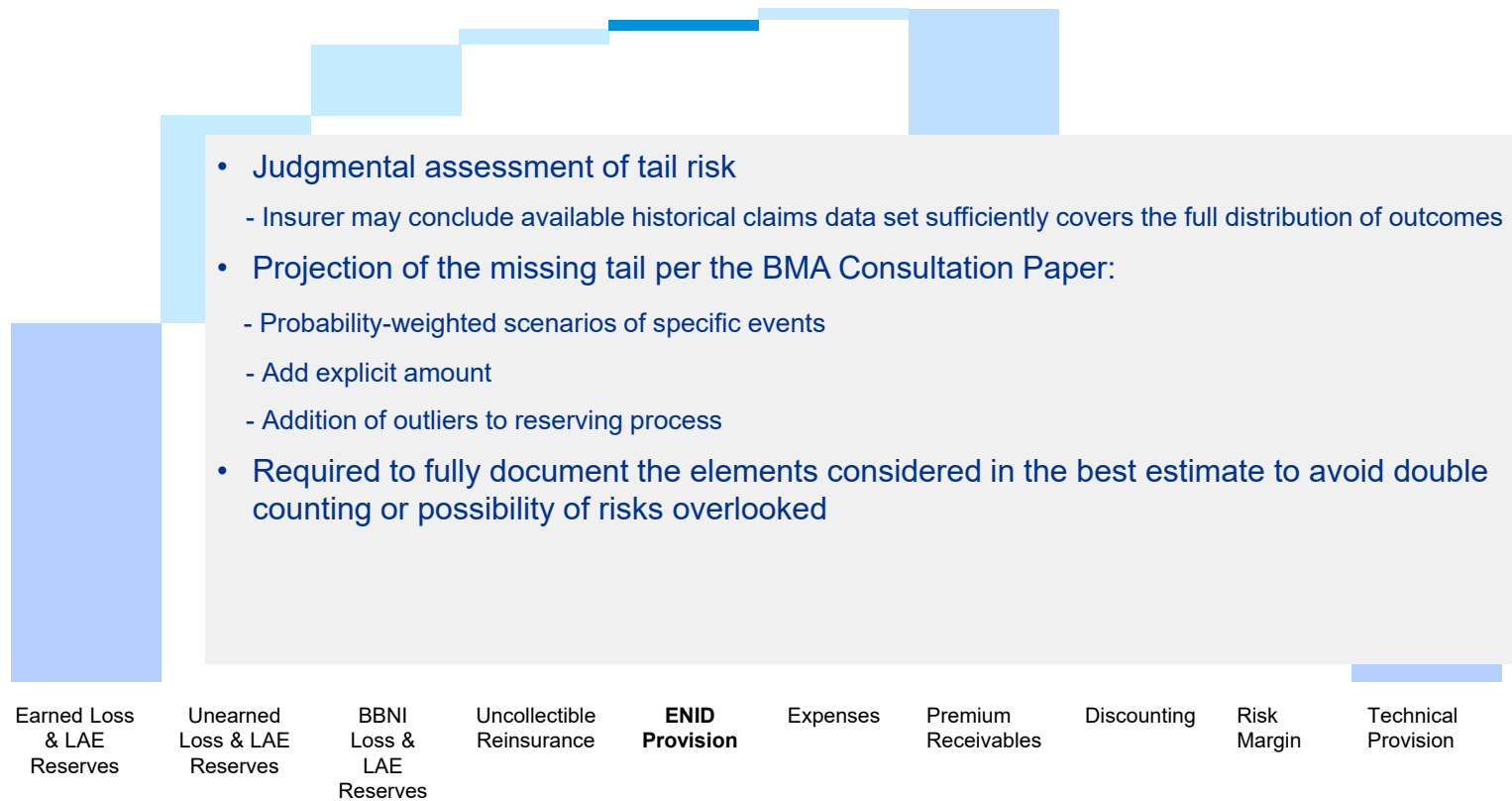
Bermuda EBS

Technical Provision Components: Uncollectible Reinsurance



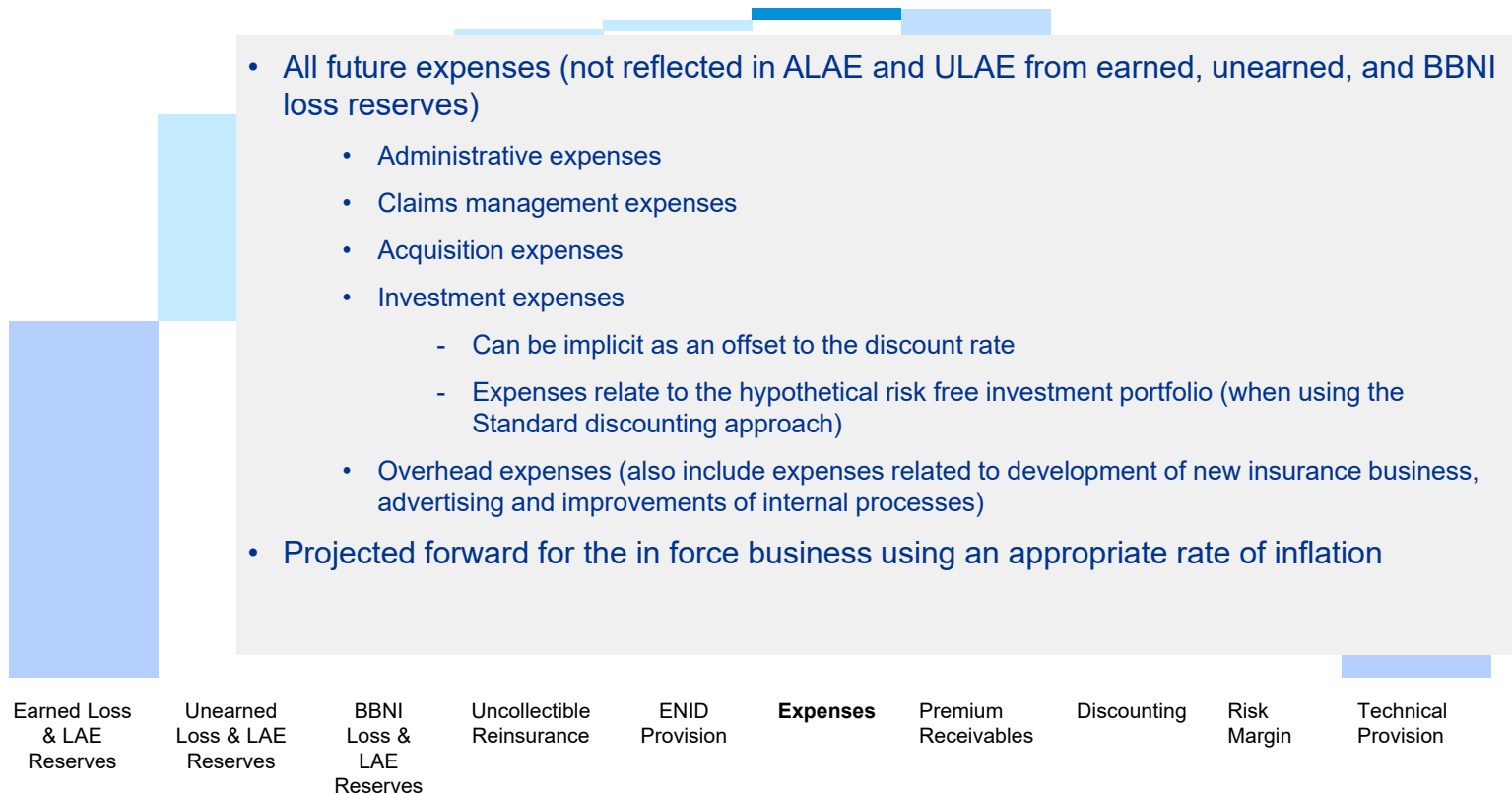
Bermuda EBS

Technical Provision Components: ENIDS Provision



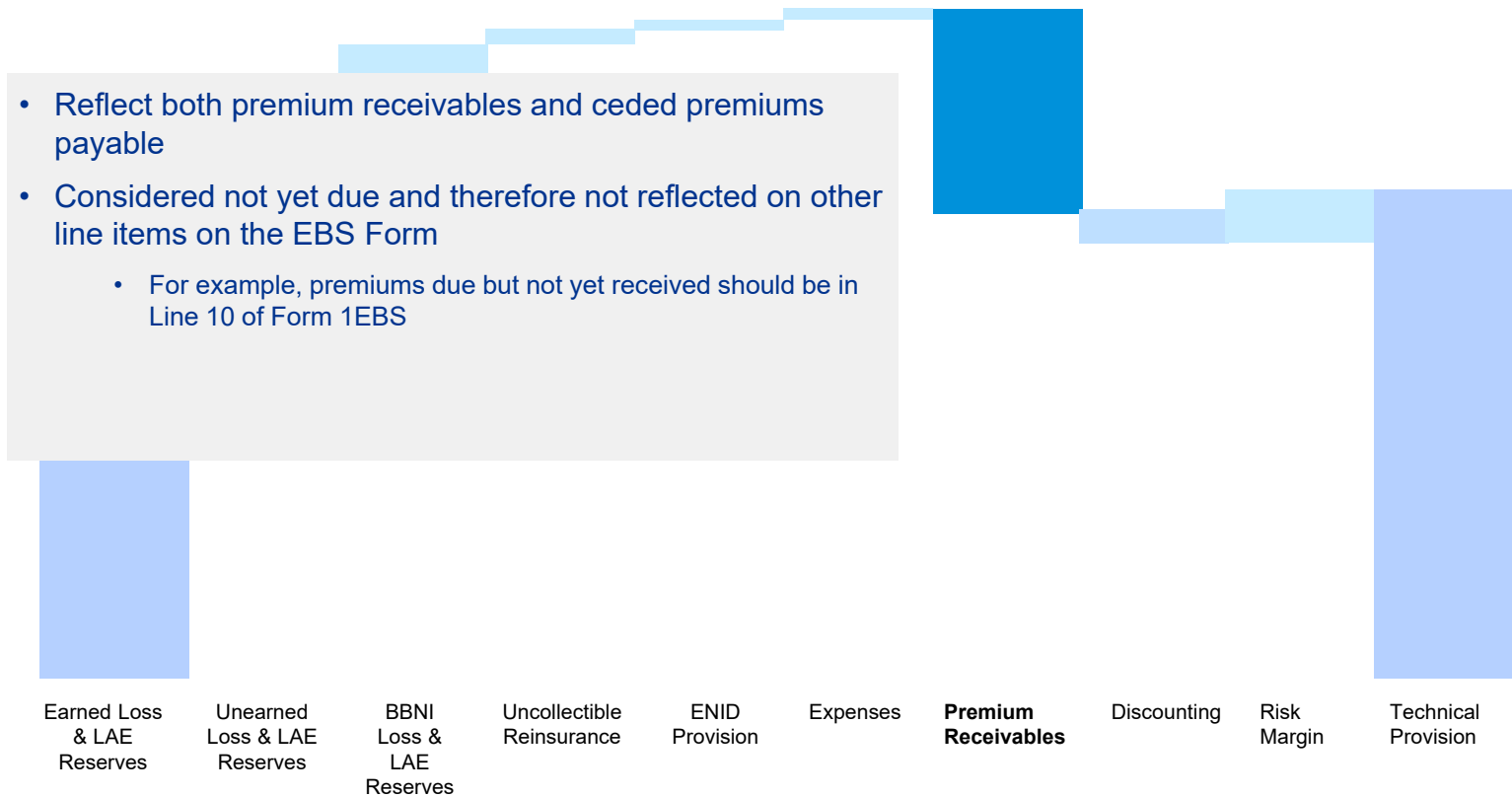
Bermuda EBS

Technical Provision Components: Expenses



Bermuda EBS

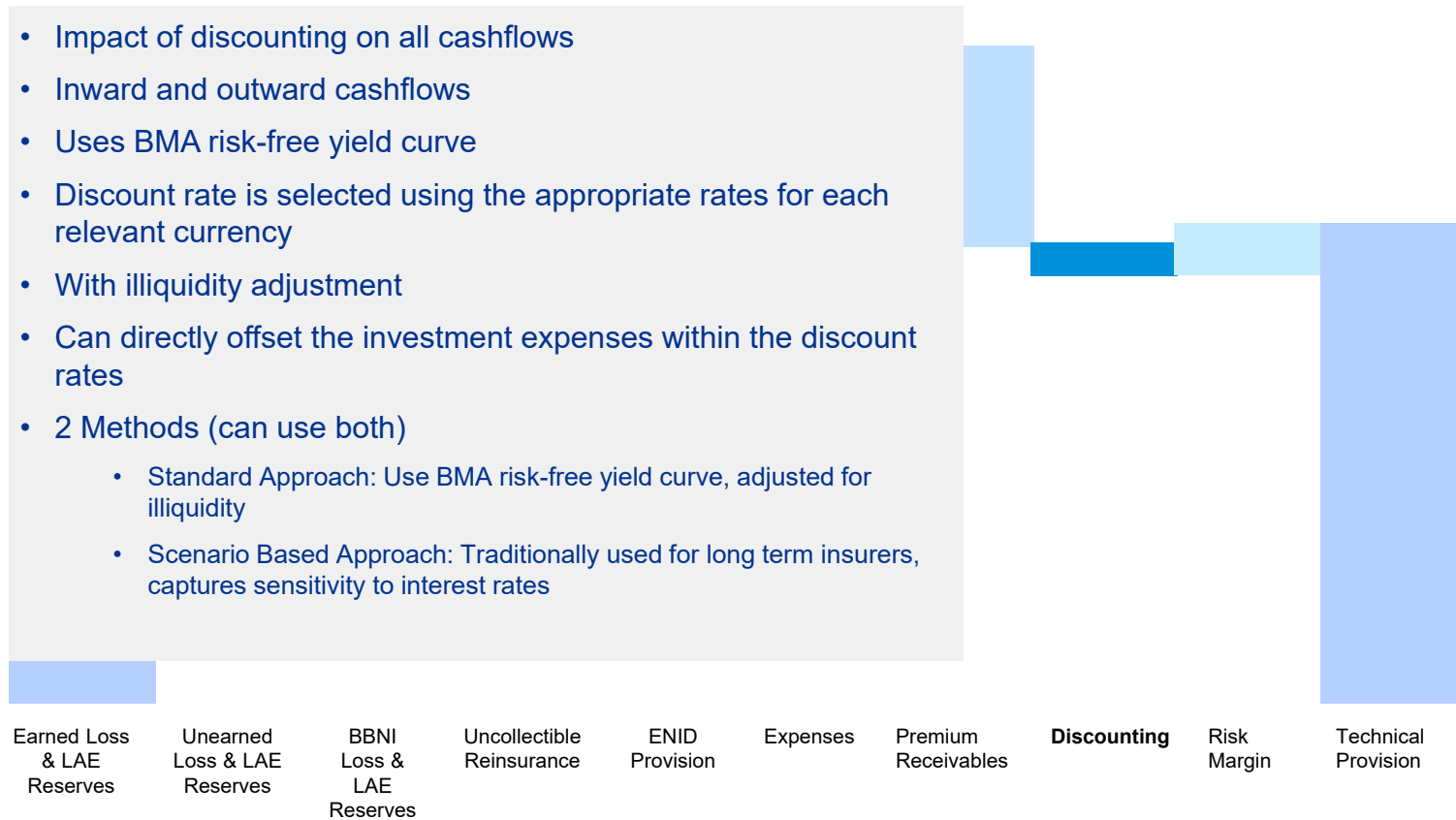
Technical Provision Components: Premium Receivables



Bermuda EBS

Technical Provision Components: Discounting

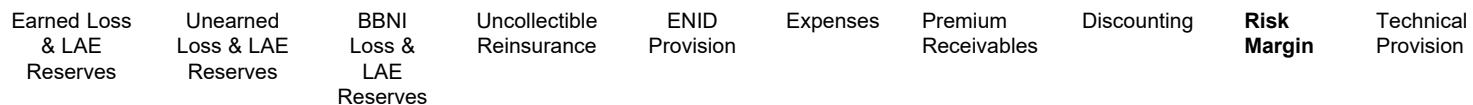
- Impact of discounting on all cashflows
- Inward and outward cashflows
- Uses BMA risk-free yield curve
- Discount rate is selected using the appropriate rates for each relevant currency
- With illiquidity adjustment
- Can directly offset the investment expenses within the discount rates
- 2 Methods (can use both)
 - Standard Approach: Use BMA risk-free yield curve, adjusted for illiquidity
 - Scenario Based Approach: Traditionally used for long term insurers, captures sensitivity to interest rates



Bermuda EBS

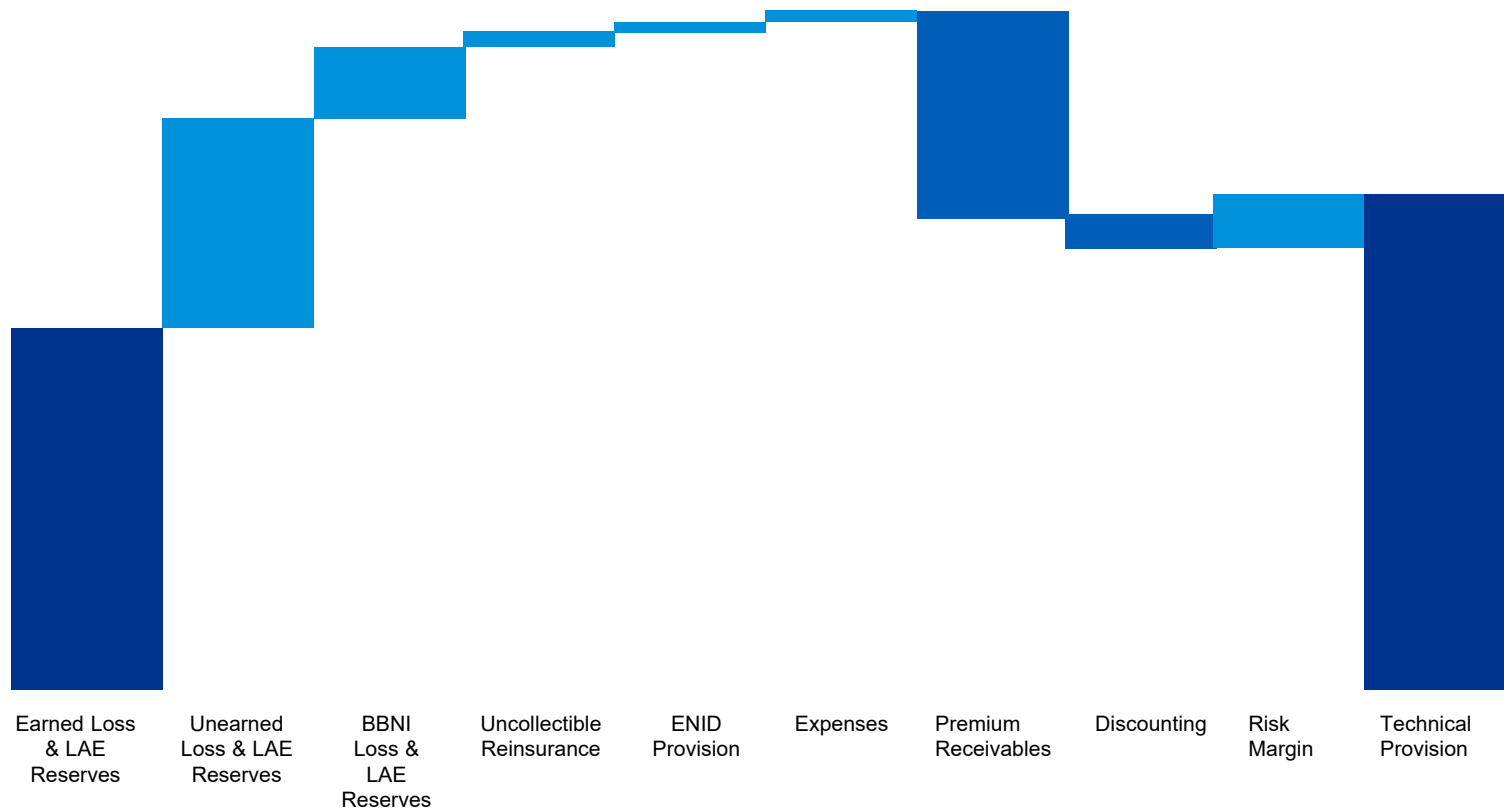
Technical Provision Components: Risk Margin

- Reflects the uncertainty associated with the probability-weighted cashflows
- Required aspects of the risk margin:
 - Greater uncertainty results in larger risk margin
 - Risks which are more material will result in larger risk margin
 - Longer tailed risks result in larger risk margin
 - Similar risks should have similar risk margins
- Risk margin calculation approach should incorporate:
 - Cost of capital of 6%
 - Bermuda regulatory capital requirements (using BSCR or approved internal model)
 - Run-off of the insurance liabilities discounted using risk-free discount curve
 - Insurance risk, counterparty risk, and operational risk
- Calculation of the technical provision is required by legal entity and by group
 - Risk margin will not be additive



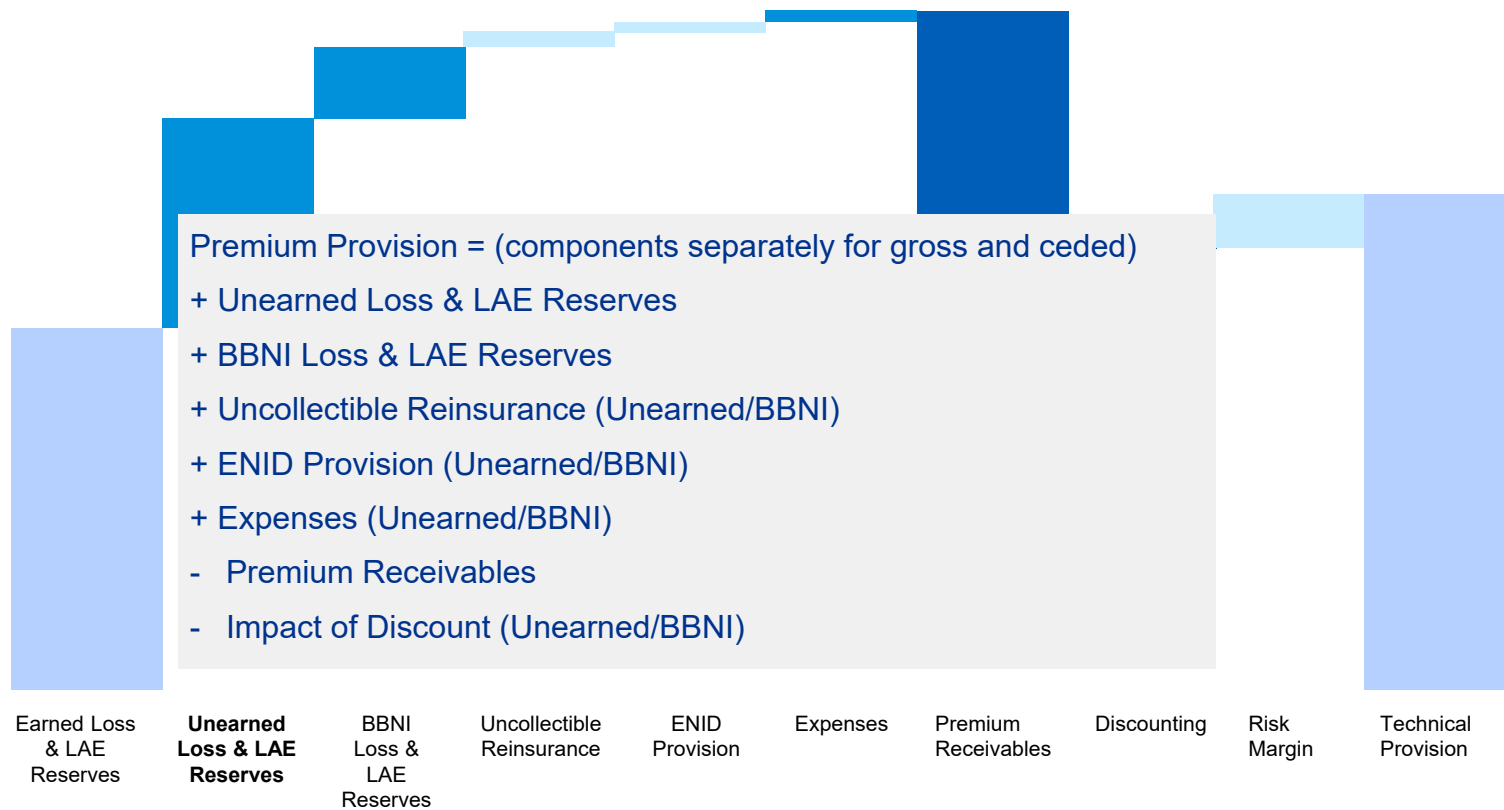
Bermuda EBS

Technical Provision Components



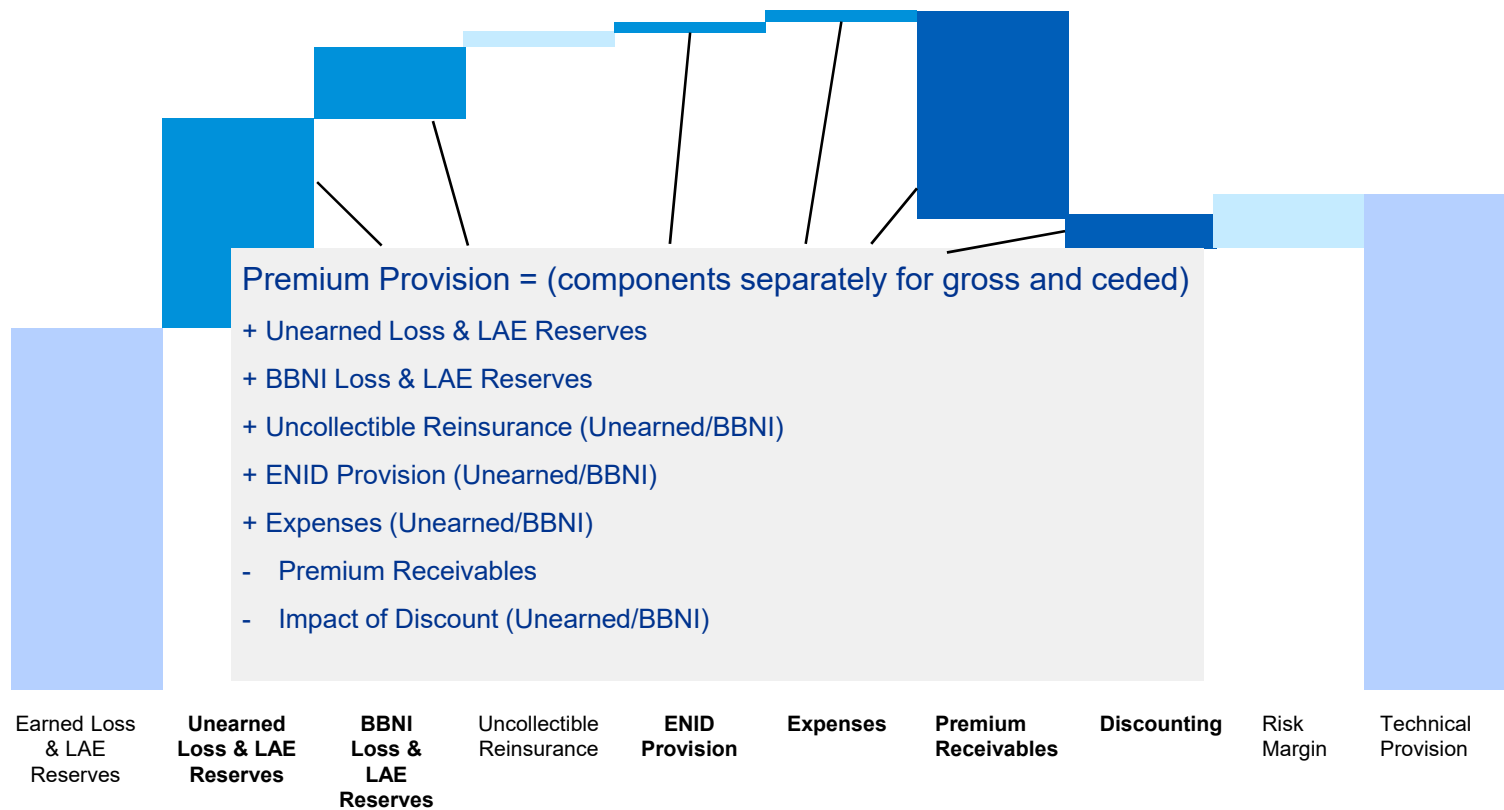
Bermuda EBS

Technical Provision Components: Line 16 Premium Provision



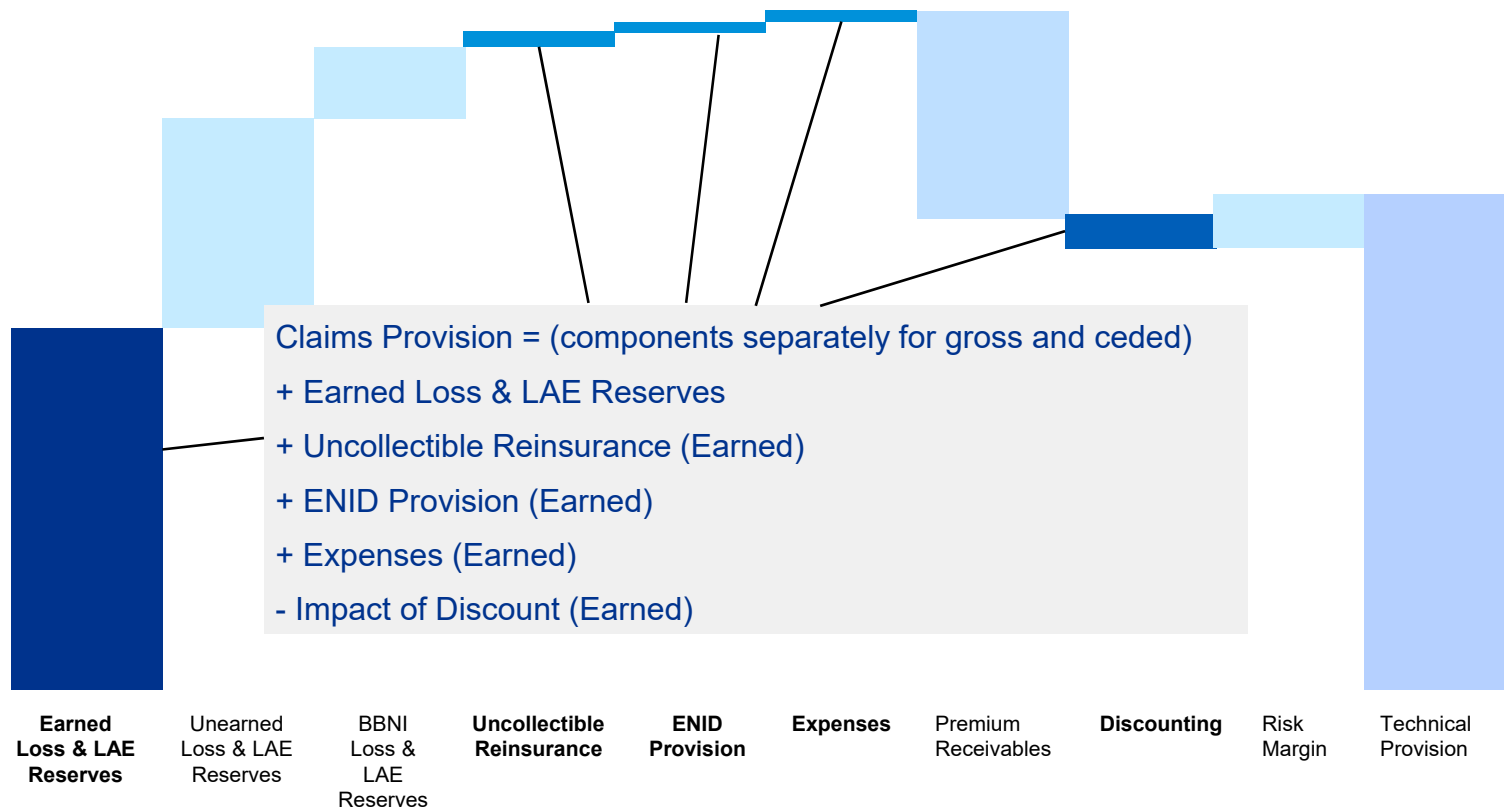
Bermuda EBS

Technical Provision Components: Line 16 Premium Provision



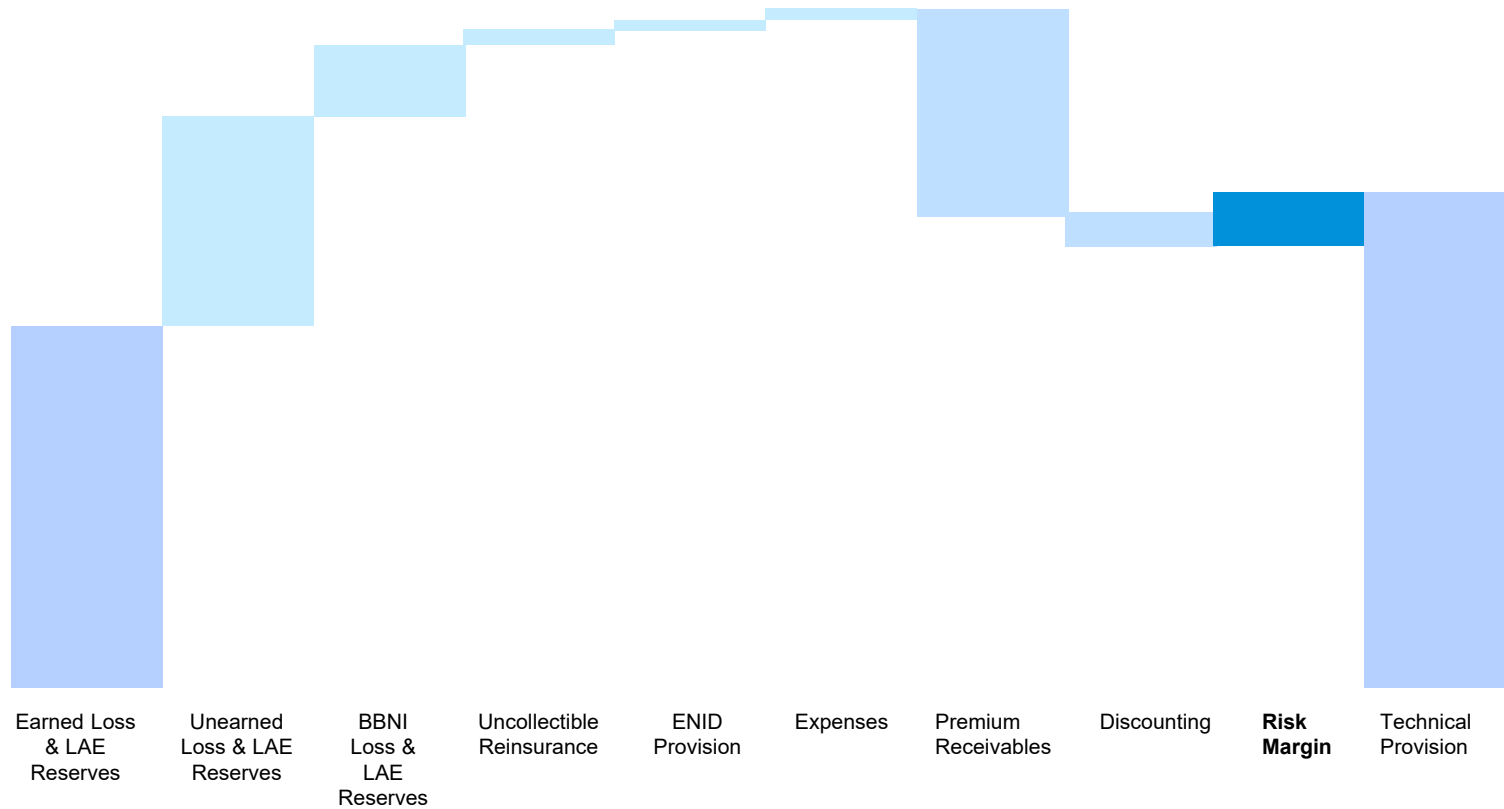
Bermuda EBS

Technical Provision Components: Line 17 Claims Provision



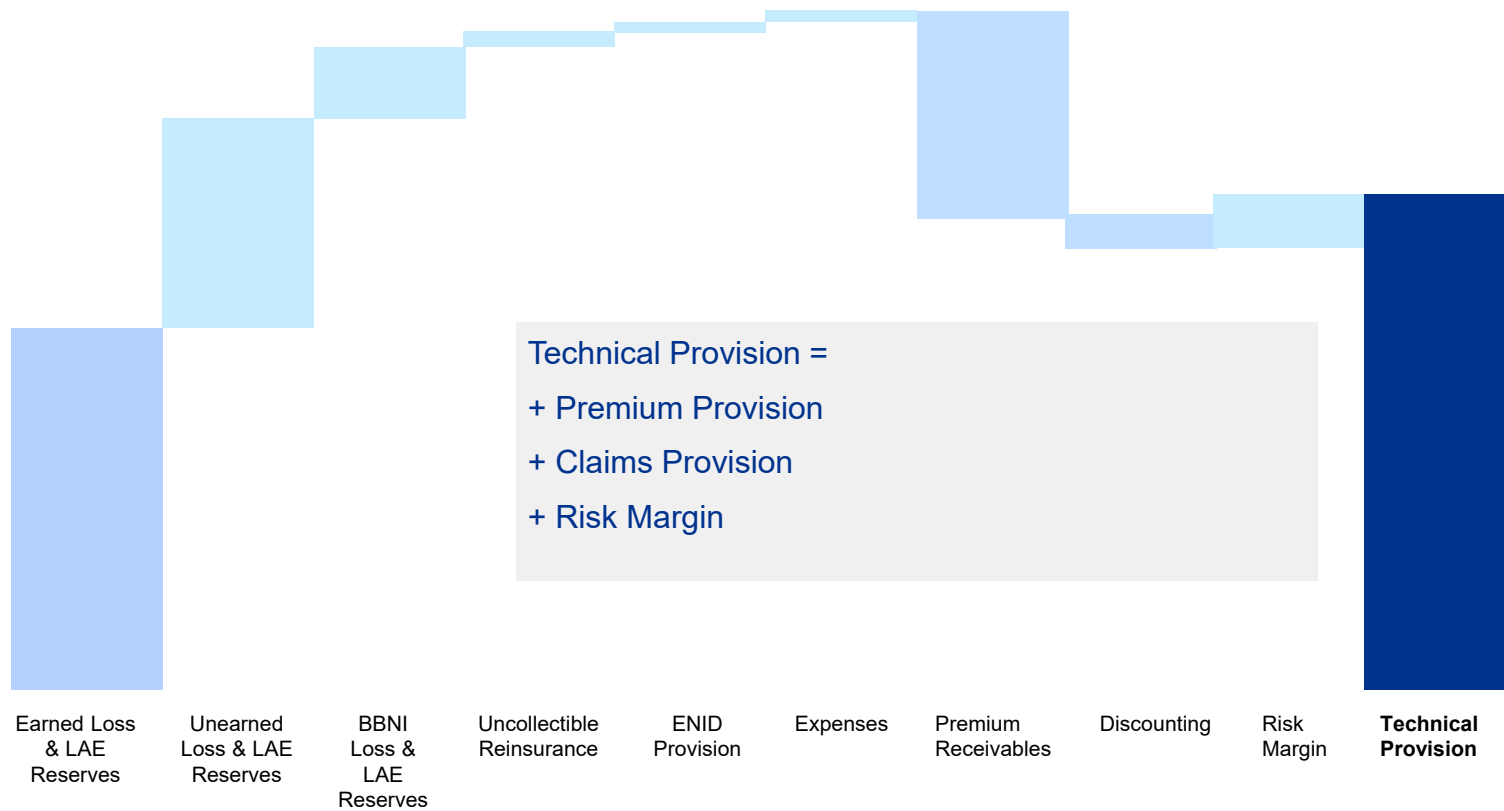
Bermuda EBS

Technical Provision Components: Line 18 Risk Margin



Bermuda EBS

Technical Provision Components: Line 19 Technical Provision





Guidance Note

Guidance note

- **BMA issued a guidance note on the actuary's opinion requirements in December 2017**
- **Primary focus was to “elaborate upon the BMA’s general approach to the supervision of insurers in relation to their engagement of an Actuary appointed to professionally opine upon the reasonableness of the insurers’ Technical Provisions”**
- **States that “A ‘best estimate’ may or may not be the result of the use of a probability distribution or a statistical analysis, and , in the Actuary’s professional judgement, is neither optimistic nor pessimistic”**
 - This comment is due to the provision of ENIDs which can’t be accurately estimated through traditional statistical means
- **The Guidance Note did not aim to provide guidance on actually determining Technical Provisions for the EBS**

Risk Margin Concerns

- **2016 guidance note had a lot of commentary regarding risk margin; clearly an area the BMA thought that LRSO's did not focus on enough in past submissions**
- **Guidance point 268 states** *"The choice of the method to calculate the risk margin should be proportionate to the nature, scale and complexity of the risks undertaken by the insurer."*
 - This point does appear to allow insurers to utilize methods which would better fit their company-specific risks without mention of BMA approval.
 - This could also lead to issues when considering the following points:
 - **Guidance point 264b:** *The calculation should reflect Bermuda regulatory capital requirements; i.e. the Enhanced Capital Requirement (ECR), which may be calculated using the Bermuda Statutory Capital Requirement (BSCR) model or an approved internal model*
 - **Guidance point 264d:** *"The Risks to be taken into account are insurance risk, counterparty credit risk and operational risk. Market risk does not need to be included except where no hedgeable market risk is material (for example for variable annuity products), as it is assumed that the asset portfolio would be adjusted to be consistent with assets held to justify a risk free portfolio"*
- **As the guidance currently stands, it is possible to end up in a situation where:**
 1. The TP as a whole is reasonably stated
 2. The risk margin, being calculated using the BMA template, isn't appropriate
- **There is no current obligation to calculate our own risk margin which could be explored by the BMA as a future option**



Market Feedback: EBS Actuarial Opinions

BMA – Feedback on Actuarial Opinions On EBS Technical Provisions – General Business

- **Comments noted by BMA in March 2019 for Part 5 – Summary of Methodology (2017 YE opinions)**

- **Data**

- Main types
- Sources
- Description of data processing steps
- Any additional checks performed
- BMA requesting more detail than “data reviewed for consistency and reasonableness”

- **Reserving process**

- Reserving thought process; steps, considerations, parties involved and roles, consultations
- Controls
- Validations performed or relied upon

- **Reserving characteristics and projections**

- How is business/reserves segmented in reserving process
- Brief overview of characteristics of main reserving segments and reserving methodology
- Methodology should address reserving basis, reserving models used, selections within models, notable adjustments and considerations, reserving for material bespoke elements, key parameters, additional commentary.

BMA – Feedback on Actuarial Opinions On EBS Technical Provisions – General Business

- **Comments noted by BMA in March 2019 for Part 5 – Summary of Methodology (2017 YE opinions)**
 - **Expert Judgment**
 - Omitted in several opinions
 - Need to discuss where expert judgment used as well as identifying most material and subjective judgments
 - Include discussion on how materiality and subjectivity was assessed
 - **EBS Conversion**
 - Opinions generally in line with expectations
 - Clear and transparent representation of and reasoning for models and methodologies used
 - Include reference and justification for most material input parameters and assumptions
 - Better opinions include quantification of most calculation material components and the final result of the different EBS components
 - **Reserving Table**
 - Several opinions omitted
 - Must include TPs broken down by each legal entity, business unit and/or reserving group
 - Better opinions include step-by-step GAAP to EBS conversion



BSCR

Updates

- **30th November 2016:** the BMA issued a Consultation Paper on a series of potential adjustments to the BSCR standard formula.
- **15th March 2017:** the BMA issued a revised version of the Consultation Paper taking into account market feedback and conducted a field testing exercise of the proposals therein contained
- **30th November 2017:** the BMA issued a new Consultation Paper that further updated the March 2017 Consultation Paper and introduced additional adjustments with the ultimate goal of further increasing the risk sensitivity of the BSCR standard formula and better reflecting how insurers manage risks.
- **31st March 2018:** the BMA re-issued the referred November 2017 Consultation Paper taking into account consultation feedback and the results of the trial-run exercise using financial data as of 31/12/2016. Alongside the Consultation Paper, the Authority also republished the associated BSCR models and draft rules. The Authority conducted a final round of field testing on the proposed changes in the spring of 2018 using financial figures as of 31/12/2017
- **17th July 2018:** the BMA issued a Stakeholder Letter taking into account the feedback received from stakeholders on the latter two consultation papers.

Updates: November 2017

- **Main concerns BMA received for the BSCR Update Proposals for 2017:**
- **Interest rate and management actions:**
 - Concerns over magnitude of interest rate shocks under the proposed alternative shock based approach for interest rate and liquidity risk
 - Suggestions on how to apply the shock based approach for insurers to determine the Best Estimate Liability
 - Requests for the current duration based method be enhanced to be more consistent with the alternative shock based method
 - Requests for discounting yield curves for the HKD
 - Requests for market risk related capital requirements to be determined after considering management actions, including where the insurer is calculating the interest rate risk capital charge
 - Concerns over allowance only for management actions that adjust non-guaranteed benefits
- **Other:**
 - Requests for the proposed treatment and the risk mitigating effect of deferred taxes be brought forward to 2018 financial year
 - Requests for additional clarification on the application of the look-through criteria and made minor suggestions of changes to the criteria
 - Suggestions for refinements for the grandfathering of equity risk charges and allowance for risk mitigation approaches

Updates: March 2018

- **March 2018 Proposal addressed many issues:**

- BMA revised the downward interest rate risk shocks and the treatment of the LTFR for the shock based approach for interest rate and liquidity risk
- Provided further guidance and tested alternatives for the application of the shock based approach for insurers for determining the Best Estimate Liability
- Tested a modified duration based approach
- Started to publish discounting yield curves for the HKD
- Brought forward the proposed treatment and risk mitigating effect of deferred taxes
- Added clarification towards the look-through criteria

- **Concerns remaining:**

- Magnitude of interest rate shocks and treatment of the Long Term Forward Rate
- The proposed modified duration based approach was unsupported
- Requests for further clarification on the calculation of the operational risk charge

Updates: July 2018

- **BMA issued a stakeholder letter in response to industry feedback on latest two consultation papers and trial-run exercises**
- **Actions taken**
 - BMA concluded BSCR Update Proposal March 2018 forms sound basis for changing the BSCR standard formula and decided to proceed with the proposed changes with minor amendments. The following amendment is worth noting for the EBS risk margin calculation:
 - Additional clarification on the calculation of the operational risk charge, namely that it should be applied after consideration of the risk mitigation effect of management actions (by reducing liabilities for future bonuses or other discretionary benefits).
- **Final version of new rules published on July 17, 2018**
 - New rules entered into force on January 1, 2019
 - This includes a grade-in period of three years for P&C (re)insurers



Thank you



kpmg.com/socialmedia



kpmg.com/app

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© [year] [legal member firm name], a [jurisdiction] [legal structure] and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative, a Swiss entity. All rights reserved.

The KPMG name, logo are registered trademarks or trademarks of KPMG International.