

#### 18<sup>TH</sup> EAST ASIAN ACTUARIAL CONFERENCE

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## Inforce value Management

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## Agenda



- Focus on Inforce value Management
- Capital Optimisation
- Customer value management
- Strategic Asset Allocation
- Summary





## Focus on Inforce value Management



## Why?



- Large blocks of inforce business
- Pressure on new business
- Pressure on capital utilisation
- Depressed economic environment
- Emerging local and global regulations





### Focus areas



- Increasing return on capital
- Minimising volatility
- Preserving economic value
- Increasing fungibility of capital
- Ensuring stable dividend stream





### How?



- Capital Optimisation making best use of capital
- Customer value management preserving future profits from non-financial profit drivers
- Strategic Asset Allocation increasing the return on capital





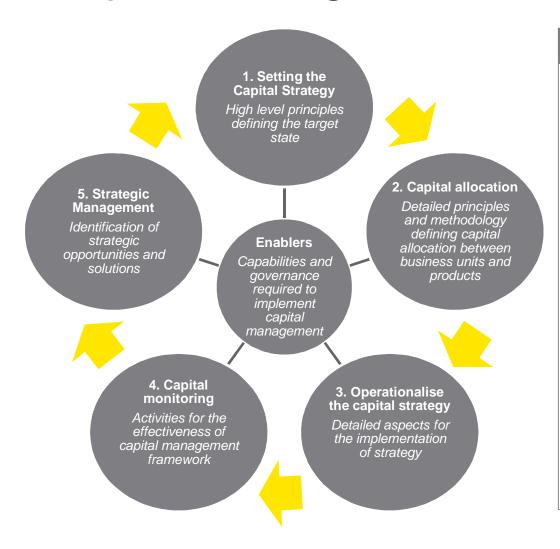


## Capital Optimisation



## Capital Management Process





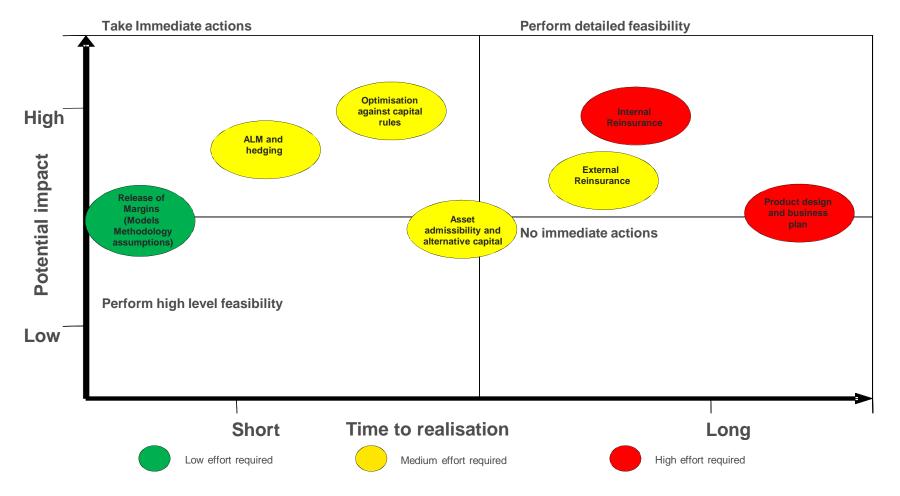
#### Key considerations

- ► Is the capital strategy aligned with your risk preferences?
- ► Is the business plan aligned with the intended use of capital?
- ▶ Is there a systematic approach to capital allocation and the use of capital? Is it proactive or reactive?
- ► Is capital reporting just retrospective or includes forecasts?
- ► Is the need for additional capital conveyed in a timely manner?





# Insurers in Asia are considering a range of options







## ALM and Hedging



#### Matching

Changing assets to better match the new balance sheet will depend on understanding the way that the underlying balance sheet behaves.

#### Hedging

What risks at entity or group level are not wanted by the business? How these risks can be removed, reduced or transferred away from the balance sheet?

Optimisation against the capital rules / internal model

Which capital measures are particularly onerous? For example to what extent can credit risk be reduced through reducing the length of the bond portfolio?

#### Diversification

Have different geographies and asset types been explored fully, to the extent extra diversification will bring capital benefits (versus cost of implementing and managing)?





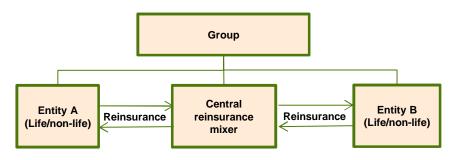
### Central reinsurance



#### How does it work?

The aim is to establish a reinsurer that takes the risks of multiple insurance entities to:

- Materialise diversification benefits at the mixer entity level
- Reduce capital requirement at the operating entity level
- ► Improve the fungibility of capital and increase capital and cash allocation flexibility
- Allow central management of reinsurance and assets
- Allow pricing to be based on diversified group requirements



Entity level required ca	pital before reinsurance:
$C_\mathtt{A}$	0
Entity level required ca	nital after reincurance:

 $C_A$ '  $C_M$ Due to diversification:  $C_\Delta$ '+  $C_B$ '+  $C_M$  <  $C_\Delta$ +  $C_B$   $C_B$ 

 $C_{R}$ 

#### Considerations when setting up a central reinsurance mixer:

- ▶ Capital efficiencies: evaluating structures, models and capital benefits
- ▶ Regulatory: assessing jurisdictions; evaluating regulatory approval and requirements
- ▶ Accounting and tax: evaluating implications on accounting methodologies and disclosures; preparing financial analysis
- ▶ Location, structure and operational: assessing optimal locations; evaluating practical feasibility







## Customer value management



### How?



- Developing lapse management strategies
- Identifying cross-selling opportunities
- Enhancing customer segmentation to identify high value customers and help prioritise commercial strategies
- Managing customers at key stages like maturity
- Understanding agents value to help adapt value propositions and reward models for agents







## Strategic Asset Allocation



## Why Optimising Asset Portfolio



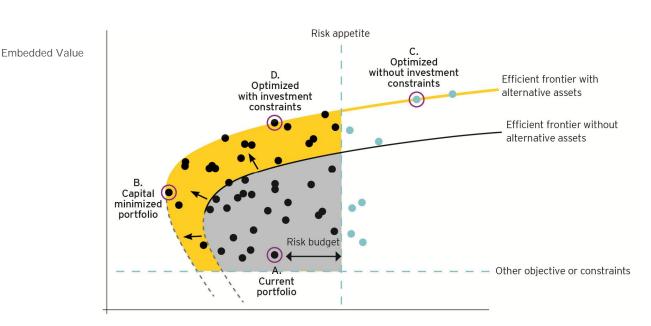
Economic Duration Cost of Capital Mismatch Capital Surplus Volatility Why optimize your asset portfolio? Portfolio Inefficiency ► Increase embedded value, IFRS profits and long-term investment returns through yield enhancement, alternative Risk and offshore investments: Vulnerability ► Improve capital efficiency by optimising shareholder's returns at a given level of risk and practical constraints, allowing you to Statutory Reserve be fully rewarded by the risk that you are taking; Embedded Enhance product competitiveness by offering better yields to value Earnings at policyholders and improving the likelihood of meeting Risk contractual product guarantees; **IFRS Profits**  Unlock free surplus by diversifying into alternative and offshore asset classes that have a low or even negative Investment Yield correlation with the existing core assets; Better manage risk vulnerability and surplus volatility by Total Return selecting a portfolio that minimizes risk exposure such as **Potential** interest rate duration and convexity mismatch between asset and liability. Return on Capital **Product** Diversification Economic Competitiveness **Benenfits** Efficiency





## Optimising Risk-Adjusted Return





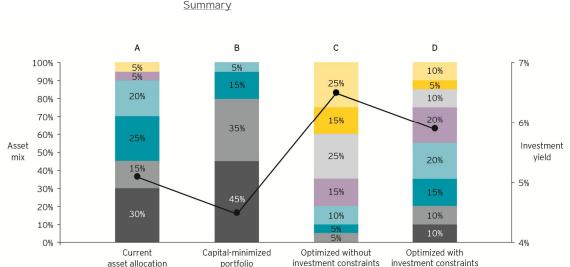
- Traditional "asset only" investment does not work well for insurers who focus on longterm insurance liabilities characteristics, capital, earnings and liquidity implications
- Current portfolios can be further optimized by utilising "risk budget" and diversifying into alternative assets (e.g. real estate, private equity, infrastructure debt, CLO)
- Two efficient frontiers allows you to find the optimal point in a phrased approach and minimize the model run time and effort required to populate the efficient frontier
- Substantial room to be explored to enhance portfolio efficiency achieving a higher reward but at a lower risk





## Financial Implications to the Business





High-vield corporate

■ AAA corporate

Illustrative SAA Result

Equity

A corporate

Alternative investment

AA corporate

Primary (USD m)	Current	S1	S2
Embedded Value			
Economic Capital			
Available Capital	1		
Free Surplus			
EV / EC			
Secondary			
Long-term Expected Investment Yield			
Solvency Margin			
GAAP Profits at Risk			
EV Profits at Risk		İ	
Dollar Duration Gap			
Convexity Gap			
IRR		ĺ	
Value of New Business			
Liquidity Test			
Probability of Target Policyholder			
% of Risky Asset			
Average Credit Quality			
Rating Agency Comments			

• If unconstrained, the optimal portfolio weight could be too extreme which becomes counter intuitive (e.g. reallocate all treasury bonds to high-yield corporate bonds)

■ BBB corporate

■ U.S. Treasury bonds

- Many secondary constraints to be considered, such as investment yield, solvency margin, IFRS earnings at risk, dollar duration gap/convexity, IRR, value of NB, liquidity ratio, credit ratings etc.
- More focus on economic view of risk, rather than just the regulatory or accounting view

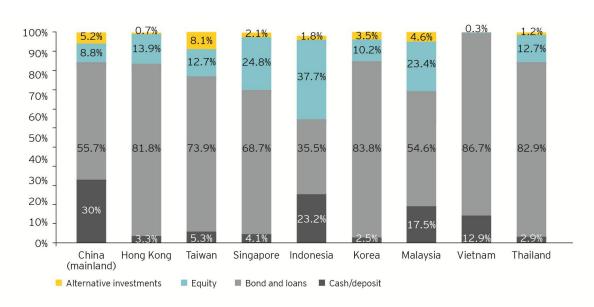




### SAA Benchmarking Database - By Market



Asset allocation by Market

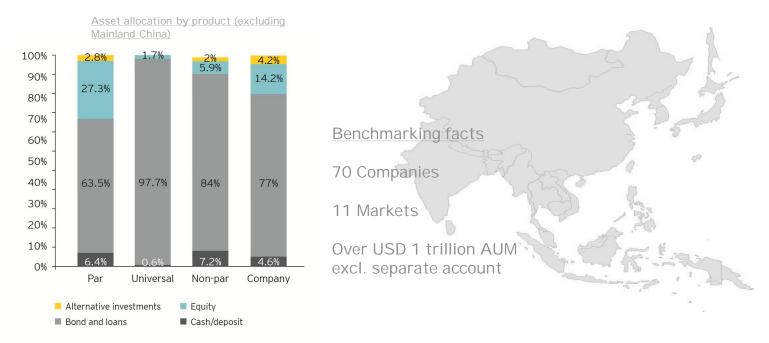


- The SAAs of insurers operating in less developed markets such as Thailand and Vietnam tend to be driven primarily regimes which favor domestic sovereign bonds (regardless of external rating) over risky and offshore assets
- Korea and Taiwan have legacy ALM and duration gap issues caused by a combination of high product guarantees and low domestic interest rate rates in recent years
- Hong Kong and Singapore insurers enjoy more flexibility in choosing assets to support their liabilities, but are subject to higher resilience reserve (in Hong Kong) and certain concentration limits (in Singapore).



## SAA Benchmarking Database - By Product





- Long-term fixed income strategy with some duration constraint is often used to back nonpar products such as universal life to lock in investment yield and target spread
- Par portfolio usually a heavier portion of equity investment to boost yield and enhance product competitiveness. The free surplus will serve as the constraint as to how much riskier asset you can take
- Some insurers have a SAA dedicated specifically to shareholder funds but the underlying asset mix varies depending on the shareholders' investment objectives and risk appetite



## Thank you

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