Welcome to Milliman's Virtual Lunchtime Briefing

- The briefing will begin in a few minutes.

17th September 2020

Virtual Meeting Best Practices

- Mute: As an attendee, you will be on mute automatically for the duration of the briefing.
- Video: Only presenters will be on video. Video is turned off for attendees.
- Q&A: Use the chat function within the meeting for questions.

Agenda

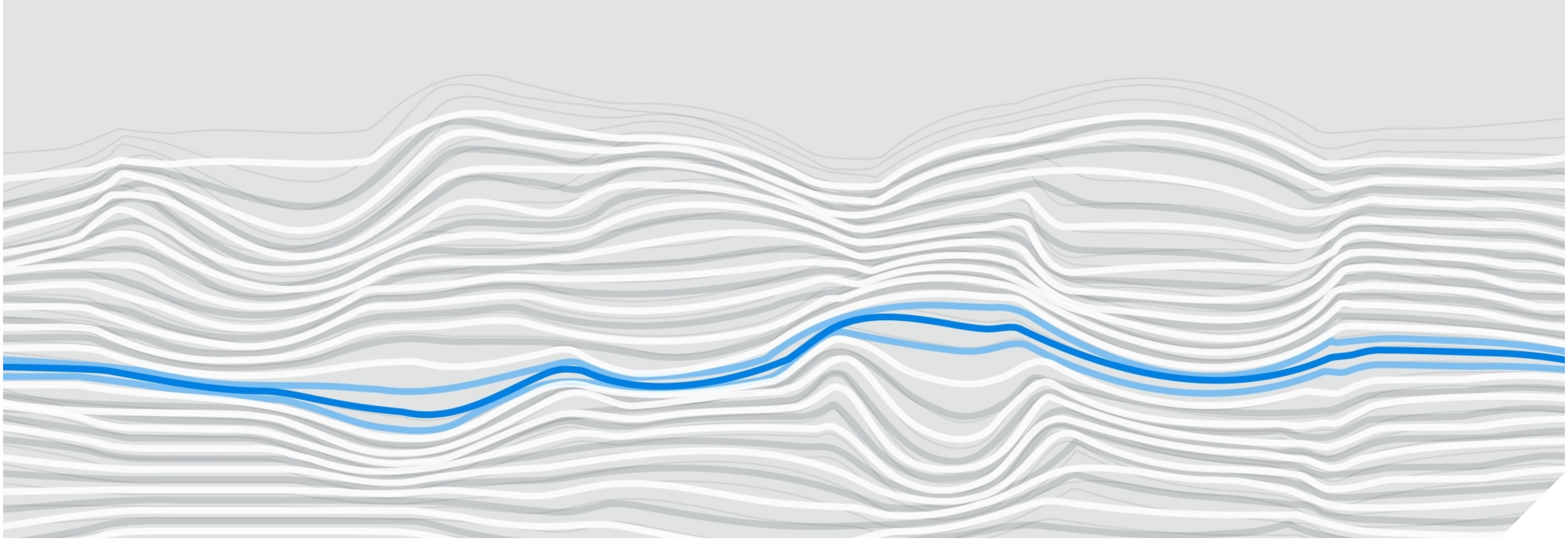
Time	Topic	Presenter
12:00pm – 12:02pm	Welcome	Aisling Barrett
12:02pm – 12.15pm	Recovery and Resolution Planning	Conor Callaghan
12.15pm – 12.35pm	Reinsurance Strategies	Rik van Beers
12.35pm – 12.55pm	Unit Matching under Solvency II	Kevin Manning
12.55pm – 1.00pm	Q&A session	Aisling Barrett

Recovery & Resolution Planning

CP131 - Regulations for pre-emptive recovery planning for (re)insurers

Conor Callaghan

17 SEPTEMBER 2020



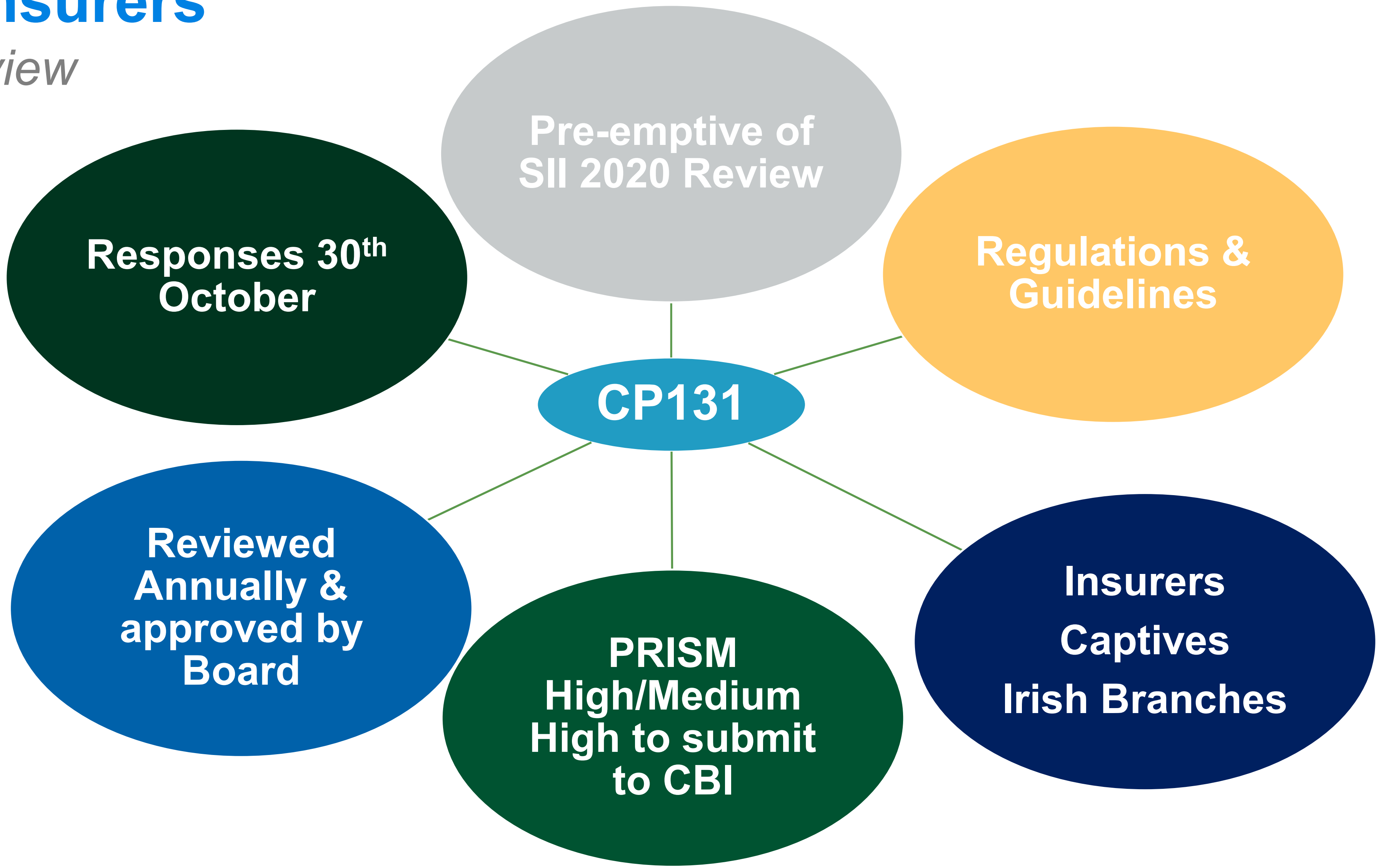
Recovery & Resolution

International Association of Insurance Supervisors (IAIS) Definitions

Recovery Plan	"Identifies options to restore financial strength and viability when the firm comes under severe stress"
Resolution	"When a firm is no longer viable or likely to be no longer viable, and has no reasonable prospect of becoming so"

CP131 - Regulations for pre-emptive recovery planning for (re)insurers

Overview



CP131 - Proposed layout of the recovery plan

Proposed format of recovery plan

Part A
Summary

Part B
Change since last recovery plan

Part C
Approval of recovery plan

Part D
Governance

Part E
Strategic analysis

Part F
Recovery indicators

Part G
Recovery options

Part H
Scenario analysis

Part I
Communication plan

Part J
Information on preparatory measures

CP131 - Opening sections of the plan

Summary	• Overall recovery capacity of the insurer • Closure to new business point and how it would be handled
Change since last recovery plan	Changes to the: • Insurer/Group • Scenarios • Indicators • Governance • Options • Prep. Measures
Approval of recovery plan	• Date of approval by the Insurer's Board

CP131 – Governance section

Governance covering development, updating and implementation of plan

Roles & functions of those responsible for the plan (including Board)

Integration into system of Governance and Risk Management Framework

Policies and procedures governing:

- **Review, update and approval of plan**
- **Implementation of recovery options**

Internal monitoring systems

CP131 – Strategic analysis section

Information for understanding plan and identifying possible vulnerabilities

CP131 – Recovery indicators section

“Indicators that identify, in a timely manor, progression of risks that have the potential to threaten the insurer’s financial viability”

BAU → Early Warning → Recovery → BAU

Trigger Framework

- **Capital**
- **Liquidity**
- Reserving
- Profitability
- Market
- Macro-economic
- Operational

Characteristics

- Business strategy
- Vulnerabilities
- Number/variety
- Quantitative/Qualitative
- Integrated in frameworks
- Forward looking
- Flag closure to new business

Review indicators annually and recalibrate when necessary

CP131 – Recovery options section

Options to contribute to restoring the financial position following a stressed event and/or maintaining insurer's ongoing viability.

- At a minimum 4 specific categories are to be included:

Restore financial position	Restore own funds through recapitalisation	Ensure access to liquidity	Reduce Risk profile, SCR

Not required of captive insurers or third-country insurers with Irish branches

- Parental support:
  - Confirmation of support
  - Possibility not forthcoming

CP131 – Scenario analysis section

Testing the effectiveness of Recovery Options and adequacy of Recovery Indicators

- At a minimum 5 specific scenarios are to be included:

1	2	3	4	5
System wide scenario	Insurer specific scenario	Combo of 1 & 2	Parental support limited	Closure to new business

Not required of captive insurers

Not required of third-country insurers with Irish branches

- Consideration across both slow moving and fast moving events
- Reverse stress testing as a starting point

CP131 - Closing sections of the plan

Communication Plan

- Internal/External
- Specific to recovery options
- Managing potential negative market reactions

Information on Preparatory Measures

- Measures already taken or necessary to take
- Address impediments flagged within the plan
- Timelines for implementing preparatory measures

CP131 – Responses to Consultation

Closing date for responses is 30 October 2020

Industry gauge

Insurance Ireland welcoming inputs

For more information:

https://ie.milliman.com/en-gb/risk/recovery-and-resolution

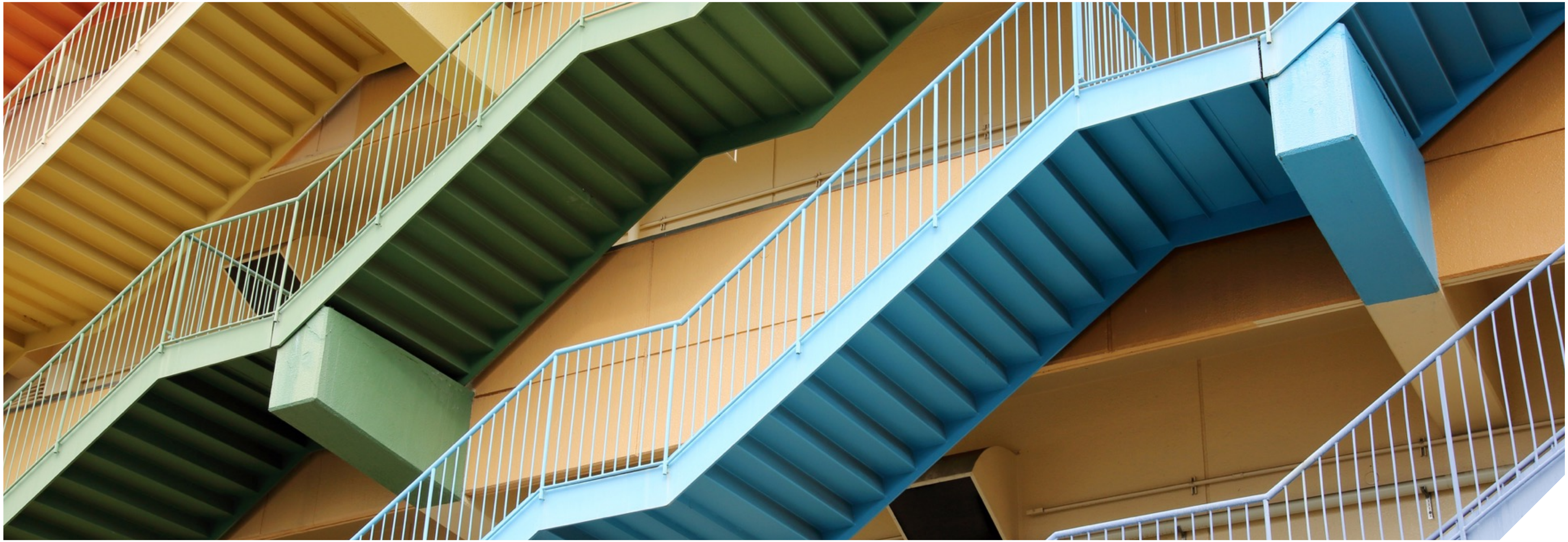
Conor Callaghan
conor.callaghan@milliman.com

Reinsurance as a capital management tool for life insurers

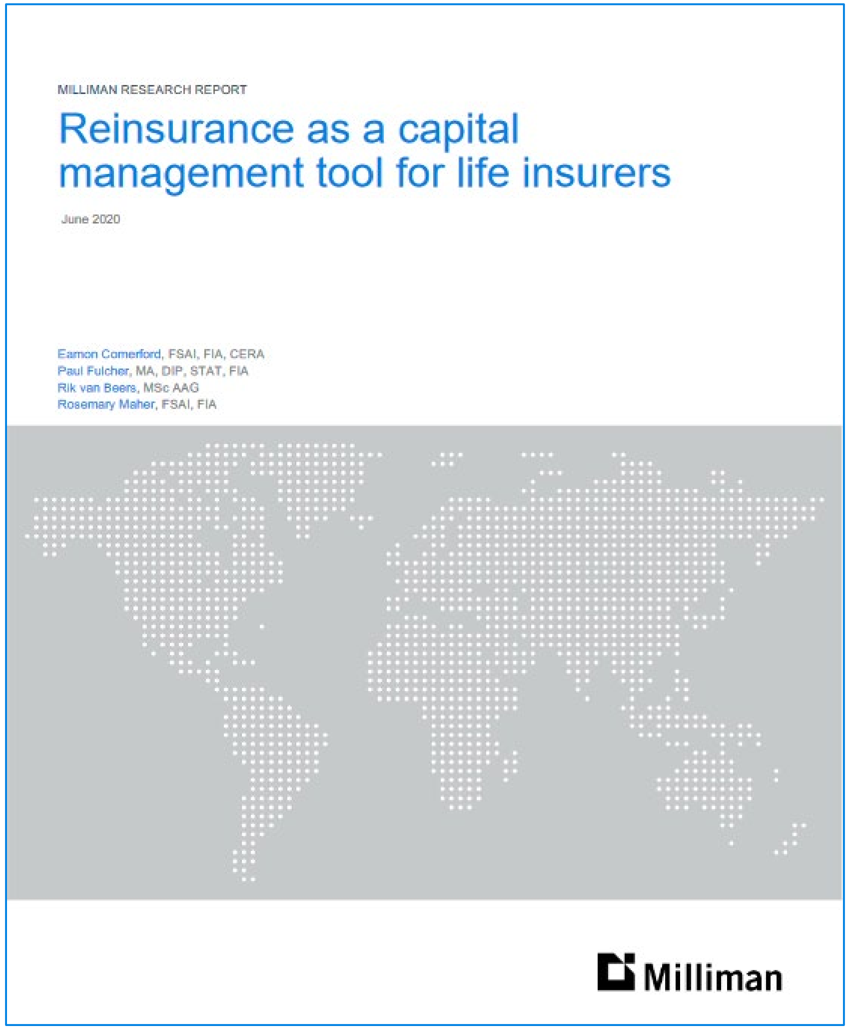
Milliman Research

Rik van Beers

17 SEPTEMBER 2020



Reinsurance as a capital management tool


MILLIMAN RESEARCH REPORT

Reinsurance as a capital management tool for life insurers

June 2020

Eamon Comerford, FSAI, FIA, CERA
Paul Fulcher, MA, DIP, STAT, FIA
Rik van Beers, MSc AAG
Rosemary Maher, FSAI, FIA

Milliman

- Milliman published a research paper in June 2020:

  Reinsurance as a Capital Management Tool for Life Insurers.

- The paper explores a range of reinsurance strategies that could be utilised by life insurers for capital management purposes.
- More common strategies along with new developments and innovative strategies are covered.
- Other areas such as regulatory considerations, collateral management and operational aspects are covered as well.
- We have used our own experience and expertise across Milliman, as well as discussions with a range of reinsurers, in order to determine the strategies to include and the considerations to focus on.

- The full research paper and summary can be found here:
- https://ie.milliman.com/en/insight/reinsurance-as-a-capital-management-tool-for-life-insurers

Main conclusions in the paper

Capital management is an increasingly important and complex puzzle to solve

Several new type of covers and strategies are being used

Regulatory approval can be a challenging and lengthy process

Setting the scene: why capital management?

- Capital management is an increasingly important and complex puzzle to solve

Low interest rate environment

Capital pressure stakeholders

Increased regulations

Competition

Optimise Risk Management

Optimise Capital Management

Optimise Solvency II Balance Sheet

Setting the scene: why reinsurance?

- Reinsurance is one of the tools available to help with this
- It can offer a wide variety of capital management options and ancillary benefits

Unlock capital in-force book	Reduce new business strain	Matching Adjustment	Risk Margin / Coverage Ratio

- Every management action comes with its trade-offs. It's important to evaluate these.
- A decision process could be as follows:

1. What is my target?	**2. Which tool to use?**	**3. What is the impact?**
KPIs & KRIs	Evaluate trade-offs	Evaluate run-off period

Evaluating a reinsurance strategy

- When evaluating a reinsurance strategy or cover, the following areas are in scope

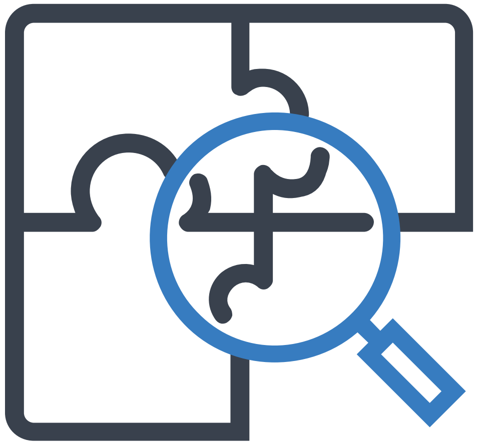
Capital requirements	P&L	Implementation

▪ Impact on required capital
▪ Additional risk introduced
  ▪ Counterparty
  ▪ Basis risk
  ▪ Etc.
▪ Renewals required
	▪ Cost of reinsurance
	▪ Capital generation
	▪ Dividend payments
	▪ P&L volatility
		▪ Implementation time
		▪ Flexibility of the treaty
		▪ Availability
		▪ Regulatory approval
		▪ Board approval

Conclusion #1 – Reinsurance is a complex puzzle to solve

- The capital optimization process has **many variables to consider**
- **Short-term** and **long-term impacts** can vary significantly
- The **due diligence** phase is a **lengthy process**

- **It is important to get main targets clear at the start of the process**
  - Agreement on what to optimise and to achieve
  - Only afterwards involve reinsurers and regulators



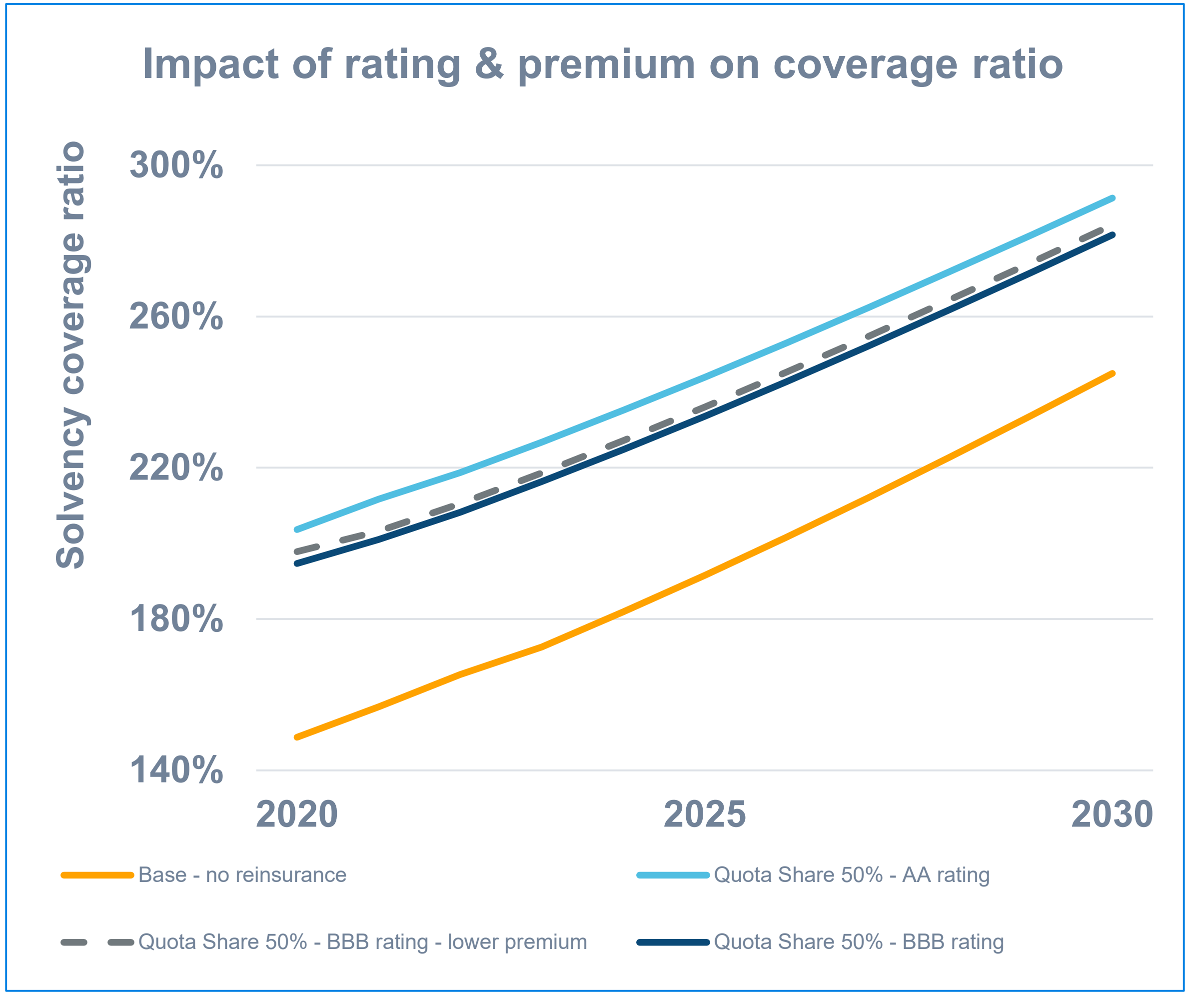
Conclusion #1 – Reinsurance is a complex puzzle to solve

- **Effectiveness of the cover is impacted by**
  1. Reinsurance premium charged
  2. Counterparty default risk introduced

- **These are driven by two main factors**
  1. Size of the block of business reinsured
  2. Credit rating of the reinsurer & collateral

- **A fourth aspect to consider:**

4. Timing of implementation



Reinsurance treaties and strategies in the market

- The range of reinsurance covers available is expanding
- This also enables implementation of new reinsurance strategies

Traditional	Asset-Intensive & Structured products	

▪ Quota-share treaty
▪ Surplus treaty
▪ Excess-of-Loss treaty
▪ Longevity swap
  ▪ Indemnity-based
  ▪ Index-based
	▪ Asset-intensive reinsurance
	▪ Catastrophe bonds
	▪ Mortality bonds
	▪ Mass lapse treaties
	▪ VIF monetisation
		▪ Investment margin financing
		▪ Contingent reinsurance
		▪ Operational reinsurance
		▪ Optimise LACDT, DTA and DTL

Example: Mass Lapse reinsurance

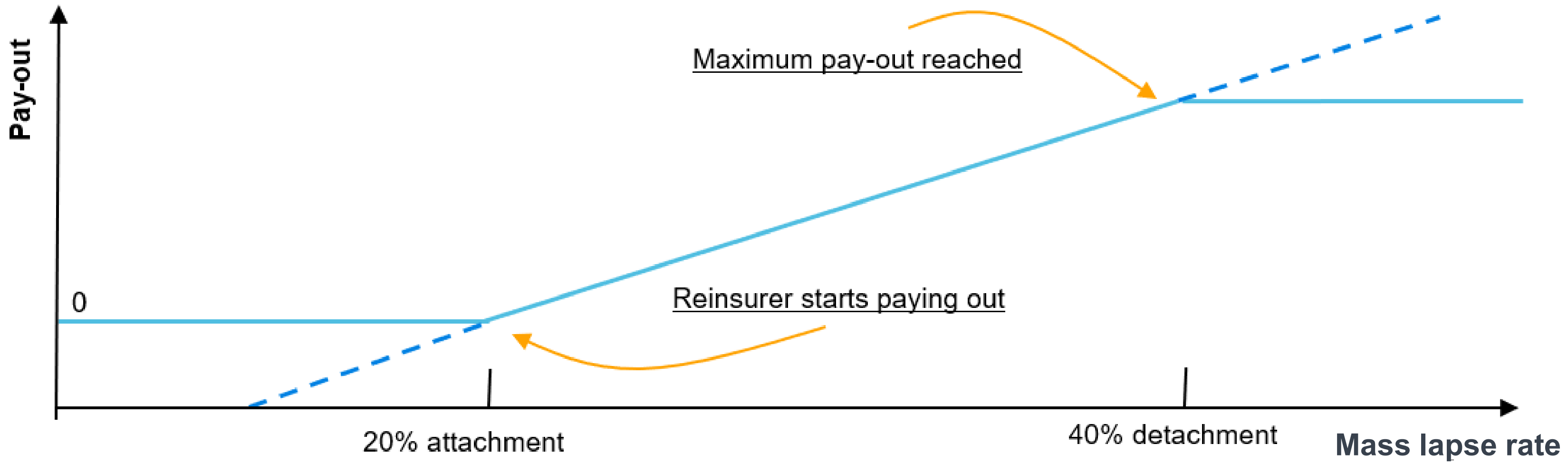
- Effectiveness of the reinsurance dependent on other lapse capital requirements

Capital requirements	Example #1	Example #2
Mass lapse risk	100	100
Lapse up risk	90	30
Lapse down risk	10	10
SCR Lapse risk – before reinsurance	100	100
SCR Lapse risk – after reinsurance	90	30
Capital reduction	10	70

- Mass lapse treaties are implemented across markets.
- We are not aware of any lapse up / down treaties: Difficult to manage for the reinsurer?

Example: Mass Lapse reinsurance

- Solvency II & regulators: an effective transfer of risk is required
- Out-of-the-money contract with an attachment and detachment point included



- Other points of attention are basis risk and the duration of the cover.

Example: asset-intensive reinsurance

- Asset-intensive reinsurance is a form of reinsurance where all risks are in scope
- Typically applied on long-dated liabilities, heavily weighted on asset and interest rate risk

Advantages	Disadvantages
▪ Unlock locked-in value in capital heavy portfolios ▪ Extensive scope might lead to lower premiums than other treaties ▪ Several ancillary benefits such as new business funding. ▪ Alternative for portfolio transfers ▪ Use to lock-in value during M&A	▪ Counterparty default risk can be substantial, potentially leading to capital add-ons in Solvency II ▪ Solvency II SF appropriateness testing is required ▪ Regulatory approval can be challenging due to importance of collateral management

Conclusion #2 – Reinsurance offers a range of solutions

- Traditional treaties and strategies are still widely used
- New solutions are also introduced by reinsurers, with a shift towards
  1. Asset-intensive reinsurance
  2. Structured / Catastrophe bond type covers – such as risk margin and mass lapse treaties.

- With these strategies and increased focus on reinsurance, also comes new challenges:
  1. Mitigating basis risk
  2. Assuring appropriate risk transfer
  3. Collateral management
  4. Assuring risk management systems are up-to-date

Regulatory approval

- Demonstrating that the cover is genuinely used as risk-mitigating technique is key

Regulatory considerations

- Strong understanding of risks that are being transferred, risks that remain and any new risks that emerge.
- A low level of basis risk and clear understanding of this basis risk.
- Analysis and consideration of possible outcomes, including scenarios where reinsurance may not be effective.
- A financially strong (and preferably large) counterparty and stringent security in the arrangement.
- Recapture plans in case of reinsurer financial distress or default.

Regulatory approval

- Companies should carry out an **in-depth review** of how **Solvency II requirements** are met
- Risk management systems should be up-to-date
  - Analysis to ensure the appropriateness of reinsurance selected
  - Determination of the appropriate types of reinsurance for the risks ceded and to what extent the risks associated with the selected reinsurance techniques can be managed and controlled
- Important areas to consider are:
  - An assessment of **credit risk** including the effect of **concentration risk**
  - **Retrocession of risks** can have a significant impact on the effectiveness of the cover
  - In case the **risk margin** increases substantially at default, it should be **included in the CDR**

Conclusion #3 – Regulatory approval

- Regulatory approval can be a **challenging** and **lengthy process**
- Demonstrating that the cover is genuinely used as **risk-mitigating technique is key**
- This also holds for having **appropriate risk management systems** in place
- **Collateral management** can play an important role in the process

- **Important:** early engagement with regulators is often the best way to achieve a positive outcome in terms of getting regulatory buy-in for a material new reinsurance arrangement

Milliman

For more information:

https://ie.milliman.com/en-gb/risk/reinsurance

Rik van Beers
rik.vanbeers@milliman.com

Unit matching under Solvency II - from theory to practice

Kevin Manning

17 SEPTEMBER 2020

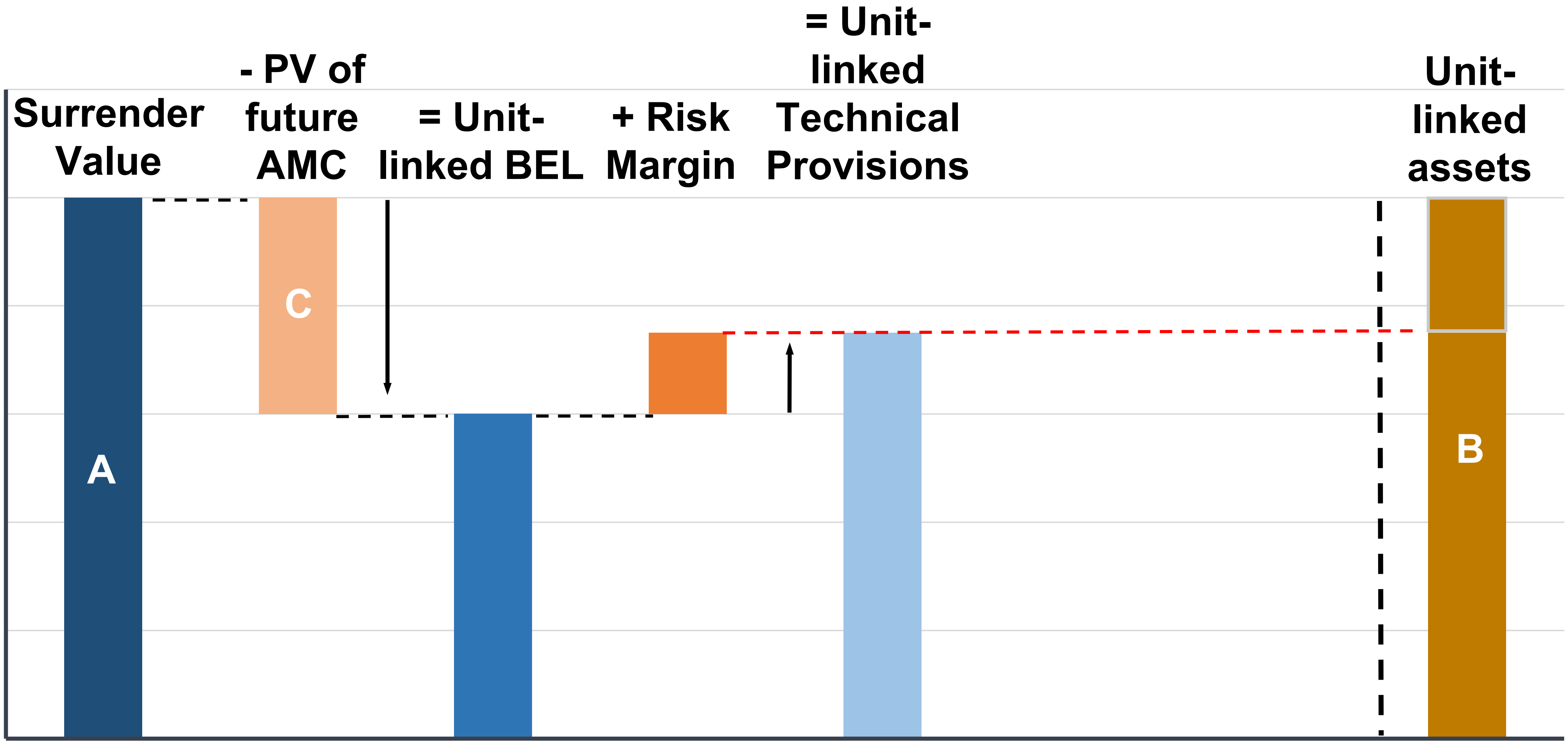
Netflix Recommends:

Because you watched Reinsurance as a Capital Management Tool for Life Insurers and Recovery and Resolution Planning:

Unit Matching under Solvency II – from theory to practice

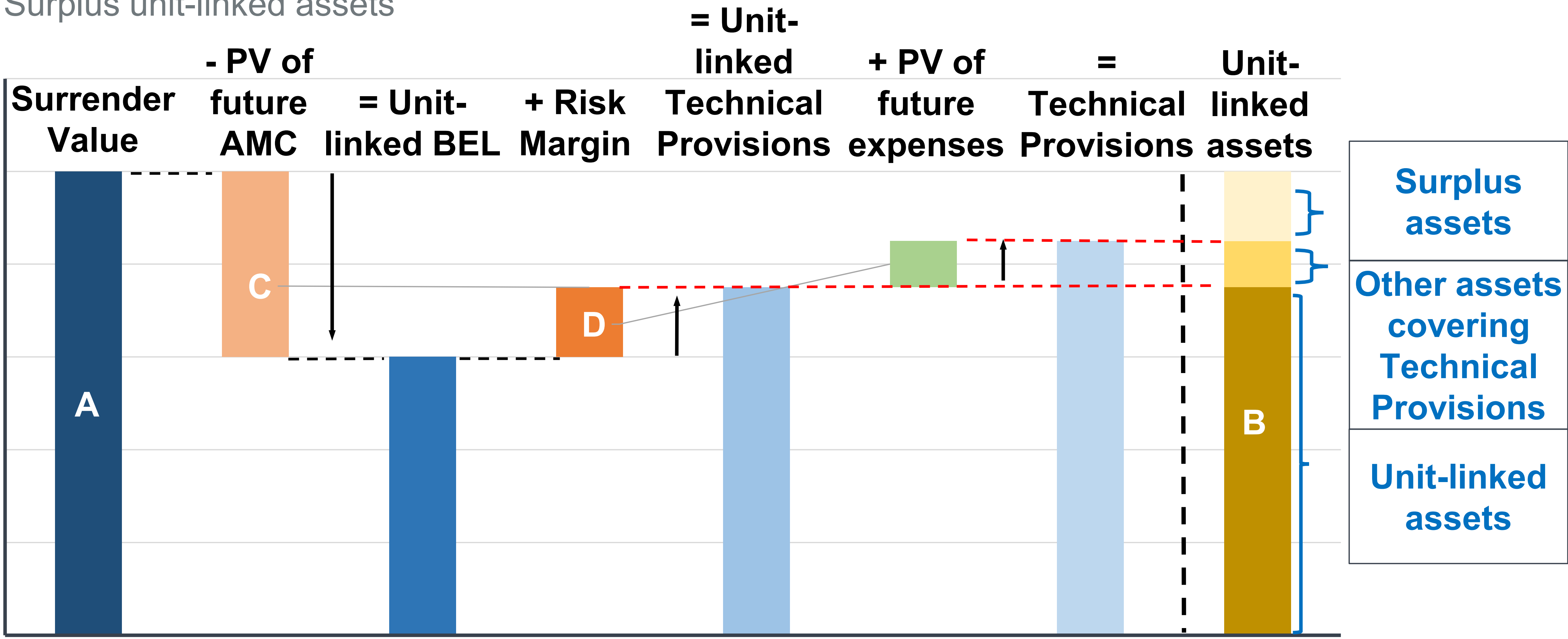
96% Match

Previously on Unit Matching under Solvency II…



Room for improvement?

Surplus unit-linked assets



The People versus Unit Matching

The Case for Unit Matching

- Reduce market risk
- Reduce SCR
- Improve liquidity
- Lapse risk management

The Case against Unit Matching

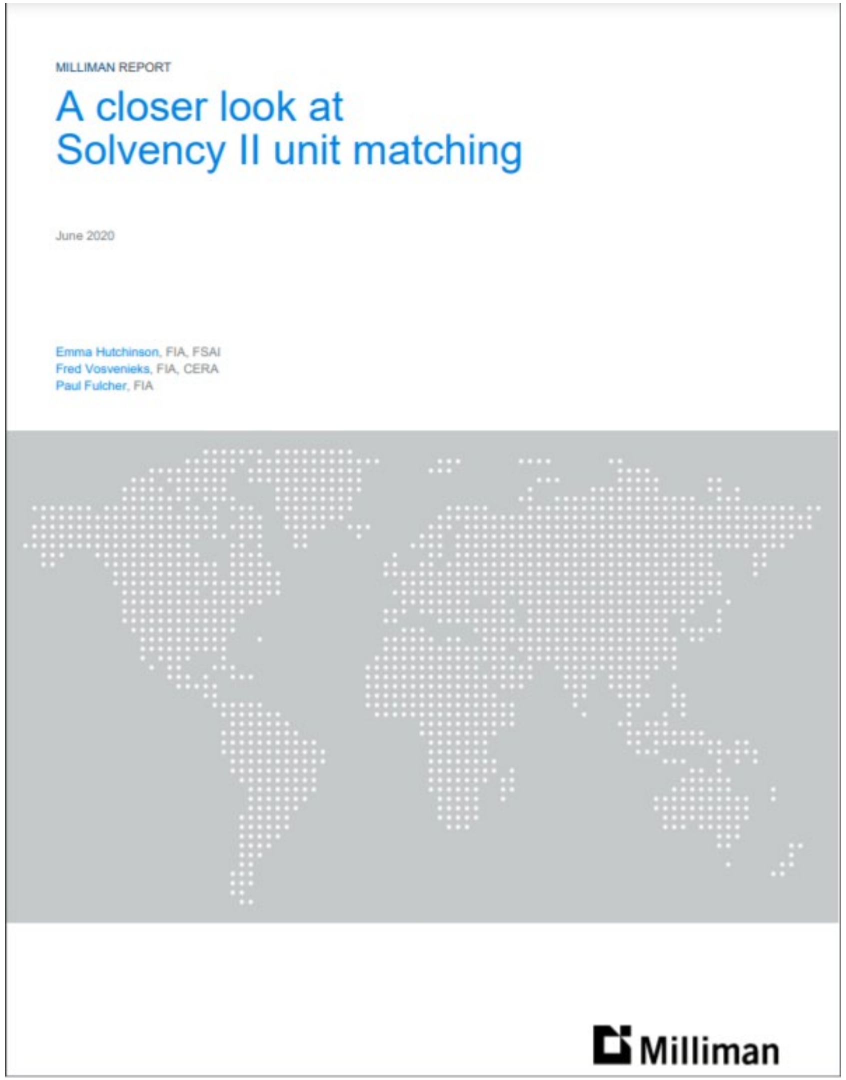
Questions arising from the UK experience

What are the practical challenges that arise?

What about the impact on policyholders?

What does the Regulator make of it?

What about other impacts like IT systems, or Accounts?



What are the practical challenges that can arise?

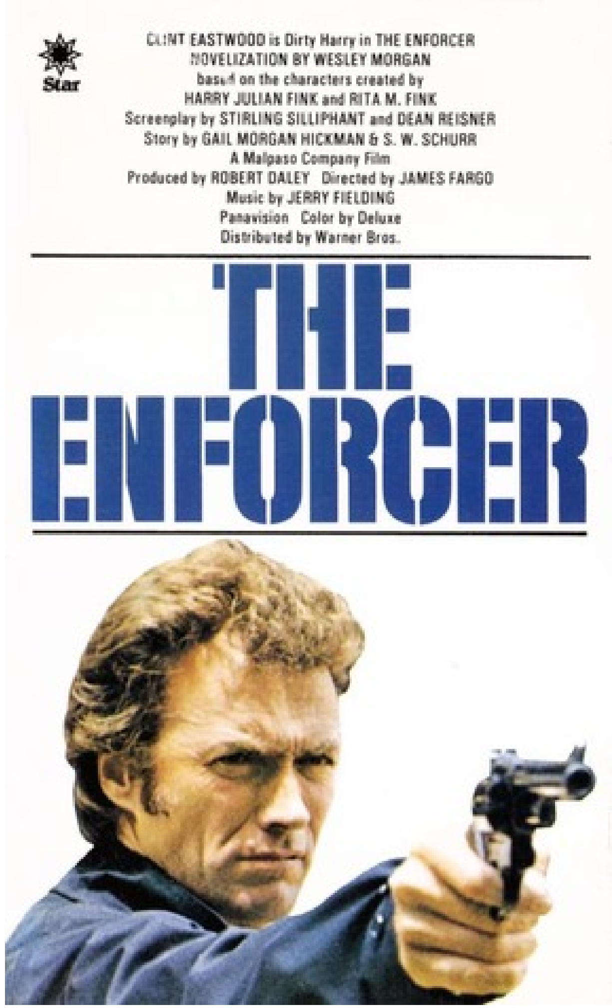
- Defining which funds and products are in scope
- Defining unit-linked cashflows
- Hypothecating to fund level
- Treatment of the risk margin
- Defining an appropriate buffer

What about policyholders?

- Financial impact?
- Second order impact?
- T&Cs

What does the Regulator make of it all?

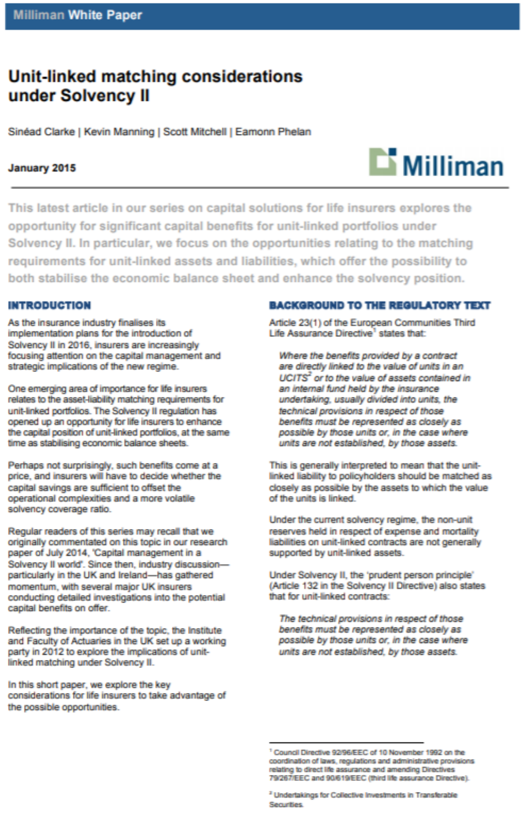
- UK experience
- Irish experience



How about impacts on IT systems, accounts etc.?

- Investing in a system to support a unit matching programme
- Trading and fund accounting
- Accounts volatility
- IFRS 17

You might also like



Milliman White Paper

Unit-linked matching considerations under Solvency II

Sinéad Clarke | Kevin Manning | Scott Mitchell | Eamonn Phelan

January 2015

Milliman

This latest article in our series on capital solutions for life insurers explores the opportunity for significant capital benefits for unit-linked portfolios under Solvency II. In particular, we focus on the opportunities relating to the matching requirements for unit-linked assets and liabilities, which offer the possibility to both stabilise the economic balance sheet and enhance the solvency position.

INTRODUCTION

As the insurance industry finalises its implementation plans for the introduction of Solvency II in 2016, insurers are increasingly focusing attention on the capital management and strategic implications of the new regime.

One emerging area of importance for life insurers relates to the asset-liability matching requirements for unit-linked portfolios. The Solvency II regulation has opened up an opportunity for life insurers to enhance the capital position of unit-linked portfolios, at the same time as stabilising economic balance sheets.

Perhaps not surprisingly, such benefits come at a price, and insurers will have to decide whether the capital savings are sufficient to offset the operational complexities and a more volatile solvency coverage ratio.

Regular readers of this series may recall that we originally commentated on this topic in our research paper of July 2014, 'Capital management in a Solvency II world'. Since then, industry discussion—particularly in the UK and Ireland—has gathered momentum, with several major UK insurers conducting detailed investigations into the potential capital benefits on offer.

Reflecting the importance of the topic, the Institute and Faculty of Actuaries in the UK set up a working party in 2012 to explore the implications of unit-linked matching under Solvency II.

In this short paper, we explore the key considerations for life insurers to take advantage of the possible opportunities.

BACKGROUND TO THE REGULATORY TEXT

Article 23(1) of the European Communities Third Life Assurance Directive[1] states that:

Where the benefits provided by a contract are directly linked to the value of units in an UCITS[2] or to the value of assets contained in an internal fund held by the insurance undertaking, usually divided into units, the technical provisions in respect of those benefits must be represented as closely as possible by those units or, in the case where units are not established, by those assets.

This is generally interpreted to mean that the unit-linked liability to policyholders should be matched as closely as possible by the assets to which the value of the units is linked.

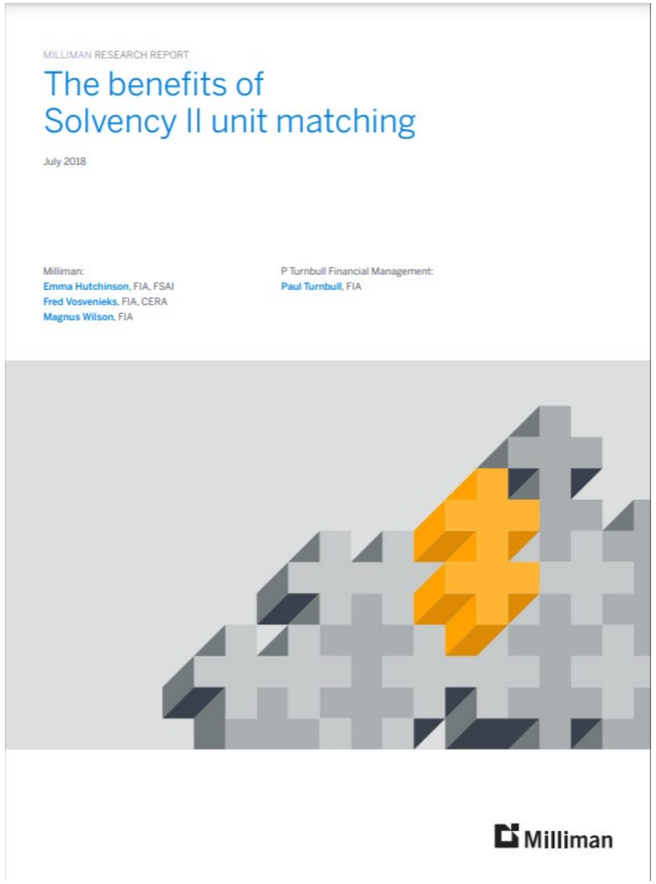
Under the current solvency regime, the non-unit reserves held in respect of expense and mortality liabilities on unit-linked contracts are not generally supported by unit-linked assets.

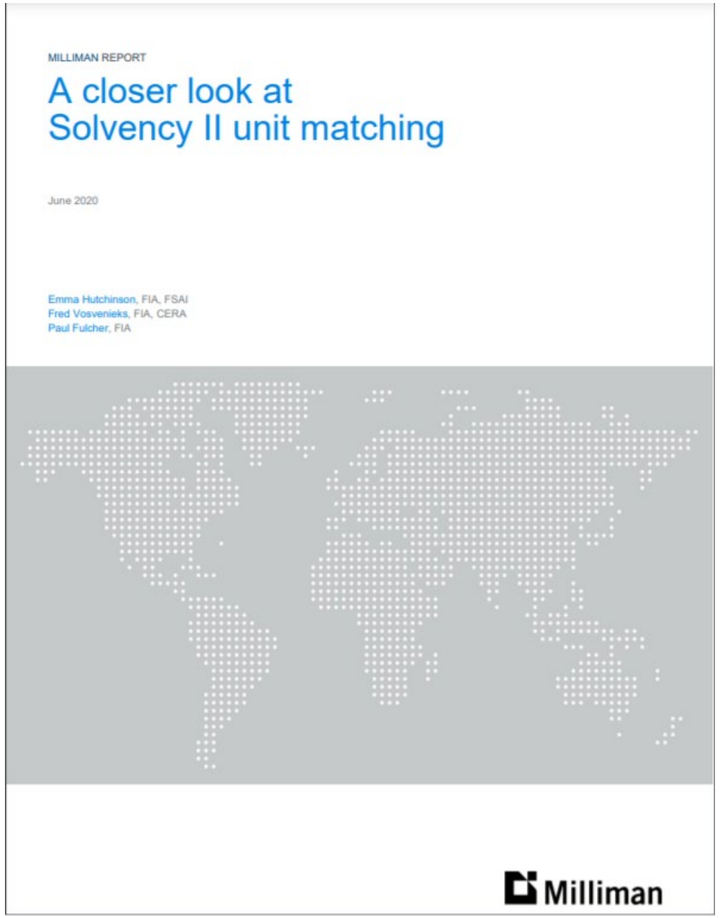
Under Solvency II, the 'prudent person principle' (Article 132 in the Solvency II Directive) also states that for unit-linked contracts:

The technical provisions in respect of those benefits must be represented as closely as possible by those units or, in the case where units are not established, by those assets.

[1] Council Directive 92/96/EEC of 10 November 1992 on the coordination of laws, regulations and administrative provisions relating to direct life assurance and amending Directives 79/267/EEC and 90/619/EEC (third life assurance Directive).

[2] Undertakings for Collective Investments in Transferable Securities.





Unit-linked matching under Solvency II

A closer look Solvency II unit matching

The benefits of Solvency II unit matching

Milliman

For more information:

https://ie.milliman.com/en-gb/insurance/solvency-ii

Kevin Manning
kevinv.manning@milliman.com

Milliman

Q&A session