2nd Capacity Building Seminar on IFRS17
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Premium Allocation Approach

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Agenda for today

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Recap on measurement models

Key highlights of IFRS17

- A more complex measurement model under IFRS 17 introduces **greater levels of system complexity and cost**

- Changes to financial statement presentation will drive **new key performance indicators** and MI requirements

- Enhanced disclosures requirements will **increase transparency of reserve adequacy and quality of earnings**

- Capacity to **leverage Solvency II** (although not applicable to every territory)
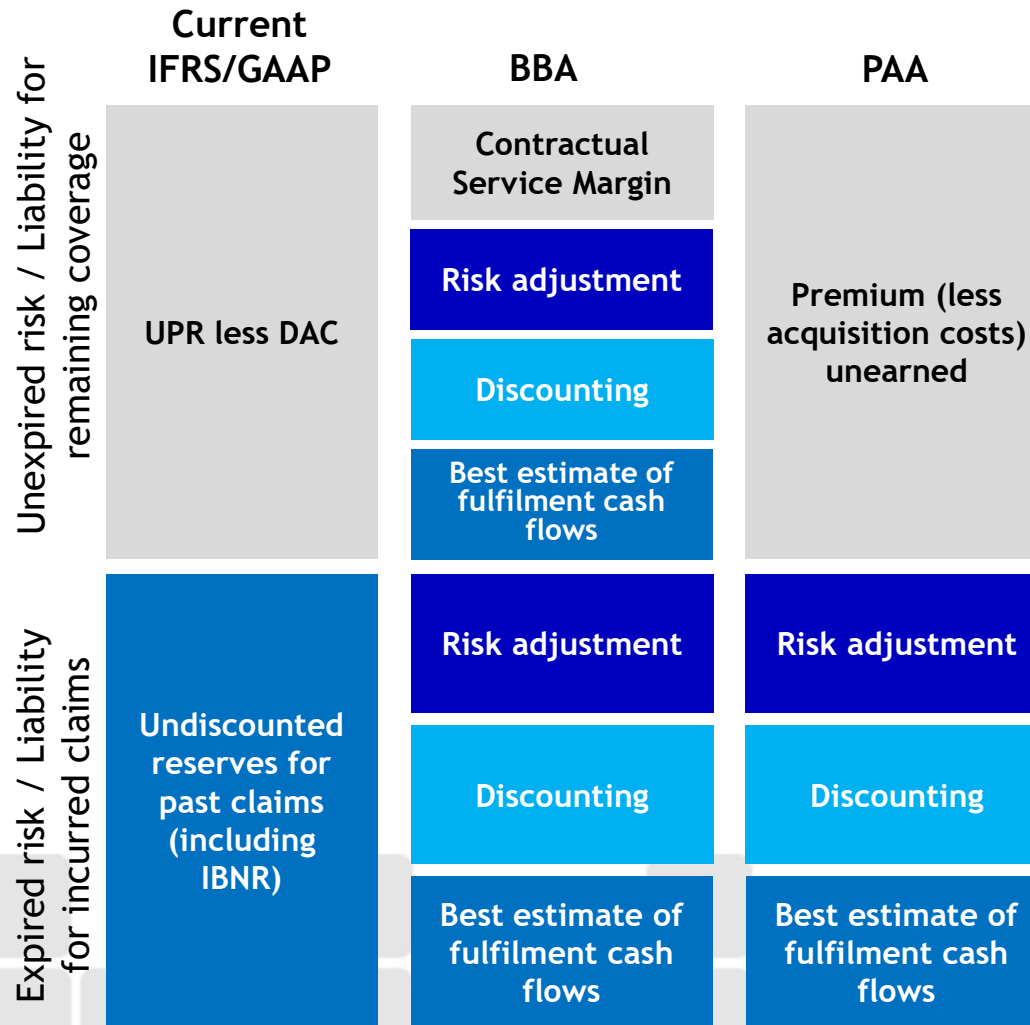
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IFRS 17 measurement models
Overview

	General model / Building Block Approach (BBA)	Premium allocation approach (PAA)	Variable fee approach
Why is it needed?	Default model for all insurance contracts	To simplify for short term contracts with little variability	To deal with participating business where payments to policyholders are linked to underlying items like assets
Types of contract	• Long-term and whole life insurance, protection business • Certain annuities • US style universal life • Certain reinsurance written • Certain general insurance contracts	• General insurance • Short-term life and certain group contracts	• Unit-linked contracts, US variable annuities and equity index-linked contracts • Continental European 90/10 contract • UK with profits contracts
Mandatory?	Mandatory	Optional	Mandatory

IFRS 17 measurement models

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	Current IFRS/GAAP	BBA	PAA
Unexpired risk / Liability for remaining coverage	UPR less DAC	Contractual Service Margin	Premium (less acquisition costs) unearned
		Risk adjustment	
		Discounting	
		Best estimate of fulfilment cash flows	
Expired risk / Liability for incurred claims	Undiscounted reserves for past claims (including IBNR)	Risk adjustment	Risk adjustment
		Discounting	Discounting
		Best estimate of fulfilment cash flows	Best estimate of fulfilment cash flows

Qualifying for the PAA

Automatically available for contracts with coverage period twelve months or less.

Inwards and reinsurance contracts are required to be considered separately, but mixed measurement models within a reportable segment could make results difficult to interpret.

Drivers of profit

Changes to yield curves will require better asset liability matching to manage income statement volatility.
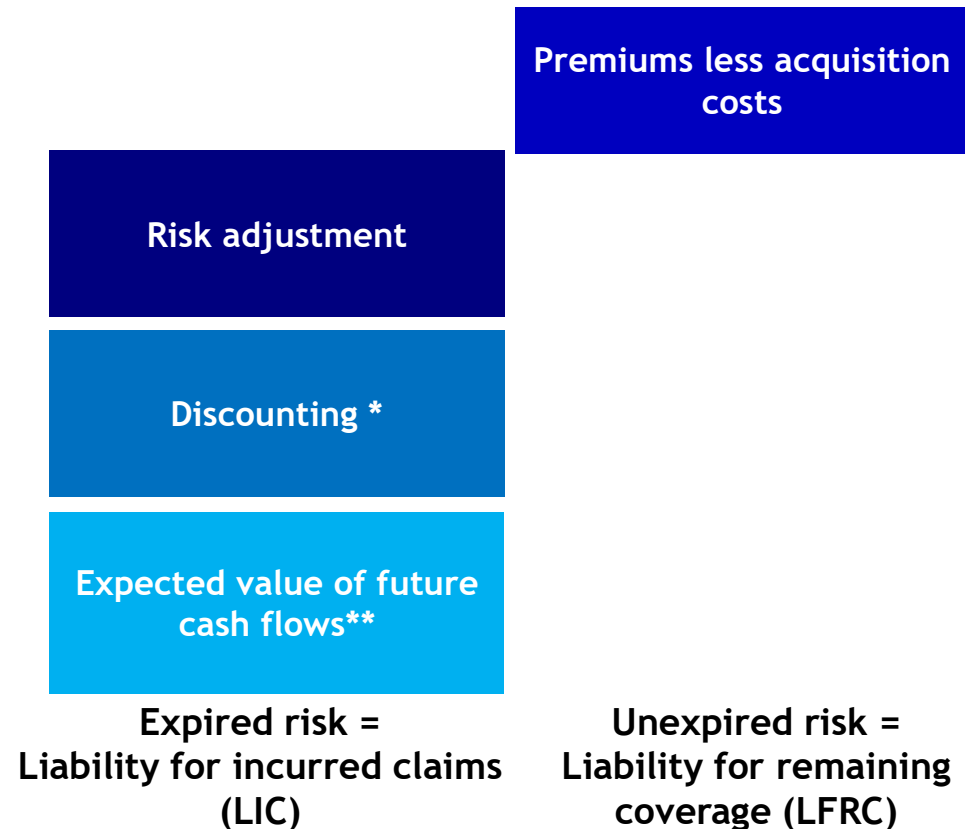
No prescribed method for measuring the risk adjustment but entity required to disclose methodology and expected to be consistent year on year.

* Size of blocks are for illustrative purposes only

Optional model for short term contracts
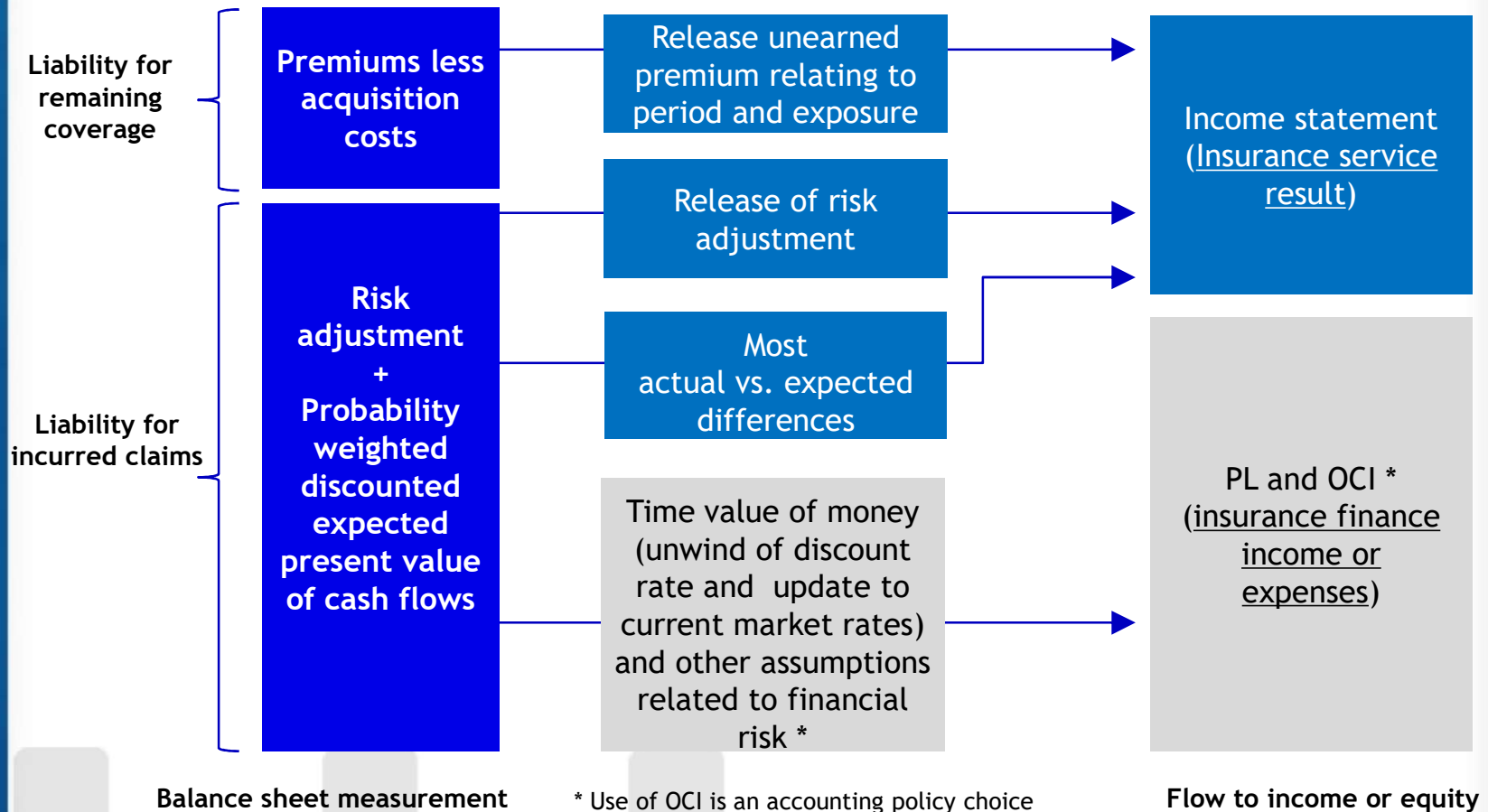## *Premium Allocation Approach (PAA)*

- Optional simplified model for future cover based on premiums.

- Permitted for short duration contracts (period of cover <= 1 year) or where "would not differ materially" from the BBA (LFRC only).

- 'would not differ materially' does not apply when entity expects significant variability in the pre claim cash flows.

- Incurred claims liability (including IBNR) calculated in the same way as for the BBA approach*.

Premiums less acquisition costs

Risk adjustment

Discounting *

Expected value of future cash flows**

Expired risk =
Liability for incurred claims (LIC)

Unexpired risk =
Liability for remaining coverage (LFRC)

* Additional simplification excludes discounting where cash flows are expected to be paid or received in one year or less.

** Probability weighted, essentially an unbiased mean.

Profit and Loss Recognition - PAA

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Liability for remaining coverage

Premiums less acquisition costs

Release unearned premium relating to period and exposure

Liability for incurred claims

Risk adjustment + Probability weighted discounted expected present value of cash flows

Release of risk adjustment

Most actual vs. expected differences

Income statement (Insurance service result)

Time value of money (unwind of discount rate and update to current market rates) and other assumptions related to financial risk *

PL and OCI * (insurance finance income or expenses)

Balance sheet measurement

* Use of OCI is an accounting policy choice

Flow to income or equity

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General measurement model in IFRS 17
Building Block Approach (BBA)

- General model for all insurance contracts.

- Based on discounted best estimate of future cash flows (in and out).

- Explicit margins:
    - Contractual service margin to prevent gain on policy inception.
    - Risk adjustment.

- Day 1 loss recognised in income statement.

- Cash flow approach for all liabilities: past claims (including IBNR) and future cover.

Contractual service margin	Unearned profits recognised over coverage period.
Risk adjustment	Reflect compensation entity requires for uncertainty. Quantifies the value difference between certain and uncertain liability.
Discounting	Discounting future cash flows using 'top-down' or 'bottom-up' approach for discount rates to reflect characteristics of the liabilities.
Best estimate of fulfilment cash flows	Best estimate cash flows – explicit, unbiased and probability weighted estimate of fulfilment cash flows.

Expired and unexpired risk

Similar to SII* but with the additional contractual service margin

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PAA Eligibility - overview

PAA eligibility
Tougher than it looks...

Factors to consider	Decision tree (see paragraph 53)		Impact on lines of business
Contract boundaries under IFRS 17 (different to current standard and Solvency II)	**Is the coverage period one year or less?** → Yes → **PAA is automatically applicable**		All (re)insurance contracts with coverage period of one year or less
Variability in your expectation of the present value of future cashflows	**At inception, would the PAA differ materially from the BBA (LFRC only)?** → No → **May be possible to construct an argument that PAA is applicable**	No (from coverage period)	Property damage type multi-year policies of 2 to 3 years, some reinsurance contracts (e.g. risk attaching)
No definition of "material" or "significant"	**Is significant variability in the fulfilment cashflows expected (which may affect the measurement of the liability for remaining coverage during the period before a claim is incurred)?** → ? → **More difficult to construct an argument that PAA is applicable**		Construction, energy, engineering, A&H, D&O, credit, surety and long duration property damage type multi-year policies

An approach to assessing PAA eligibility
Premium Allocation Approach (PAA)

At inception, would the PAA differ materially from the BBA (LFRC only)?

Is significant variability in the fulfilment cashflows expected (which may affect the measurement of the liability for remaining coverage during the period before a claim is incurred)?

→ May be possible to construct an argument that PAA is applicable

Using contract boundaries:

Pros:

• Allows for a quick analysis

• Can take account of contract wording, such as re-rating clauses and cancellation terms

Cons:

• Need to look through binders and risk attaching during ("RAD") policies

• Cannot provide definitive "proof"

Using actuarial modelling:

Pros:

• Provides definitive proof

• Can allow for a range of scenarios and assumption sensitivities

Cons:

• Time intensive

• Requires specialist resource

Initial recognition

Earliest of when

- Coverage period starts
- First payment from policyholder is due or actually received
- A group of contracts becomes onerous

Binders

Reinsurance

Recognition
Contract boundaries

Is the cash flow in the boundary of an insurance contract?

No ← **Policyholder obliged to pay related premiums?** → Yes

OR

Yes ← **Practical ability to reprice risks of the particular policyholder to reflect the risks?**

No

Practical ability to reprice portfolio of contracts to reflect the risks? → No

Yes

No ← **Premiums reflect risks beyond the coverage period?** → Yes

OUT

IN
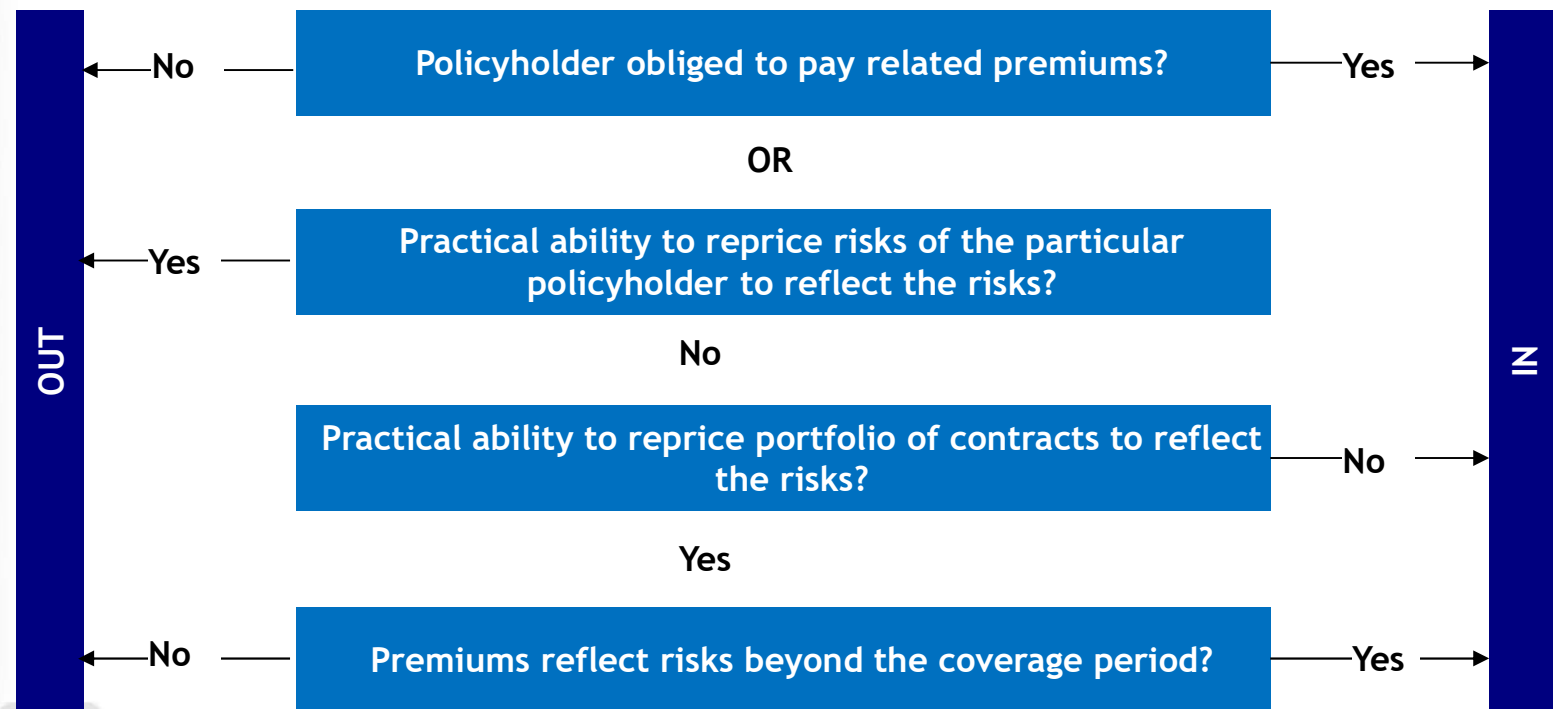
Level of aggregation
Recap

1. Objective

| Profitable vs onerous contracts | No CSM at the end of coverage period |

2. Aggregation requirements

Top-down approach:
Start at portfolio level (similar risks, managed together)

3 groups at inception:
- Onerous;
- Profitable with no significant risk of becoming onerous; and
- Other profitable contracts

Risk of contracts becoming onerous:
- Internal reporting
- Sensitivity of fulfilment cash flows

Requires that a group shall not include contracts issued more than one year apart

=> Effect of regulation

Some laws or regulations prevent insurers from pricing for certain risk indicators (e.g. gender)

If a law or regulation specifically constrains
- insurer's practical ability to set a different price or level of benefits for policyholders with different characteristics...
- then ignore that characteristic for grouping (e.g. male or female drivers)

3. CSM allocation

Based on coverage units, reflecting the expected quantity of benefits and expected coverage duration of the contracts in the group

PAA benefits
Summary

1. **Similarity to current** measurement model for calculating unexpired risk

2. **Less** complex both operationally and for financial reporting than the alternative BBA.

3. In particular, no requirement to separately identify and calculate a **Contractual Service Margin (CSM)**

4. PAA model **assumes there are no onerous contracts** (unless facts and circumstances indicate otherwise), reducing the requirement to always monitor, track and revalue such groups of contracts.

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PAA eligibility – in detail

PAA eligibility
Some definitions

1. This assessment should be performed at a **group of contracts level** (a "group"), rather than a portfolio level. Therefore it is reasonable to identify groups of contracts that exhibit features of contract boundaries that are greater than 12 months, and perform the analysis at that level.

2. The Standard does not define what is meant by **'reasonably expects'** and judgement will be required in making this determination. At inception of a group of contracts, need to consider a range of potential scenarios that can be reasonably expected to occur in each future reporting period within the coverage period, compare the liability for remaining coverage ('LFRC') using the BBA and the LFRC using the PAA. As such a range of **sensitivity tests** should be performed to determine the reasonableness of the occurrence of each circumstance.

3. If the expected balance of the LFRC under the PAA model compared to the expected balance of the LFRC under the BBA is **within the insurer's quantitative thresholds under all reasonably expected scenarios**, the PAA approach may be used.

PAA eligibility
Contract boundaries – one categorisation

| Group A | Groups that exclusively include insurance contracts with coverage periods of twelve months or less |

| Group B | Groups of insurance contracts with a coverage periods **less than or equal to 12 months and an immaterial value** of gross written premiums with coverage periods greater than 12 months |

| Group C | Groups of insurance contracts including a material value of gross written premiums with coverage periods **greater than 12 months but less than 36 months** |

| Group D | Groups of insurance contracts which include a material value of gross written premiums with coverage periods **greater than 36 months** |

This is an example. Must consider:
- What categorisation is right for your business?
- What level of materiality should be used (see auditor's report)?
- What sensitivity tests should be used to meet the 'reasonably expects' criteria?

PAA eligibility
Examples of sensitivity tests

1. **Yield curve stresses** - changes in yield curves are reasonably expected to arise throughout the duration of a policy, for a longer term policy

2. **Expected claims ratio** - it is reasonably expected that expectation of future claims experience could change over the duration of a policy.

3. **Policy length variation** – applied in the case of 'open ended' policies where the duration is not clear at the outset

PAA eligibility
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PAA eligibility
Modelling process

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PAA eligibility
Modelling process

Select testing scope – several groups identified in each territory / business unit?

Identify maximum variability in cashflows – BBA less PAA, as a % of BBA result

Agree threshold percentage above which a materiality assessment must be made

Model a single annual cohort – each point in time represents the LFRC for that cohort

PAA eligibility
Modelling process

Liability for Remaining Coverage BBA vs PAA
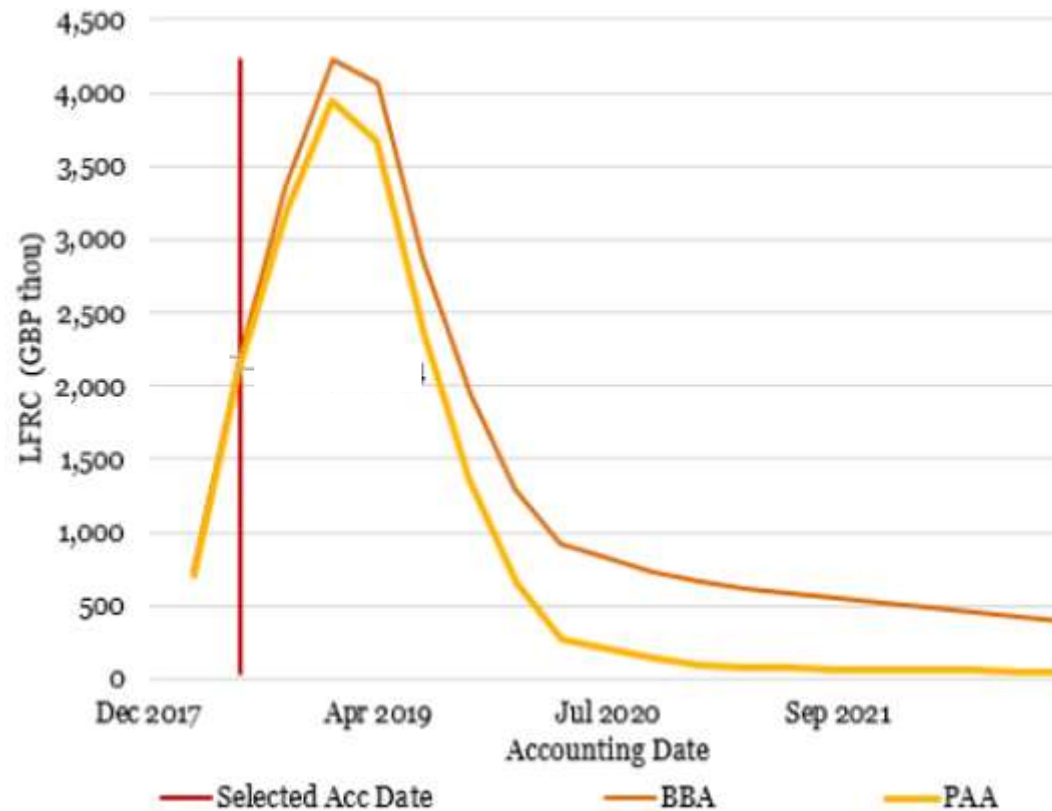
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The risk adjustment in GI

Risk adjustment
What the standard says

High Level Principles

- *The risk adjustment is a compensation for bearing the uncertainty around the timing and amount of cashflows arising from non-financial risk.*
- *It is the amount which should make an entity indifferent between certain and uncertain cashflows.*

Calculation Requirements

1. *Risks with low frequency and high severity will result in higher risk adjustments for non-financial risk than risks with high frequency and low severity;*
2. *for similar risks, contracts with a longer duration will result in higher risk adjustments for non-financial risk than contracts with a shorter duration;*
3. *risks with a wider probability distribution will result in higher risk adjustments for non-financial risk than risks with a narrower distribution;*
4. *the less that is known about the current estimate and its trend, the higher will be the risk adjustment for non-financial risk; and*
5. *to the extent that emerging experience reduces uncertainty about the amount and timing of cash flows, risk adjustments for non-financial risk will decrease and vice versa.*

Additional Guidance

The risk adjustment should also reflect:

1. *the degree of diversification benefit the entity includes when determining the compensation it requires for bearing that risk; and*
2. *both favourable and unfavourable outcomes, in a way that reflects the entity's degree of risk aversion.*

Risk Adjustment
In practice

As shown in the previous slide, IFRS 17 provides:
- *High level principles to be considered when determining a risk adjustment; and*
- *A set of guidelines to follow in the calibration of the adjustment.*

The Standard does not dictate, however:
1. *The methodology to be used; or*
2. *The calibration of that methodology (for example, the percentile to be booked at).*

Therefore insurers will need to make a decision on:
1. *Method used - such as cost of capital, confidence level or scenario based approaches*
2. *Calibration of that method - including selecting a percentile or determining the 'return on capital' assumption*
3. *Allocation - as risk adjustment will need to be allocated down to a portfolio level for the assessment of onerous contracts*

Risk Adjustment
Contentious market issues

One year vs ultimate
- Although the standard does not explicitly state the time horizon over which to measure risk, industry papers suggest that because the standard mentions the risk associated with the "fulfilment" of a contract, this likely relates to an ultimate view of risk.

Risk adjustment on the LFRC
- It has not yet been explicitly stated whether the overall risk adjustment methodology should calculate the risk adjustment attributable to the LFRC, or whether the risk adjustment should be based on a reserve risk distribution, with an approximation applied to determine the risk adjustment on onerous contracts.

Risks in scope
- The risks which need to be captured within the IFRS 17 risk adjustment may differ from those included in existing models. The risk adjustment should only reflect risks attributable to and related to fulfilment of insurance contracts. Therefore risks such as general operational risk which persist regardless of whether a set of contracts are written would need to be excluded.

Thank you

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