



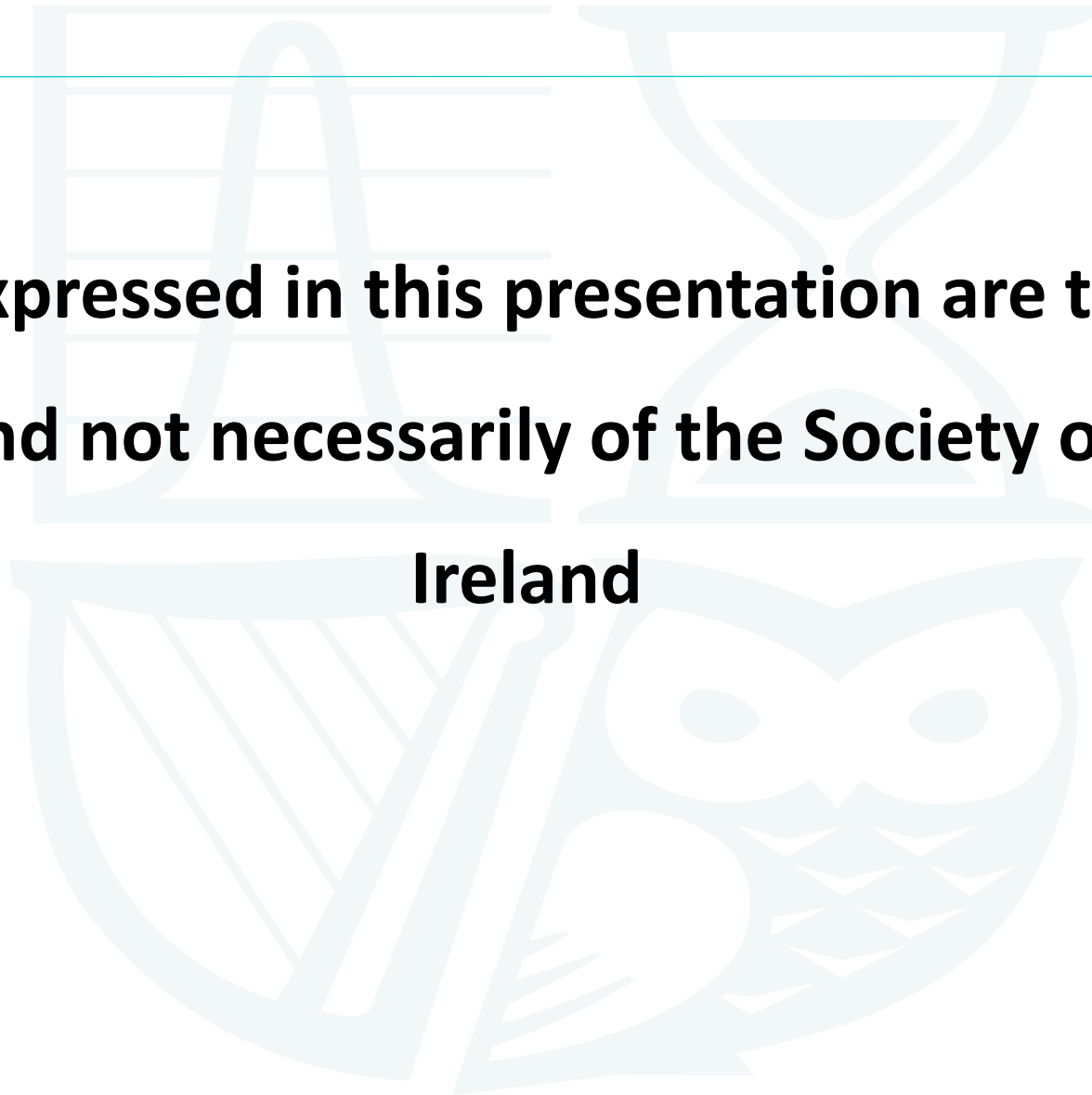
Society of Actuaries in Ireland

IFRS 17 – A Non-Life Perspective

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Disclaimer

The views expressed in this presentation are those of the presenter(s) and not necessarily of the Society of Actuaries in Ireland



Agenda

- Review of Non-Life relevant TRG papers
- Specific Non-Life Issues
 1. Premium Allocation Approach
 2. Reinsurance
 3. Aggregation
 4. Risk Adjustment
- Overview of IFRS 17 issues for Non-Life (Re)Insurers
- Financial Impact Assessment considerations
- Questions

Review of Non-Life relevant TRG papers



Summary of TRG Topics

Separation of insurance components of a single insurance contract

- Examples: A commercial contract that includes both coverage for workers compensation and general liability coverage **or** a contract that includes one year coverage for medical expenses and two years of motor coverage
- TRG Members observations:
 - Lowest unit of account used under IFRS 17 is the contract that includes all insurance components **AND**
 - Entities would usually design contracts in a way that reflects their substance **BUT...**
 - May be circumstances where legal form of a contract does not reflect the substance => not an accounting policy choice
- Factors to consider:
 - Can one be cancelled without the other?
 - Can the components be sold separately?
 - Are the cash flows available separately?



Summary of TRG Topics

Boundary of reinsurance contracts held

- Paragraph 34 of IFRS 17 – how to determine whether cash flows are within the boundary of an insurance contract
 - “compel the policy holder to pay premiums” and “substantive obligation to provide services”
 - Not directly applicable to reinsurance contracts held
- TRG view:
 - Substantive right is to receive services from the reinsurer
 - Substantive obligation is to pay amounts to the reinsurer
 - Right ends when reinsurer has practical ability to reassess risk/terminate the contract
- Could include cash flows from future underlying contracts
- What happens in the case of a contract where reinsurer has right to cancel at any time with a three month notice period?



Summary of TRG Topics

Insurance acquisition cash flows paid and future renewals

- How to account for acquisition cash flows unconditionally paid for each initially written contract were:
 - Expects renewals outside the contract boundary to occur; and
 - Has written new business with that expectation.
- Example:
 - Commission paid for each initially written insurance contract, and is greater than the premium
 - Contract boundary of one year
 - Expects a substantial number of renewals over a number of years
- TRG Views:
 - Acquisition cash flows that are directly attributable to individual contracts should be included in the measurement of the group to which the individual contract belongs, and not other groups within the portfolio
 - In above case, commission cannot be allocated to future groups => included within group to which initial contract belongs
 - Initial contract and not renewals => not in same group => initial contract is onerous and renewal is not
- Impact of acquisition cash flows on profitability of contract – important consideration

Premium Allocation Approach

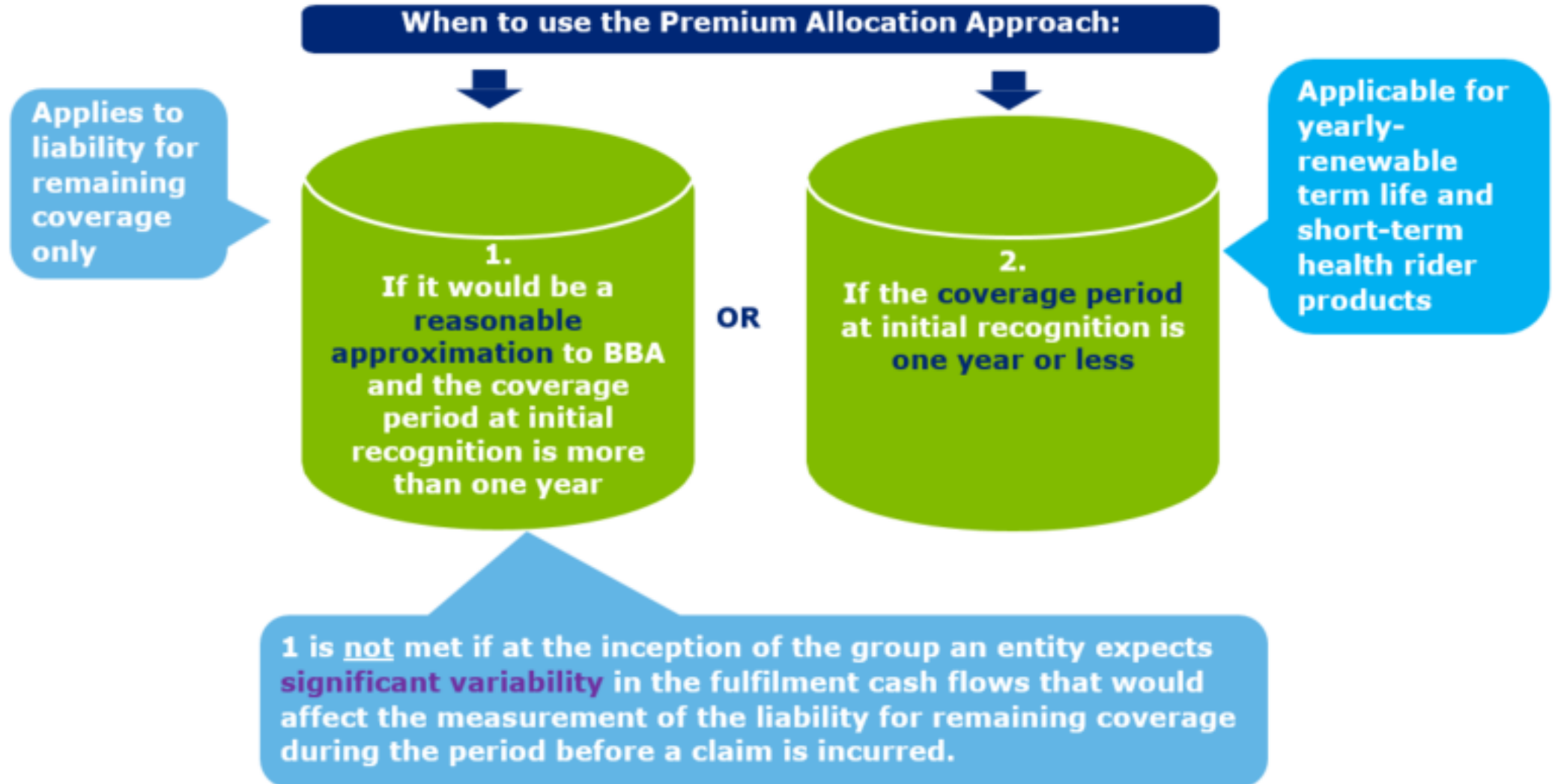


Introduction to the Premium Allocation Approach

- Premium Allocation Approach (PAA) is a **simplified approach** to measuring the **Liability for Remaining Coverage (LRC) only**.
- The key simplification is to **exempt** the insurer from calculating and explicitly **accounting for the CSM**, the main component of the liability for remaining coverage.
- It does not apply to the **Liability for Incurred Claims (LIC)** for which the general measurement model/**Building Block Approach (BBA) always applies**.
- The primary impact of the PAA is that it allows **non-life insurers** to continue to use their process and systems for calculating **unearned premiums amounts**.



Premium Allocation Approach - Eligibility

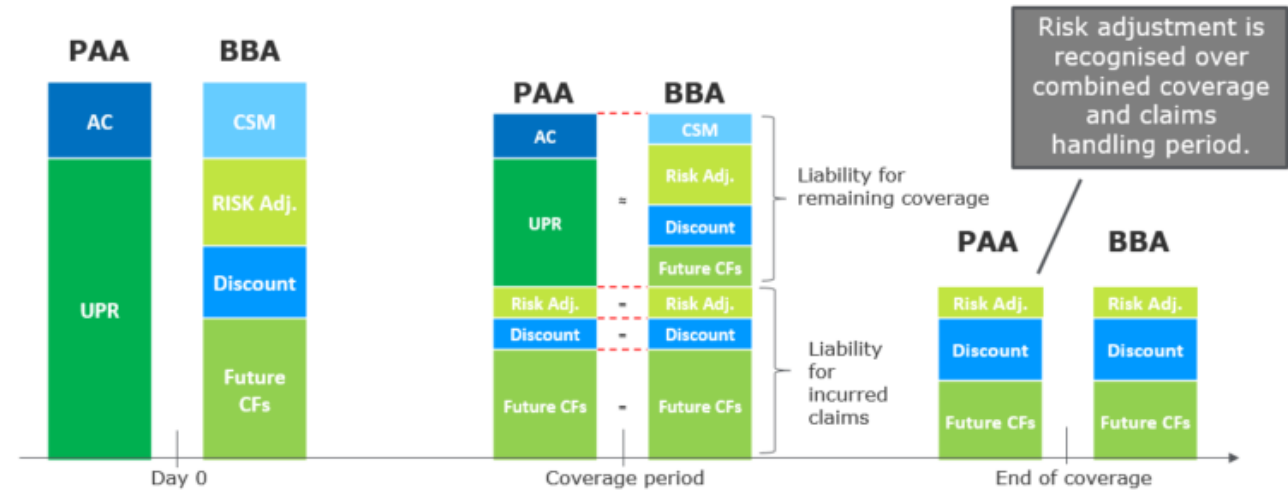




Premium Allocation Approach – BBA vs PAA

Key simplifications:

- **Onerous contracts** – calculation at initial recognition not required
- **Discounting** – may not be necessary to discount the LIC or LRC
- **Expenses** – option to recognise as an expense as they are incurred



Acronym key	
AC	Acquisition cash flows
UPR	Unearned premium reserve
BBA	Building block approach
PAA	Premium allocation approach
CFs	Cash flows



Key Issues - Premium Allocation Approach

- **PAA eligibility testing and ongoing monitoring**

- What happens in the case of a company with 90% one year business and 10% business greater than one year?
- Framework around PAA eligibility testing - “reasonable approximation”
- Pattern of release / Profit signature under BBA and PAA
- Eligibility being met for long term business?
- Materiality considerations
- Product redesign

- **Onerous Group considerations**

- “facts and circumstances” – what are the triggers?

- **PAA LRC based on premium received**

- Revenue recognised on **expected** premium receipts – can produce counterintuitive results

Reinsurance



Reinsurance under IFRS 17

- Measured separately from direct insurance contracts

Inconsistencies between direct and reinsurance treatment:

- **Measurement models**

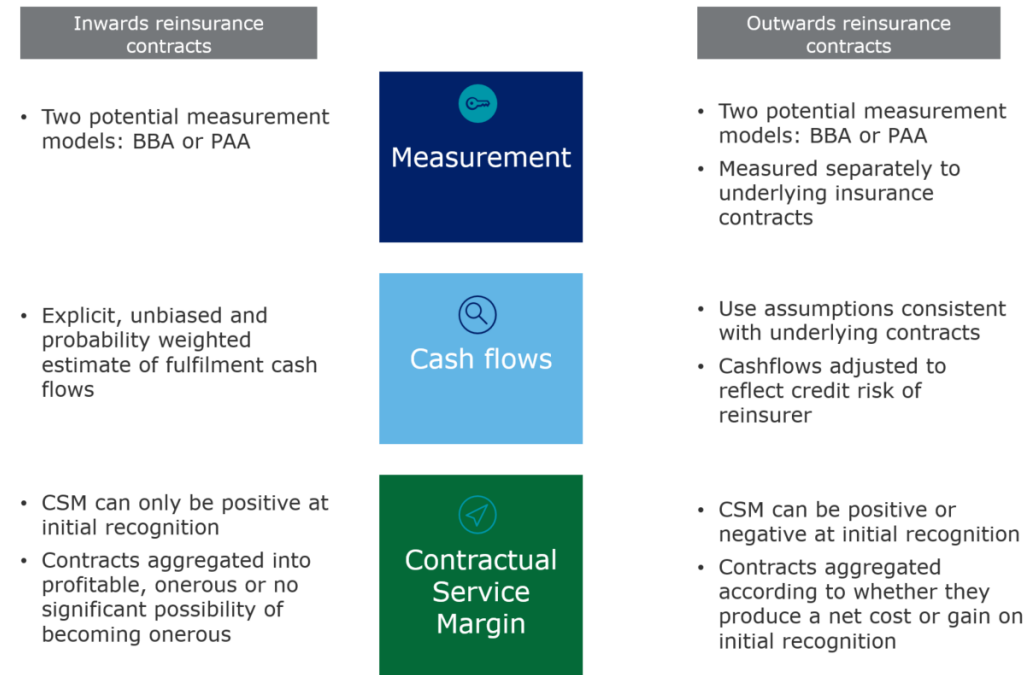
- VFA model cannot be applied to a reinsurance contract held or issued – is this really appropriate?
- PAA eligibility determined separately – risks attaching vs. losses occurring

- **Recognition criteria** – proportional vs. non proportional

- **Example**

- Outwards non-proportional reinsurance contract with coverage period beginning 1 January
- First payment due on 1 December

- **Aggregation** – net cost or net gain on initial recognition





Key Issues – Reinsurance under IFRS 17

- **Reinsurance covering multiple classes of business, multiple years etc.**
 - Unit of account
 - Allocation
- **Data issues**
 - Delay in receipt of data, reliance on ceding company for information etc.
- **Consideration of reinsurance specific items**
 - Reinstatements, retrospective reinsurance, funds withheld arrangements etc.
- **Restructuring of reinsurance programmes to ensure alignment**

Aggregation



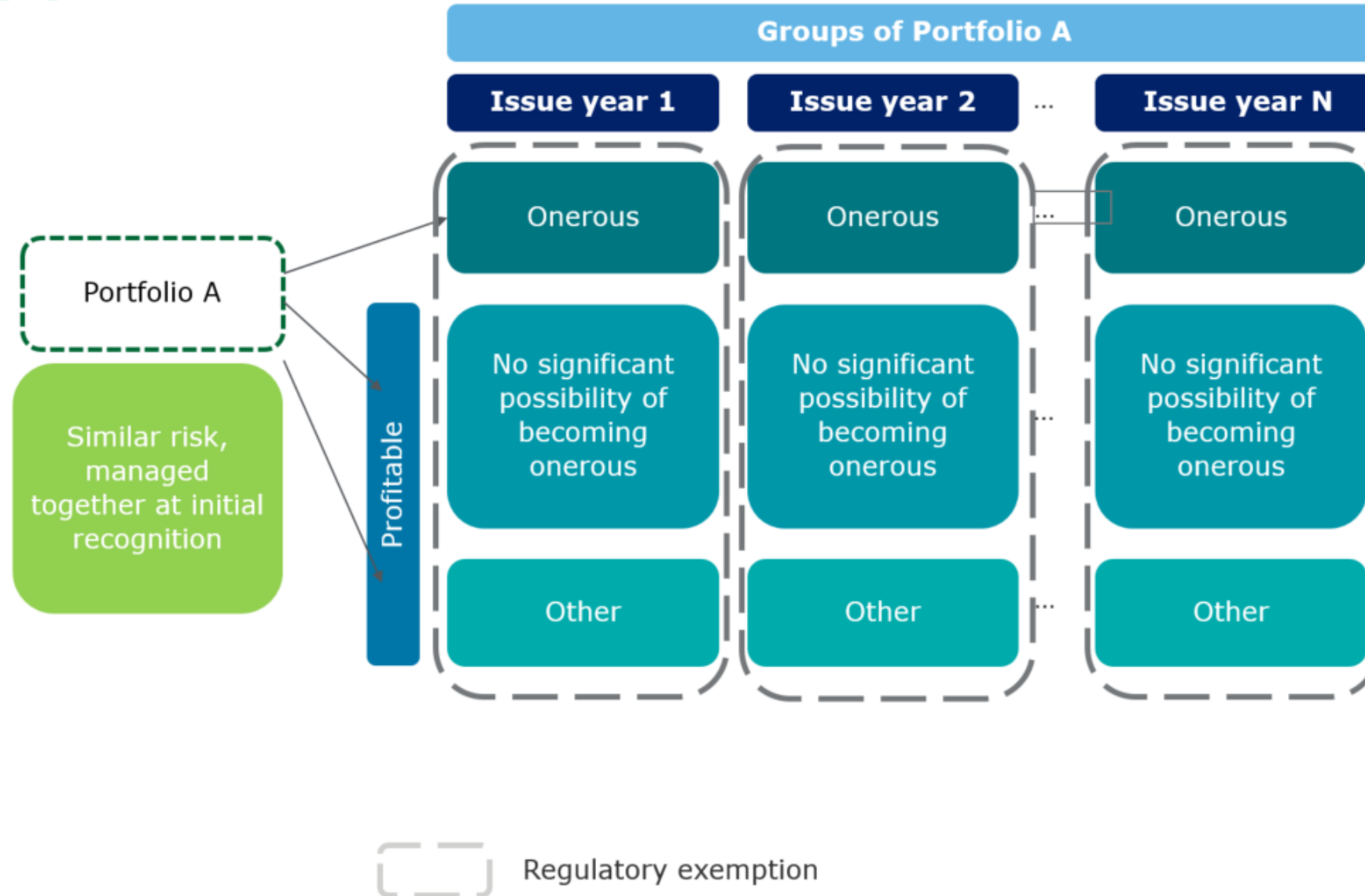
Aggregation Requirements under IFRS 17

- A **portfolio** is a group of contracts subject to **similar risks and managed together** as a single pool.
- The portfolio is then required to be disaggregated into **groups** of insurance contracts that at inception are:
 - A. Onerous
 - B. Profitable with no significant risk of becoming onerous; and
 - C. Other profitable contracts
- Decreasing ranking of the risk-adjusted profitability of the groups (B, C, A). B is the highest ranking risk-adjusted profitable group and A is the lowest (A is actually expected to be loss making).
- Further disaggregation of the specified groups is permitted.
- Only contracts issued **within the same twelve-month period** are permitted to be grouped. Groups for shorter periods are permitted.
- Groups established at initial recognition and the composition **shall not be reassessed** subsequently.



Aggregation Requirements under IFRS 17

Aggregation of contracts





Key Issues – Portfolio Aggregation

- **What are insurers used to?**

- Managing by product line
- Underwriting Year vs. Accident Year

- **What is meant by “similar risks”?**

- Rating factor level vs. less granular (e.g. product level)
- Multi-peril
- Definition (e.g. reliance on Internal Management Reporting Systems)

- **What is meant by “managed together”?**

- Distribution channels (Direct/Broker), risk covers (BI/OD/TPL) – emerging views
- Consider level at which book is managed vs. monitored (MI reports)
- Contract with distinct risks managed separately



Key Issues – **Group** Aggregation

- **Expectation of three profitability groups in practice?**
 - Difficult to conclude “no significant possibility of becoming onerous”
 - Consumer protection perception – risk transfer?
 - Emergence of two profitability groups – onerous and other profitable contracts
- **Criteria for calculation of profitability**
 - Individual contract vs. set of contracts
 - Randomness vs. strategic/marketing/operational pricing
 - Reserving vs. pricing information and at appropriate level
- **Other considerations**
 - Allocation of cash flows to groups (consider mapping to SII classes)
 - Define allocation process (ongoing), Analysis of change for groups, Explainable by the Board, Supported by Auditors

Risk Adjustment



Risk Adjustment

- Risk adjustment for non-financial risk measures the **compensation** that the entity requires for it to be **indifferent/neutral between** fulfilling a liability that:
 1. Has a **range** of possible outcomes arising from non-financial risk; and
 2. Will generate **fixed** cash flows with the same expected present value as the insurance contracts.
- Risk adjustment is the **compensation** that the entity requires for bearing **uncertainty** around the **amount and timing** of cash flows that arise from non-financial risk.
- Risk adjustment reflects:
 - a) **diversification of risks** the insurer considers, and
 - b) both **favourable and unfavourable outcomes** reflecting the entity's degree of risk aversion.
- Risk adjustment reflects **all non-financial risks** associated with the insurance contracts. It shall not reflect financial risks or risks that do not arise from the insurance contracts.
- The risk adjustment is an **entity specific** measurement.



Risk Adjustment

IFRS 17 does not specify the technique to determine the risk adjustment.

Three main methods commonly discussed in market today:

A

Cost of capital

- Disclosure of **confidence level** required irrespective of the technique used to measure the risk adjustment.

B

Quantile (e.g. Value at Risk or Conditional Tail Expectation)

- Risk adjustment is **explicit** - balances for unexpired coverage liability and for claims liability must be disclosed separately.

C

Explicit assumption (e.g. factor-based or judgment based on experience studies)



Key Issues – Risk Adjustment

- **Solvency II Risk Margin vs IFRS 17 Risk Adjustment**

- Appropriateness of underlying assumptions

- Bias of adverse outcomes, CoC rate, 1 year vs lifetime of FCFs

- SII capital risks not considered under IFRS 17 - operational, market, non-reinsurer credit

- Confidence level

- Gross and reinsurance risk adjustment

- **Level of aggregation**

- Entity level vs. Portfolio/Group level – practical impacts

- Allocation methodology

- Simulation (Dependencies – structure, parameters, validation)



Key Issues – Risk Adjustment

- **Entity specific measurement**

- Consistent with “degree of risk aversion” (Business economic objectives, Risk controls, Governance)
- Risk Appetite Statement – articulate insurance risk

- **Modelling considerations**

- Uncertainty – Risk Aversion – Diversification – Quantification – Communication
- Treatment of cash inflows vs. cash outflows

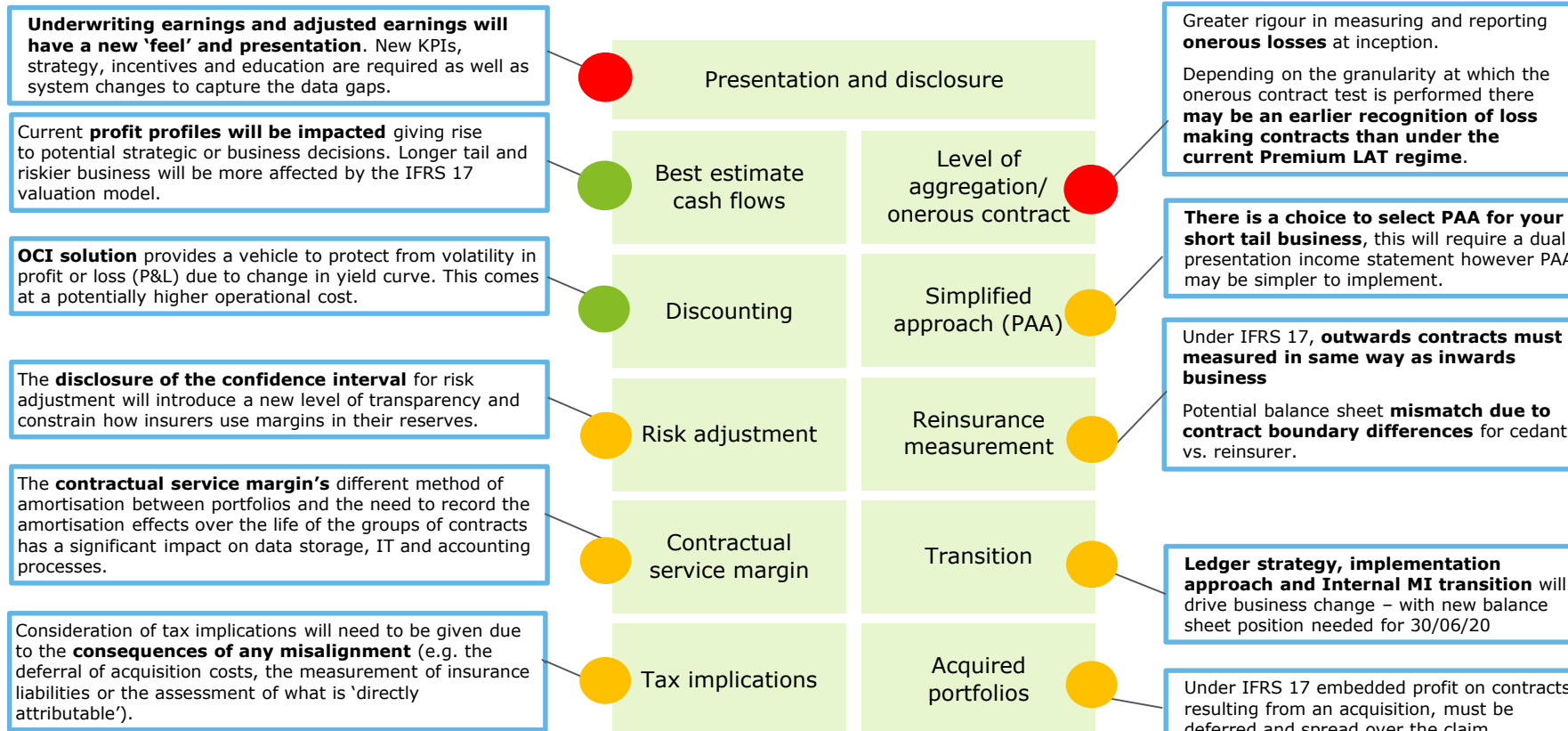
- **Other considerations**

- Efficient process for running at each reporting period
- Disclosure – derivation of distribution of FCFs, confidence level, PAA approach
- Validation and re-measurement

IFRS 17 Issues for Non-Life (Re)Insurers



IFRS 17 Issues for Non-Life (Re)Insurers



- Significant change required to meet the IFRS 17 technical requirement
- Moderate change required to meet IFRS 17 technical requirement
- Low change required to meet IFRS 17 technical requirement

Financial Impact Assessment considerations



Financial Impact Assessment considerations

Now that we are all familiar with the standard..... what is involved in a Financial Impact Assessment (FIA) under the new IFRS 17 requirements?

- What measurement model is appropriate for each IFRS 17 cohort?
- What are the key assumptions/data inputs that are required?
- What will my calculations look like?
- What will my output look like?

Why start now?

- Understand impact of IFRS 17 on assets and liabilities
- Understand the impact on how profit emergence may change over time
- Understand the impact on the income statement and balance sheet disclosures
- Understand the impact of different implementation choices

The results of the FIA may inform changes in product design, reinsurance programme etc.



Financial Impact Assessment considerations



Inputs



Calculation



Outputs

Assumptions



Description: This worksheet list out the liability and economic assumptions (input)

Payment Pattern Assumptions

Development Quarter	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Cumulative Payment Pattern (UW Q)	1%	1%	2%	3%	5%	8%	11%	15%	20%	25%	30%	35%	40%	45%

Earnings Pattern Assumptions

Calendar Quarter	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Earnings Pattern for one quarter of exposure	3%	3%	3%	3%	8%	8%	8%	8%	7%	7%	7%	7%	5%	5%
Earnings Pattern for full annual exposure	1%	2%	2%	3%	4%	6%	7%	8%	8%	8%	7%	7%	7%	6%
Earnings Pattern for CSM	4%	4%	4%	4%	10%	10%	10%	10%	4%	4%	4%	4%	3%	3%

Premium Assumptions

Calendar Quarter	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Single Premium received (e.g. annual premium paid once)	100	100	100	100	0	0	0	0	0	0	0	0	0	0
Premium received monthly or quarterly	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Written Premium	100	100	100	100	0	0	0	0	0	0	0	0	0	0
Gross Earned Premium	3	6	9	12	17	22	27	32	31	30	29	28	26	24
Unearned Premium Reserve	97	191	282	370	353	331	304	272	241	211	182	154	128	104

Claims Assumptions

Expected payments - claims and direct CHE

Calendar Quarter	ULR %	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Q1	45%	0.2	0.2	0.5	0.5	0.9	1.4	1.4	1.8	2.3	2.3	2.3	2.3	2.3	2.3
Q2	45%	0.0	0.2	0.2	0.5	0.5	0.9	1.4	1.4	1.8	2.3	2.3	2.3	2.3	2.3
Q3	45%	0.0	0.0	0.2	0.2	0.5	0.5	0.9	1.4	1.4	1.8	2.3	2.3	2.3	2.3
Q4	45%	0.0	0.0	0.0	0.2	0.2	0.5	0.5	0.9	1.4	1.4	1.8	2.3	2.3	2.3

BE Claims Reserve (incl Direct CHE)	1	3	7	11	16	23	31	40	47	53	58	61	64	66
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Expense Assumptions

Calendar Quarter	Ratio %
Directly Attributable Acquisition Costs	14%
Indirect Expenses and contract-related overheads	5%
Allocation of all other overheads	3%

Risk Margin assumption for Risk Adjustment

Risk Margin % of PVF cash outflows for Risk Adjustment	12.00%
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Financial Impact Assessment considerations



Inputs



Calculation



Outputs

PAA Calculations



Year	1	1	1	1
Quarter	Q1	Q2	Q3	Q4
IFRS 17 (Balance Sheet) - PAA				
Unearned Premium Reserve	97	191	282	370
Premium due to be received	0	0	0	0
Unamortised Acquisition Cost	13	26	39	51
Post claims liability	2	5	9	15
<i>Undiscounted mean estimate</i>	1	3	7	11
<i>Claims handling Provision</i>	0	0	0	1
<i>Risk Adjustment</i>	1	2	3	5
<i>Discount-Original Rate</i>	0	0	-1	-1
<i>Discount Change to current rate</i>	0	0	0	0
Onerous Contract Charge	0	0	0	0
Onerous Contract Charge + Change	0	0	0	0
Gross Insurance contract Liability- PAA	85	169	252	334
Reinsurers share of UPR	32	64	94	124
RI Share of Prem receivable	0	0	0	0
Reinsurance assets- Post claims liability	1	2	5	8
<i>RI share of Incurred Claims liability</i>	1	2	3	6
<i>Adjustment for expected non- payment</i>	0	0	0	0
<i>Discount-Original Rate</i>	0	0	0	-1
<i>Discount Change to current rate</i>	0	0	0	0
<i>Risk Adjustment</i>	0	1	2	3
Reinsurance Share of Insurance Contract Liability	33	66	99	131
Net Insurance contract Liability- PAA	52	103	154	203

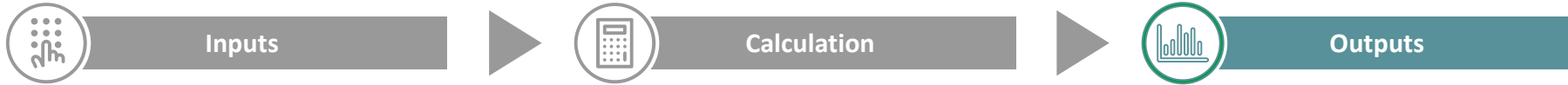
PAA Calculations



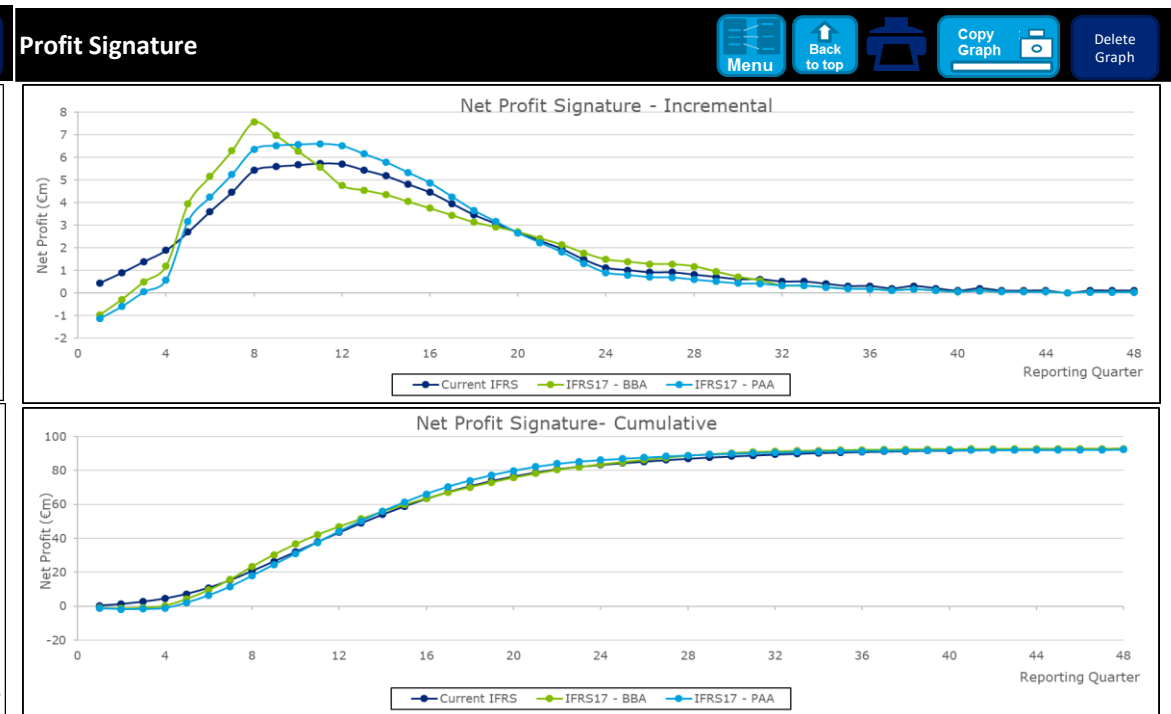
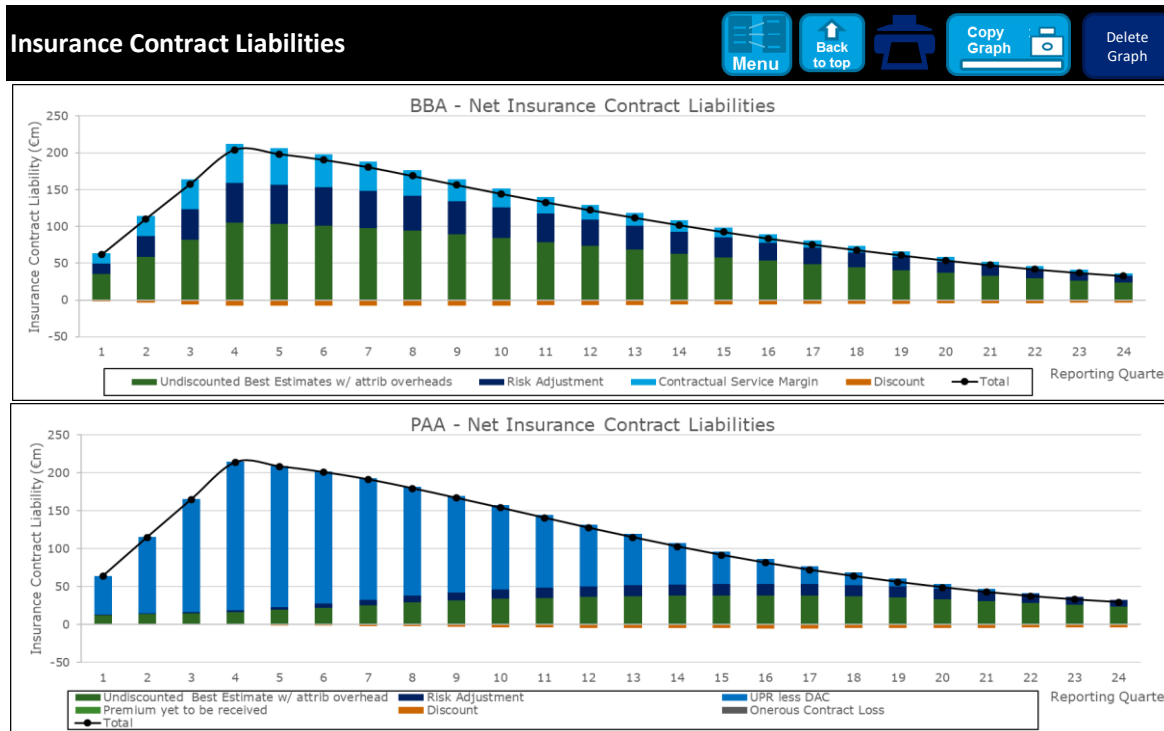
Year	1	1	1	1
Quarter	Q1	Q2	Q3	Q4
IFRS 17 (Income Statement) - PAA				
Insurance Contract Revenue	3	6	9	12
Insurance contract expense	-2	-5	-7	-9
Incurred Claims	-1	-3	-4	-5
Movement of Risk Adjustment related to claims provision	-1	-1	-1	-2
Onerous Contract Loss	0	0	0	0
Amortised Acquisition Costs	0	-1	-1	-2
Reinsurance Contract expense	-1	-2	-3	-4
Reinsurance Contract Recoveries	1	2	3	4
<i>RI Share of incurred claims</i>	1	1	2	3
Movement of Risk Adjustment related to claims provision	0	1	1	1
Insurance Finance Income/Expense	0	0	0	0
Gross Unwind of Discount-Original Rate	0	0	0	0
Gross Impact of change in current Discount Rate	0	0	0	0
RI Share Unwind of Discount-Original Rate	0	0	0	0
RI Share Impact of change in current Discount Rate	0	0	0	0
Attributable and Non-attributable Overhead expenses Incurred in Qtr	0	0	0	-1
Non-attributable Acq expenses Incurred in Quarter	-2	-2	-2	-2
Non-attributable ULAE expenses Incurred in Quarter	0	0	0	0
IFRS 17- PAA Gross	-1	0	0	1
IFRS 17- PAA Net	-1	-1	0	1



Financial Impact Assessment considerations



€m	Total Profit (Net of RI)			Year 1 profit cashflow			Year 2 profit cashflow			Year 3 profit cashflow			Year 4 profit cashflow			Year 5 profit cashflow		
	Current	IFRS-17	IFRS-17	Current	IFRS-17	IFRS-17	Current	IFRS-17	IFRS-17	Current	IFRS-17	IFRS-17	Current	IFRS-17	IFRS-17	Current	IFRS-17	IFRS-17
	IFRS	BBA	PAA	IFRS	BBA	PAA	IFRS	BBA	PAA	IFRS	BBA	PAA	IFRS	BBA	PAA	IFRS	BBA	PAA
Base Case	93.1	93.0	92.3	4.6	0.4	-1.1	16.2	23.0	19.0	22.7	23.6	26.2	19.9	16.7	22.1	13.2	12.2	13.7





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Questions?



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