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## Nicholas Actuarial Solutions

**IFRS 17 Webinar 2021 – Persatuan Aktuaris Indonesia**

**Measurements in IFRS 17 – General Insurance**

**Session 2 : Liability for Remaining Coverage (LRC) –**

**General Measurement Model (GMM)**

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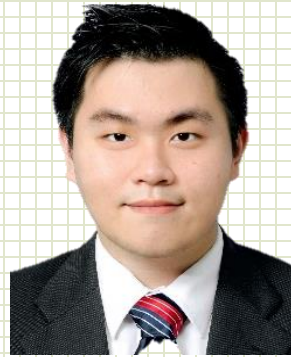
# Presenters

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## All Sessions

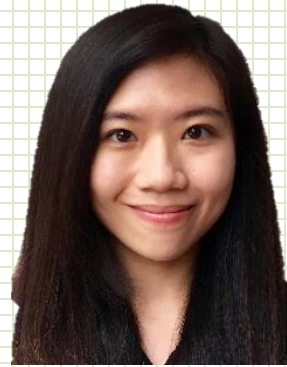


**Nicholas Yeo**  
FIA FASM FSA FSAS  
Founder & Actuary



**Billy Tanuwijaya**  
Actuarial Analyst

## Session 1



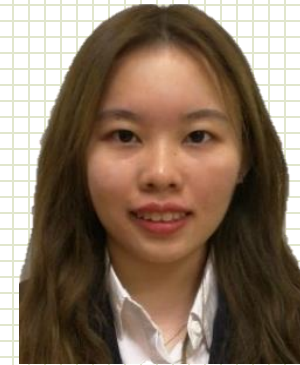
**Kok Ming Wei**  
Actuarial Analyst

## Session 2



**Chong Wai Chung**  
Actuarial Analyst

## Session 3

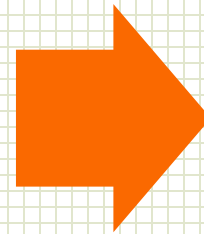


**Jessie Leong**  
Actuarial Analyst

# IFRS 17 (PSAK 74 Objective)

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“Establishes principles for the recognition, measurement, presentation and disclosure of insurance contracts”



Replace the currently implemented IFRS 4 (PSAK 62) starting in 2025

# Comparing IFRS 4 & IFRS 17

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Current (IFRS 4)	
Asset	Liability
Investment	Benefits reserve
Deferred acquisition costs	Unearned premium reserves
Insurance receivables (net of provision for insurance doubtful debts)	Claim liabilities
Reinsurance assets	Other payables

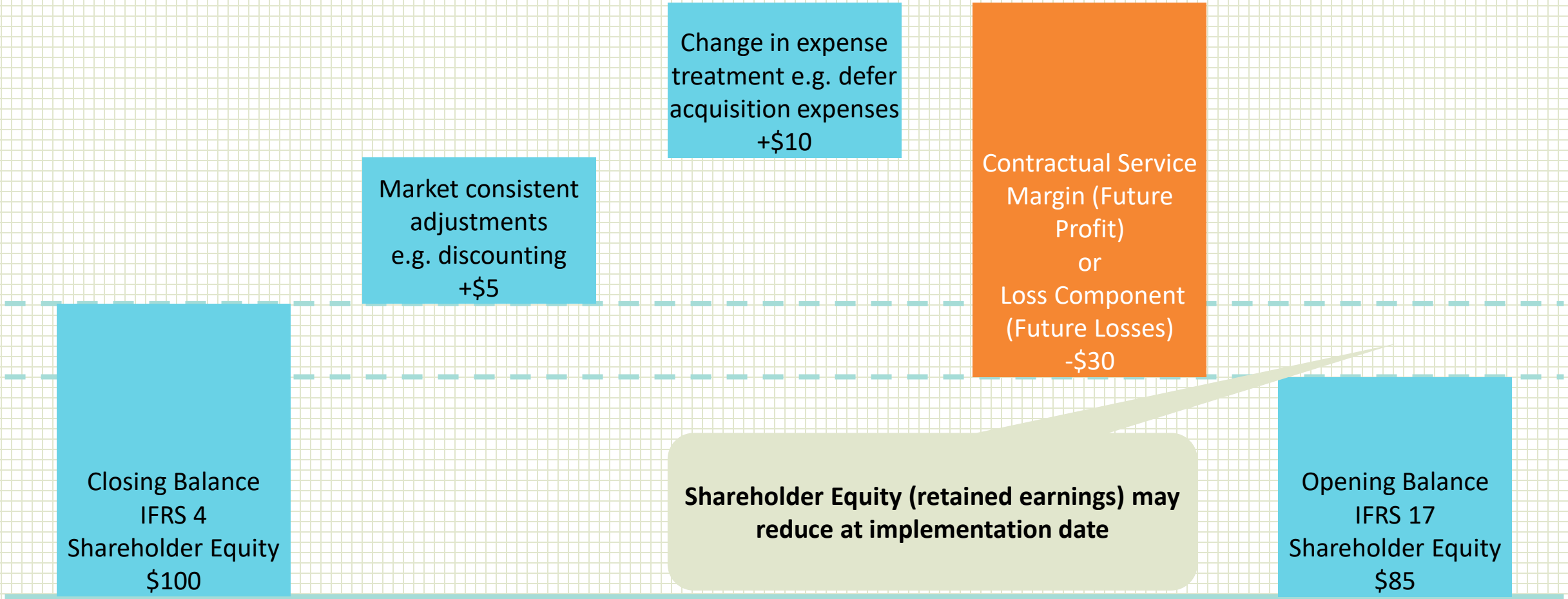
Future (IFRS 17)	
Asset	Liability
Investment	Liabilities for remaining coverage
Reinsurance contract assets	Liabilities for incurred claims
	Payables

**IFRS 17 introduces single, revenue recognition principle to reflect insurance services provided/received (layman's term).**

\*This is an abridged version of Statement of Financial Position

# What will happen in Day 1?

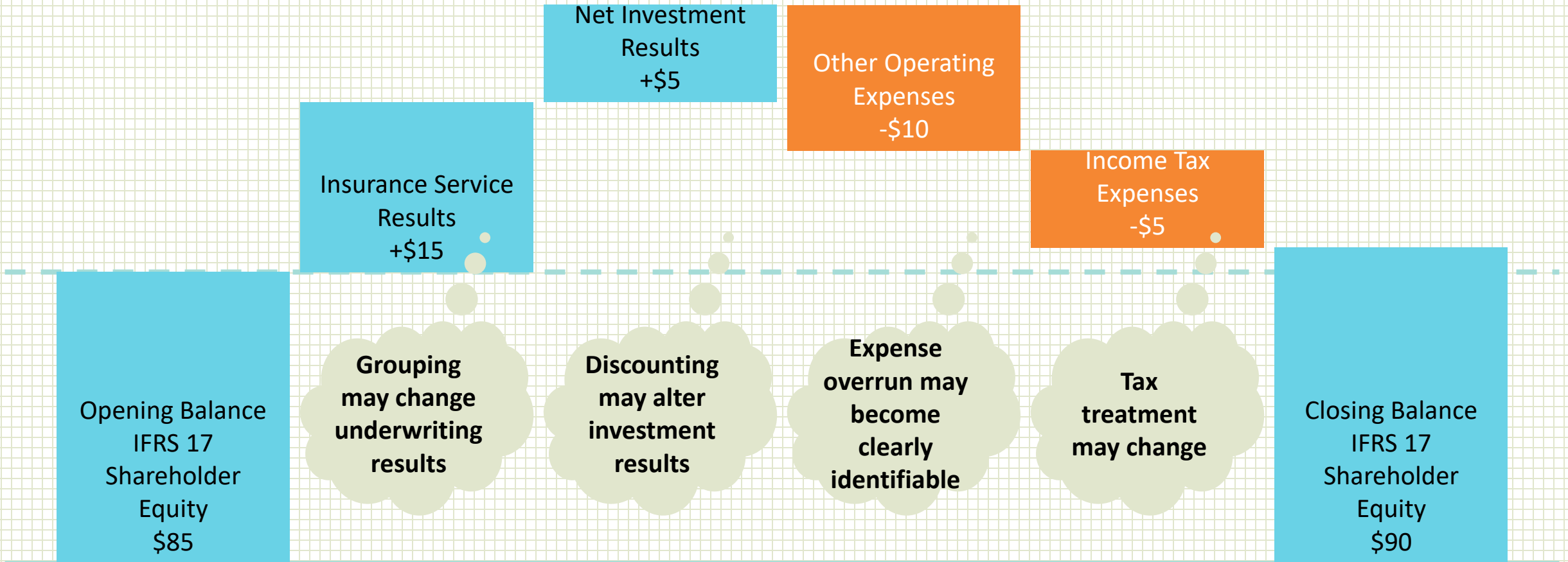
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Shareholder Equity (retained earnings) may reduce at implementation date

# What will happen in Year 1?

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# IFRS 17 Scope

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Webinar  
Focus



Combination &  
Separation

- Combining several related contracts into 1 set of insurance contract OR separating components of an insurance contract and measuring them separately (e.g. investment/service component)

Level of Aggregation

- Division of a portfolio of insurance contracts by profitability (onerous/profitable) and issued year (1 year apart)

Recognition

- When to start recognizing insurance contracts for measurement

Measurement

- Measure the liability of insurance contracts (liability of incurred claims + liability of remaining coverage)

Modification &  
Derecognition

- How to treat an insurance contract with modified term AND how & when to derecognize an insurance contract

Presentation &  
Disclosure

- Present the measurement result & disclose the details in the financial statement



# Insurance Contract Liabilities Component

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measured in 3 ways

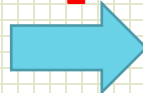
GMM  
(General Measurement Model)

VFA ~~X~~  
(Variable Fee Approach)

PAA  
(Premium Allocation Approach)

Fulfilment Cash Flow  
+ Risk Adjustment  
consisting of  
Case Reserve + IBNR

Session 2



The default measurement model, expected to be applied to life insurance and non-life insurance contracts not eligible for the PAA.

A variation on the GMM for direct participating contracts. This typically includes unit linked insurance contracts.

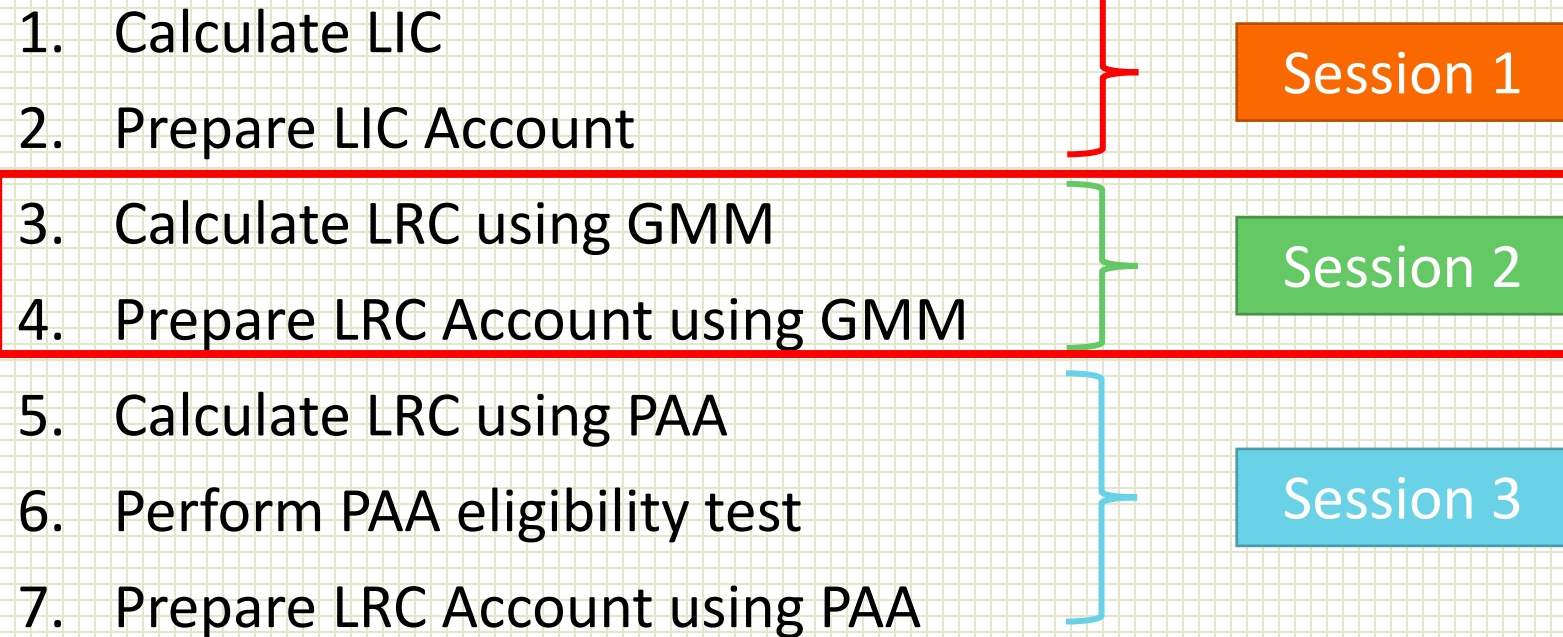
Applicable to some short-term contracts, such as most non-life insurance contracts.

# Measurement Components

Measurement Components	Session 1 LIC	Session 2 LRC GMM	Session 3 LRC PAA
Present Value of Future Cash Flow (PVFCF)	✓	✓	
Risk Adjustment (RA)	✓	✓	
Contractual Service Margin (CSM)		✓	
Loss Component (LC)		✓	✓
Insurance Revenue (IR)		✓	✓
Insurance Service Expense (ISE)	✓	✓	✓
Insurance Finance Income/Expense (IFIE)	✓	✓	✓

# Learning Outcome

At the end of the webinar courses, participants shall be able to:

1. Calculate LIC
  2. Prepare LIC Account
  3. Calculate LRC using GMM
  4. Prepare LRC Account using GMM
  5. Calculate LRC using PAA
  6. Perform PAA eligibility test
  7. Prepare LRC Account using PAA
- Session 1
- Session 2
- Session 3
- 

# Spreadsheet Samples (1)

## LRC GMM Account for 1 Transaction Entry

Scenario 1 : Premium is received at inception (t=0) and the contract remains profitable throughout the coverage period.

Premium Register	
Entry	Premium
Date	1/1/2021
Amount	100
Coverage Period	2 years

Cash Register	
Entry	Premium
Date	1/1/2021
Amount	100

Ultimate Loss Ratio	50%
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Assumptions			
Period	Inception (t=0)	1	2
Premium Received Pattern (PRP)	100%	0%	0%
Claims Payment Pattern (CPP)	0%	40%	60%
CSM Systematic Allocation Ratio (SAR)	0%	40%	60%

Undiscounted Cash Flows			
Period	Inception (t=0)	1	2
Premium	0	0	0
Claims	0	0	0
Net Cash Flows	0	0	0
Present Value of FCF at inception	0		
Present Value of FCF at end of period		0	0

Journal Entry			
Account Type	Description	Debit	Credit
<u>As at 01.01.2021 :</u>			
Asset	Cash	0	
Liability	LRC excl. LC		0
AND			
Liability	LRC excl. LC: PVFCF - Initial Recognition	0	
Liability	LRC excl. LC: CSM - Initial Recognition		0
AND			
Expenses	Insurance Service Expense	0	
Liability	LRC LC - Initial Recognition		0
<u>As at 31.12.2021:</u>			
Asset	Cash	0	
Liability	LRC excl. LC		0
AND			
Revenue	Insurance Revenue		0
Liability	LRC excl. LC: PVFCF - Insurance Revenue	0	
AND			
Revenue	Insurance Revenue		0
Liability	LRC excl. LC: CSM - Insurance Revenue	0	
AND			
Expenses	Insurance Service Expense		0
Liability	LRC LC - Release in LC	0	

# Spreadsheet Samples (2)

## LRC GMM Account for Whole Portfolio

LRC Excluding LC Account (01.01.2020 to 31.12.2020)		Journal Entry					Income Statement (01.01.2020 to 31.12.2020)	
		Account Type	Description	Description 2	Debit	Credit	Expenses	Revenue
<b>LRC Opening Balance</b>	-							
PVFCF	-							
RA	-							
CSM	-							
<b>Initial Recognition</b>	-							
Initial Recognition - PVFCF	-	Liability	LRC excl. LC	Initial Recognition - PVFCF				
Initial Recognition - RA	-	Liability	CSM	Initial Recognition - PVFCF				
Initial Recognition - CSM	-	Liability	LRC excl. LC	Initial Recognition - RA				
<b>(Insurance Revenue) or Insurance Service Expense</b>	-	Liability	CSM	Initial Recognition - RA				
<b>Current Service</b>	-							
Subsequent Changes - PVFCF	-	Expense	Insurance Service Expense	Initial Recognition of LC				
Subsequent Changes - RA	-	Liability	LC	Initial Recognition of LC				
Release in CSM	-							
<b>Insurance Finance Income or (Expense)</b>	-							
Interest Accretion - PVFCF	-	Revenue	Insurance Revenue	Change in Current Service PVFCF				
Interest Accretion - RA	-	Liability	LRC excl. LC	Change in Current Service PVFCF				
Interest Accretion - CSM	-	Revenue	Insurance Revenue	Change in Current Service RA				
Change in Discount Rate - PVFCF	-	Liability	LRC excl. LC	Change in Current Service RA				
Change in Discount Rate - RA	-	Revenue	Insurance Revenue	Release in CSM				
<b>Actual Cash Flows</b>	-	Liability	CSM	Release in CSM				
Premiums Received	-	Expense	Insurance Service Expense	Release in LC				
<b>LRC Closing Balance</b>	-	Liability	LC	Release in LC				
PVFCF	-	Expense	Insurance Finance Expense	Change in Discount Rate - PVFCF				
RA	-	Liability	LRC excl. LC	Change in Discount Rate - PVFCF				
CSM	-	Expense	Insurance Finance Expense	Change in Discount Rate - RA				
<b>CSM Account (01.01.2020 to 31.12.2020)</b>		Liability	LRC excl. LC	Change in Discount Rate - RA				
<b>CSM Opening Balance</b>	-							
CSM	-	Expense	Insurance Finance Expense	Interest Accretion - PVFCF				
<b>Insurance Service Expense</b>	-	Liability	LRC excl. LC	Interest Accretion - PVFCF				
Initial Recognition of CSM	-	Expense	Insurance Finance Expense	Interest Accretion - RA				
Release in CSM	-	Liability	LRC excl. LC	Interest Accretion - RA				
<b>Insurance Finance Income or Expense</b>	-	Expense	Insurance Finance Expense	Interest Accretion - CSM				
Interest Accretion - CSM	-	Liability	CSM	Interest Accretion - CSM				

Balance Sheet (as at 31.12.2020)	
Assets	Liabilities
Cash	LRC excl. LC
	CSM
	LC
	Retained Earning or (Loss)

# Liability for Remaining Coverage (GMM)

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## Contractual Service Margin (CSM)

**PV inflow > PV outgo**

Expected unearned profit. It is set up to ensure no profit or loss at inception. It will be amortised over the coverage period.

## Loss Component (LC)

**PV inflow < PV outgo**

Any losses will be recognised as insurance service expense in income statement at inception. It will be amortised over the coverage period.

**Disclosure requirements** include:

- Split by LRC excl. LC and LC
- Split by PVFCF and RA
- Split by current service and future service
- Insurance finance income and expenses (interest accretion and change in discount rate, especially if the OCI option is selected)
- Cash flows

