

IFRS 17 EXPLAINED | EPISODE 2

How Does the **CSM** Unwind?

Decoding CSM Release via Coverage Units



CSM



COVERAGE UNITS



IFRS 17

Recap: Where We Left Off

Episode 1 established these four LRC components at inception for our 20-year whole life policy group (1,000 policyholders)



PVFCF

-\$150,000

Present Value of Fulfilment Cash Flows

Net liability before CSM. PV Inflows \$1.5M minus PV Outflows \$1.35M.

IFRS 17 Para 32–37



RA

+\$30,000

Risk Adjustment for Non-Financial Risk

Compensation required for bearing uncertainty in amount and timing of cash flows.

IFRS 17 Para 37(b)



CSM

+\$120,000

Contractual Service Margin

Deferred profit locked in at inception. Prevents day-one P&L recognition on profitable contracts.

★ EPISODE 2 FOCUS

IFRS 17 Para 38 & 44



LRC NET

\$0

Liability for Remaining Coverage (Net)

PVFCF + RA + CSM = \$0. Zero net liability at inception for profitable contracts.

IFRS 17 Para 38



Episode 2 Question: The **\$120,000 CSM** is locked in at inception — but how does it actually reach the P&L over 20 years? **Answer: Coverage Units** — the mechanism that systematically releases deferred profit as insurance services are delivered.

The CSM Roll-Forward: 5 Moving Parts

IFRS 17 PARA 44 — GMM ROLL-FORWARD STEPS

01 Opening CSM Balance

Starting point each reporting period. Carries forward the unearned profit locked in at inception discount rate.

02 New Contracts Added

CSM from newly issued contracts in the same group is added to the existing balance during the period.

03 Interest Accretion

CSM grows at the locked-in discount rate from inception. Financial changes do not adjust CSM under GMM.

04 FCF Changes — Future Service EP. 3+

Changes in future service FCF (assumption changes & experience variances) adjust the CSM. *Deep-dive in upcoming episodes.*

05 CSM Release via Coverage Units — Always Last (Para 44(e))

The CSM is released to P&L based on the Amortization Ratio (CU delivered ÷ total remaining CU) applied to the CSM balance after accretion. This is always the final step — the standard mandates release occurs after all other adjustments.

ROLL-FORWARD FORMULA

Opening CSM

+ New contracts

+ Interest accretion (locked-in rate)

± FCF changes (future service only)

– CSM release (amortization ratio)

= **Closing CSM Balance**

⚠ CRITICAL RULE

Changes relating to **past or current service** bypass the CSM and flow **directly to P&L**. The full routing rules — including experience variance treatment for premiums, expenses & claims — will be explored in **upcoming episodes**.

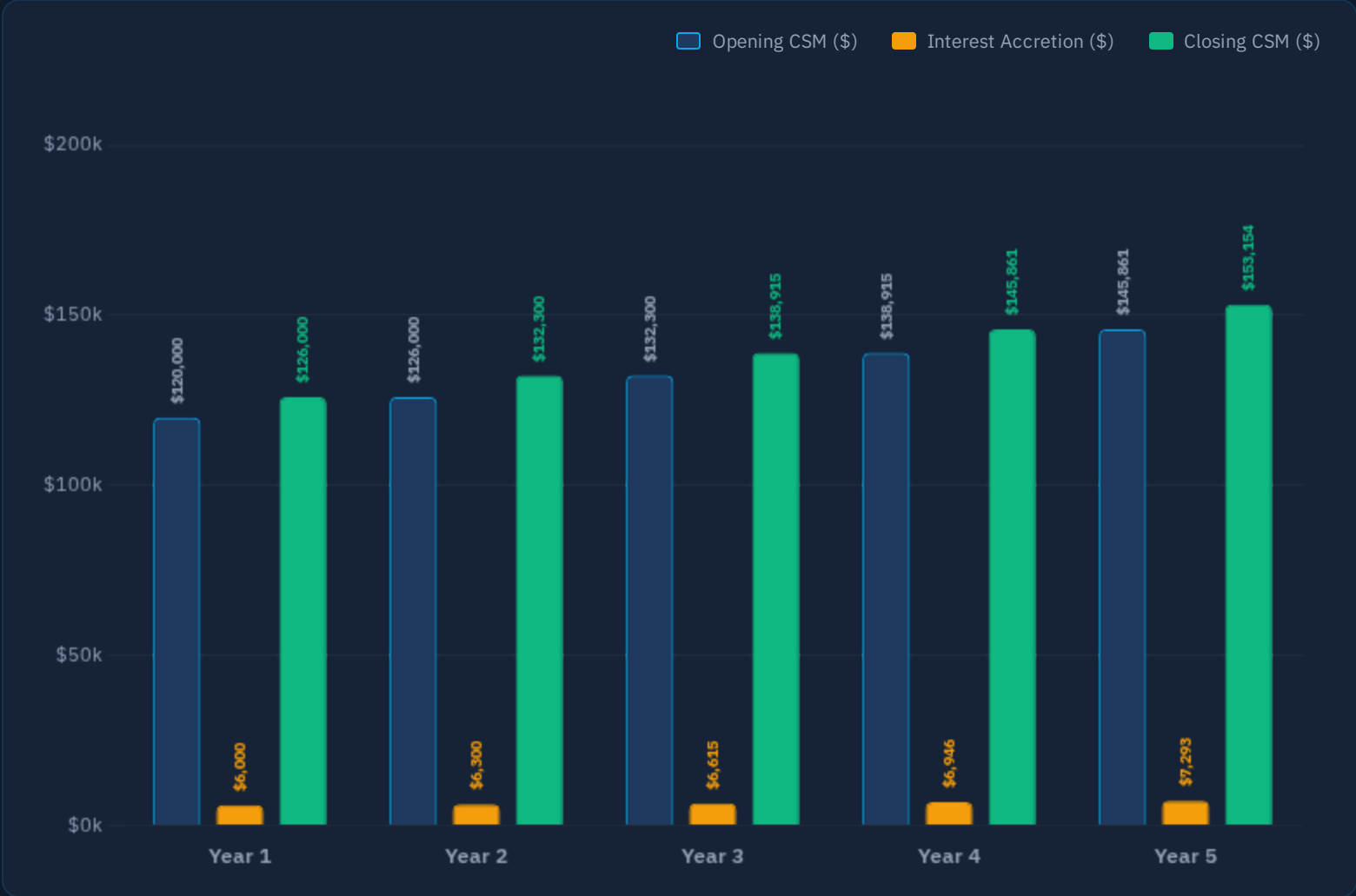
Source: IFRS 17 Para 44 · IFoA CSM Working Party (2019) · PSAK 117

Interest Accretion on the CSM

Assumption: Locked-in Rate = 5% p.a.

IFRS 17 · PARA 44(B)

OPENING CSM · INTEREST ACCRETION · CLOSING CSM — YEARS 1–5 (BEFORE CSM RELEASE)



★ YEAR 1 ACCRETION

\$6,000

\$120,000 opening CSM × 5% locked-in rate
Added to CSM balance — not recognised in P&L



LOCKED-IN RATE

Rate is fixed at **initial recognition** — never updated for market movements.

IFRS 17 Para 44 & B72(b)



NOT IN P&L

Accretion is **added to CSM balance** — it unwinds time value of deferred profit only.



CSM GROWS BEFORE RELEASE

Each period the CSM **accrues upward**, then coverage units determine how much is released.

ACCRETION FORMULA $CSM_t \text{ Accretion} = \text{Opening CSM Balance} \times \text{Locked-in Rate (5\%)}$

What Are Coverage Units?

IFRS 17 PARA B119

IFRS 17 PARA B119

"The number of coverage units is the **quantity of coverage provided**, determined by considering the **quantity of benefits** and **expected coverage duration** for each contract."

IFRS 17 Para B119 · IFoA CSM Working Party (May 2019)

TWO KEY INPUTS TO CU

QUANTITY OF BENEFITS

The **benefit amount per contract** — sum at risk, face amount, or survival benefit depending on product type.

EXPECTED COVERAGE DURATION

The **remaining coverage period** — how many periods the insurer is still obligated to provide coverage.

IN-FORCE COUNT

Only **active policies** contribute CU — lapses and deaths reduce the count each period.

STEP-BY-STEP CU CALCULATION — WHOLE LIFE EXAMPLE

20-Year Whole Life Policy

EP. 2 BASE CASE

- 1

POLICY FACTS (FROM EPISODE 1)
Policyholders: **1,000** · Sum at Risk: **\$200,000** · Coverage: **20 yrs**
- 2

EXITS PER YEAR (ASSUMPTION)
10 deaths + 5 lapses = **15 exits/year** (simplified)
- 3

TOTAL CU ACROSS ALL 20 YEARS (FIXED AT INCEPTION)
Yr 1: 1,000 · Yr 2: 985 · Yr 3: 970 ... Yr 20: 715
 Σ Total CU = $20 \times (1,000 + 715) \div 2 =$ **17,150**
- 4

CU REMAINING FROM YEAR T ONWARDS (DENOMINATOR)
Year 1: Σ CU remaining = **17,150**
Year 2: $17,150 - 1,000 =$ **16,150**
Year 3: $16,150 - 985 =$ **15,165**
- 5

CU DELIVERED IN PERIOD (NUMERATOR)
Year 1: **1,000** · Year 2: **985** · Year 3: **970**

CU BASIS — OTHER PRODUCT TYPES

Endowment (5-Year)

DUAL BENEFIT

$CU_t = \text{In-force} \times (\text{Death Benefit} + \text{Survival Benefit})$
Both benefits count → higher CU weight at maturity

Dual structure means CU is relatively stable during coverage, then **spikes at maturity** — back-loaded release pattern.

Term Life (10-Year)

PURE MORTALITY

$CU_t = \text{In-force} \times \text{Death Benefit only}$
No survival benefit → CU declines steadily each year

Pure mortality coverage — CU falls gradually as policies lapse. Produces a **relatively even** CSM release profile.

ACTUARIAL JUDGMENT REQUIRED

CU basis must be **consistently applied** across all contracts in the group under PSAK 117.

→ Amort. Ratio = $CU_t \div \Sigma \text{CU remaining from period } t$. The denominator shrinks each year as prior CU is consumed. → **See Slide 6**

CSM Amortization Ratio & Release Calculation

AMORTIZATION RATIO

IFRS 17 PARA 44 · B119

✓ Assumption: **No new contracts** added to the group during the period

✓ Assumption: **No changes in FCF** (no assumption changes or experience variances)

✓ Locked-in rate: **5% p.a.** · 15 exits/year · Σ Total CU = **17,150**

✂ CSM AMORTIZATION RATIO FORMULA

$$\text{Ratio}_t = \text{CU}_t \div \Sigma \text{CU}_{\text{remaining from } t}$$

Denominator = CU from period t to end of coverage

$$\text{Release}_t = \text{Ratio}_t \times (\text{Opening CSM}_t + \text{Accretion}_t)$$

📌 SIMPLIFIED ROLL-FORWARD (THIS EXAMPLE)

With **no new contracts** and **no FCF changes**, the CSM roll-forward reduces to:

Closing CSM = Opening CSM + Accretion – Release

No $\pm$ FCF adjustment step needed in this illustration.

1 Sum All CU at Inception

Σ Total CU = **17,150** (arithmetic sum: 1,000+985+...+715 over 20 years)

2 Compute Ratio Each Period

Divide **CU_t** by Σ CU remaining from period t . Denominator reduces by prior CU each year.

3 Apply to CSM Balance

Multiply ratio by **(Opening + Accretion)**. Result = CSM released to P&L this period.

📅 WORKED EXAMPLES — 20-YEAR WHOLE LIFE

YEAR 1

Ratio: 5.831%

CU₁=**1,000** · Σ CU rem.=**17,150**

Ratio=**1,000**÷**17,150**=**5.831%**

\$120,000+\$6,000=\$126,000

Release=**5.831%**×\$126,000=**\$7,347**

Closing=**\$118,653**

YEAR 2

Ratio: 6.099%

CU₂=**985** · Σ CU rem.=**16,150**

(17,150–1,000 delivered Yr 1)

Ratio=**985**÷**16,150**=**6.099%**

\$118,653+\$5,933=\$124,586

Release=**6.099%**×\$124,586=**\$7,599**

Closing=**\$116,987**

YEAR 3

Ratio: 6.396%

CU₃=**970** · Σ CU rem.=**15,165**

Ratio=**970**÷**15,165**=**6.396%**

\$116,987+\$5,849=\$122,836

Release=**6.396%**×\$122,836=**\$7,857**

Closing=**\$114,979**

📈 ACCELERATING RATIO — YEARS 1–20

AMORTIZATION RATIO BY YEAR

Year 1		5.831%
Year 2		6.099%
Year 3		6.396%
Year 5		7.099%
Year 10		9.954%
Year 15		17.497%
Year 19		50.519%
Year 20		100.000%

Validation: Year 20 ratio = 100% — all remaining CSM released in final year. Closing CSM ≈ **\$0** ✓. Total releases ≈ \$120,000 + all accretion over 20 years.

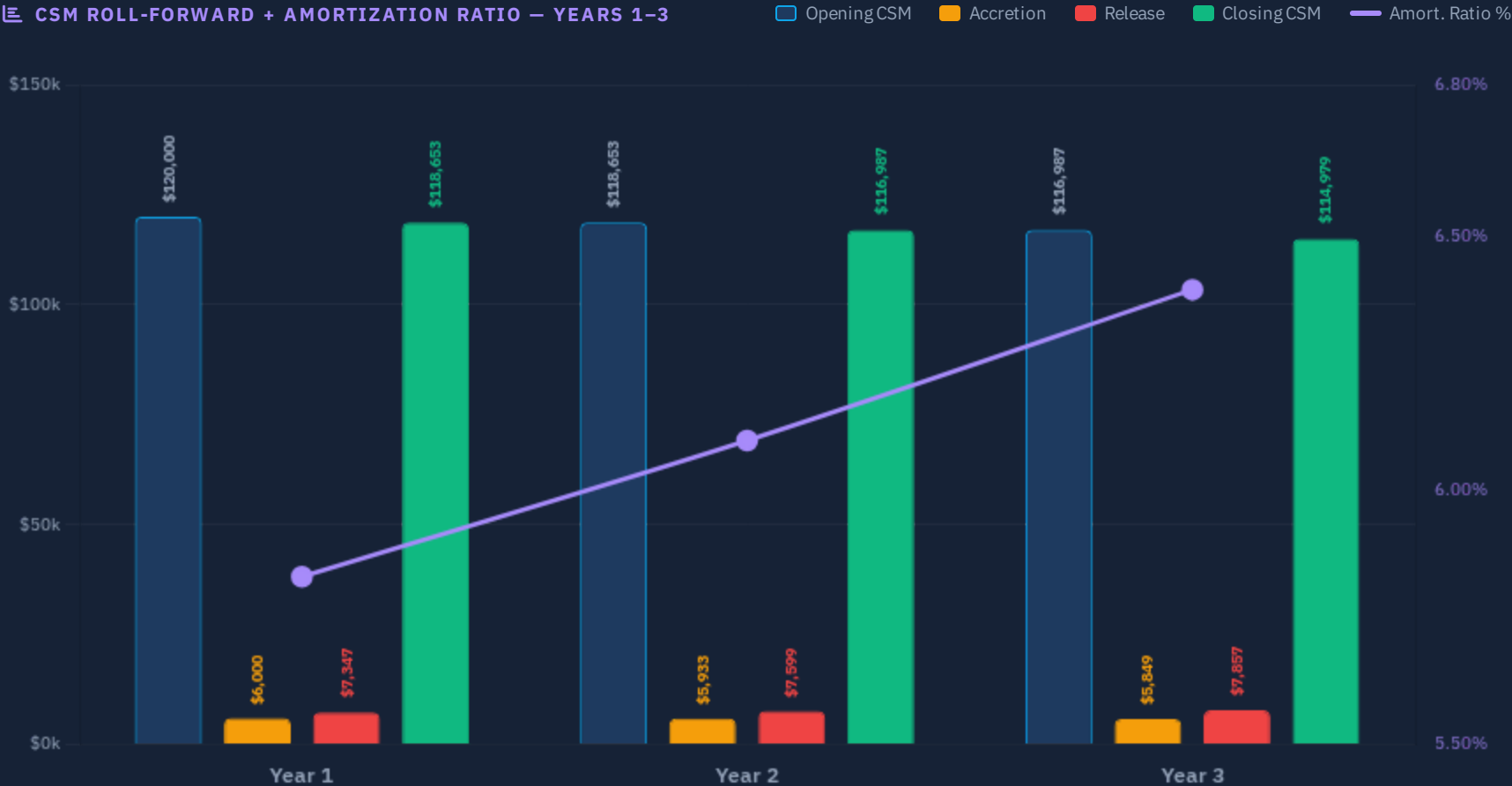
💡 Release **accelerates** over time — denominator shrinks faster than numerator as policies exit.

CSM Release — Amortization Ratio Technique

💰 LOCKED-IN RATE = 5% P.A.

📄 IFRS 17 PARA 44 · B119

CSM ROLL-FORWARD + AMORTIZATION RATIO — YEARS 1-3



📐 AMORTIZATION RATIO FORMULA

$$\text{Ratio}_t = \text{CU}_t \div \sum \text{CU}_{\text{remaining from } t}$$

Denominator shrinks each year

$$\text{Release}_t = \text{Ratio}_t \times (\text{Opening Balance} + \text{Accretion} + \text{Changes})$$

Y1: $1,000 \div 17,150 = 5.831\%$
 $\times \$126,000 = \$7,347$

Y2: $985 \div 16,150 = 6.099\%$
 $\times \$124,586 = \$7,599$

📐 YEAR 1 AMORT. RATIO
5.831%
 $1,000 \div 17,150$ (total CU at inception)

📈 YEAR 1 CSM RELEASE
\$7,347
 $5.831\% \times \$126,000$ (after accretion)

📈 RATIO AT YEAR 20
100.000%
All remaining CSM released — Closing ≈ \$0

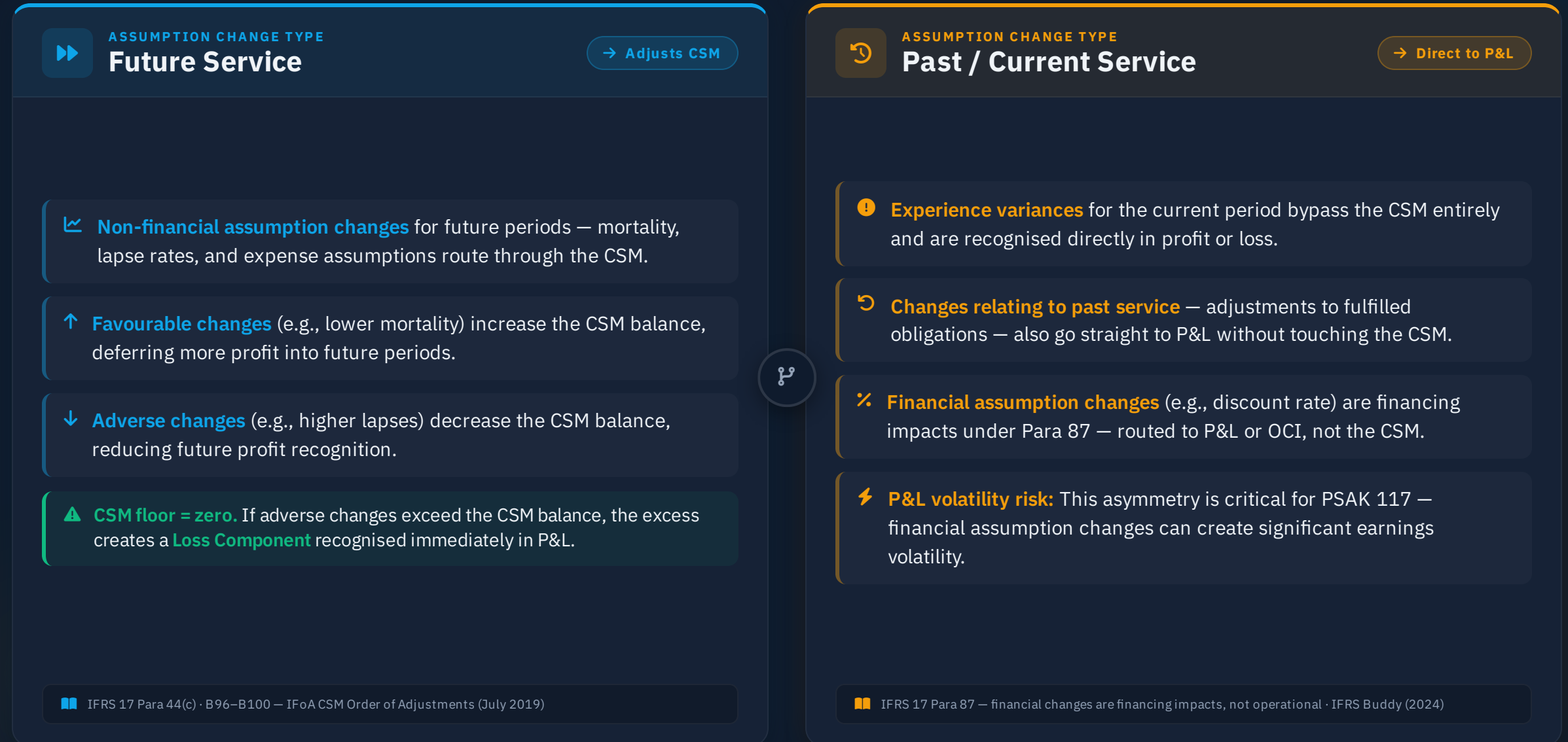
Accelerating pattern: Ratio grows each year as denominator shrinks faster than numerator. Early years release less; later years release more. CSM → \$0 by Year 20. ✓

📄 DETAILED ROLL-FORWARD · Σ TOTAL CU AT INCEPTION = 17,150

YEAR	OPENING CSM (\$)	ACCRETION 5% (\$)	CSM BEFORE RELEASE (\$)	CU DELIVERED	Σ CU REMAINING	AMORT. RATIO (%)	RELEASE (\$)	CLOSING CSM (\$)
Year1	120,000	6,000	126,000	1,000	17,150	5.831%	7,347	118,653
Year2	118,653	5,933	124,586	985	16,150	6.099%	7,599	116,987
Year3	116,987	5,849	122,836	970	15,165	6.396%	7,857	114,979

What Adjusts the CSM? Future vs. Past Service

IFRS 17 Para 44(c), B96–B100 — The routing rule that determines P&L volatility



Key Takeaways & What's Next



CSM Release via Amortization Ratio

Ratio = $CU_t \div \sum CU \text{ remaining from period } t$. Denominator shrinks each year — ratio accelerates from 5.831% (Yr 1) to 100% (Yr 20).

📖 IFRS 17 PARA B119



5-Part CSM Roll-Forward

New business + interest accretion + FCF changes (future service) + experience variances – CSM release. Release is always the last step (Para 44(e)).

📖 IFRS 17 PARA 44–45



Simplified Assumptions (This Episode)

No new contracts, no FCF changes assumed. Full roll-forward mechanics — including FCF changes and experience variances — explored in upcoming episodes.

🕒 EP. 3+ DEEP-DIVE



CSM as a Leading Profitability Indicator

The CSM balance signals future profit recognition — a critical disclosure metric under PSAK 117 for Indonesian insurers reporting to OJK and IAI.

📖 PSAK 117 DISCLOSURES



COMING NEXT · EPISODE 3

Experience Variances & Assumption Changes — What Hits the CSM vs. P&L?

FCF changes for future service, experience variances for claims/premiums/expenses, and the routing rules that determine P&L volatility — decoded for Indonesian insurers.

🔔 Follow for Ep. 3

👍 Like if helpful

OFFICIAL STANDARDS & REGULATORY



IFRS 17 Insurance Contracts

Para 32–37 Para 38 Para 44–45 Para 87 Para B119

IASB · Issued May 2017, Amended June 2020 · Effective 1 Jan 2023
CSM roll-forward, coverage units, FCF routing rules



The Accounting Model Explained on One Page

IFRS Foundation · Educational Material · January 2018 · ifrs.org



PSAK 117 Kontrak Asuransi — Adopsi IFRS 17 di Indonesia

PSAK 117

IAI (Ikatan Akuntan Indonesia) · Efektif 1 Januari 2025
Menggantikan PSAK 62 · Diwajibkan OJK · Disclosure requirements



AP5: Determining Quantity of Benefits for Coverage Units

Para B119

IASB TRG for Insurance Contracts · February 2018
CU identification across different product types

PRACTITIONER GUIDES & INDUSTRY RESEARCH



IFRS 17 CSM: Calculating the Value at Initial Recognition

IFoA CSM Working Party (May 2019)

Institute and Faculty of Actuaries (IFoA) · September 2019
CSM roll-forward mechanics, coverage unit identification, order of adjustments



IFRS 17: CSM — Order of Adjustments

IFoA CSM Order of Adjustments (July 2019)

IFoA CSM Working Party · July 2019
Para 44(c), B96–B100 · Timing of FCF changes; release is always last (Para 44(e))



Contractual Service Margin (CSM) for Insurance Contracts

IFRS Buddy (2024)

IFRS Buddy · 2024 · ifrsbuddy.com
CSM subsequent measurement, Para 44(b) accretion, Para 44(c) FCF routing rules



Contractual Service Margin (CSM) for Insurance Contracts — IFRS 17

Daniel Wira, ACPA (Oct 2024)

Daniel Wira, ACPA, Cert. IFR, ACA · LinkedIn · October 2024
CU amortization ratio formula · CSM movement under GMM · Accounting entries