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Insurance Capital Standard (ICS)

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June 2025

Agenda

1	**Overview of ICS**	Background and development of the Insurance Capital Standard (ICS)
2	**ICS vs Solvency UK**	ICS Balance Sheet Discount Rates Margin over current estimate (MOCE) Capital Requirements
3	**Key Regional Developments**	Regional perspectives Aggregation method
4	**What happens next?**	ICS implementation

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Overview of ICS

Background of the ICS

What is the ICS?	Who has developed it?	Who does it apply to?	When was it adopted?
A global consolidated group-wide capital standard as a measure of capital adequacy	International Association of Insurance Supervisors (IAIS)	'Internationally Active Insurance Groups' (IAIGs)[1]	Adopted by the IAIS at its Annual General Meeting in December 2024

What are the aims of ICS?			What are the impacts of ICS?	
Protect policyholders and contribute to financial stability	Enhance global convergence amongst group capital standards	Create a common language for supervisory discussions on group solvency	Set global minimum group capital standard that local regimes need to meet	Influence on other jurisdictions that are either implementing new risk-based capital solvency regimes or revising existing regimes

[1] There are currently around 60 IAIGs, where IAIGs are designated by their lead regulator based on the following size and international activity criteria:

- ***Size:*** *$50bn total assets or $10bn gross written premiums*
- ***International activity:*** *Premiums are written in three or more jurisdictions and at least 10% of the group's total gross written premium written outside the home jurisdiction*

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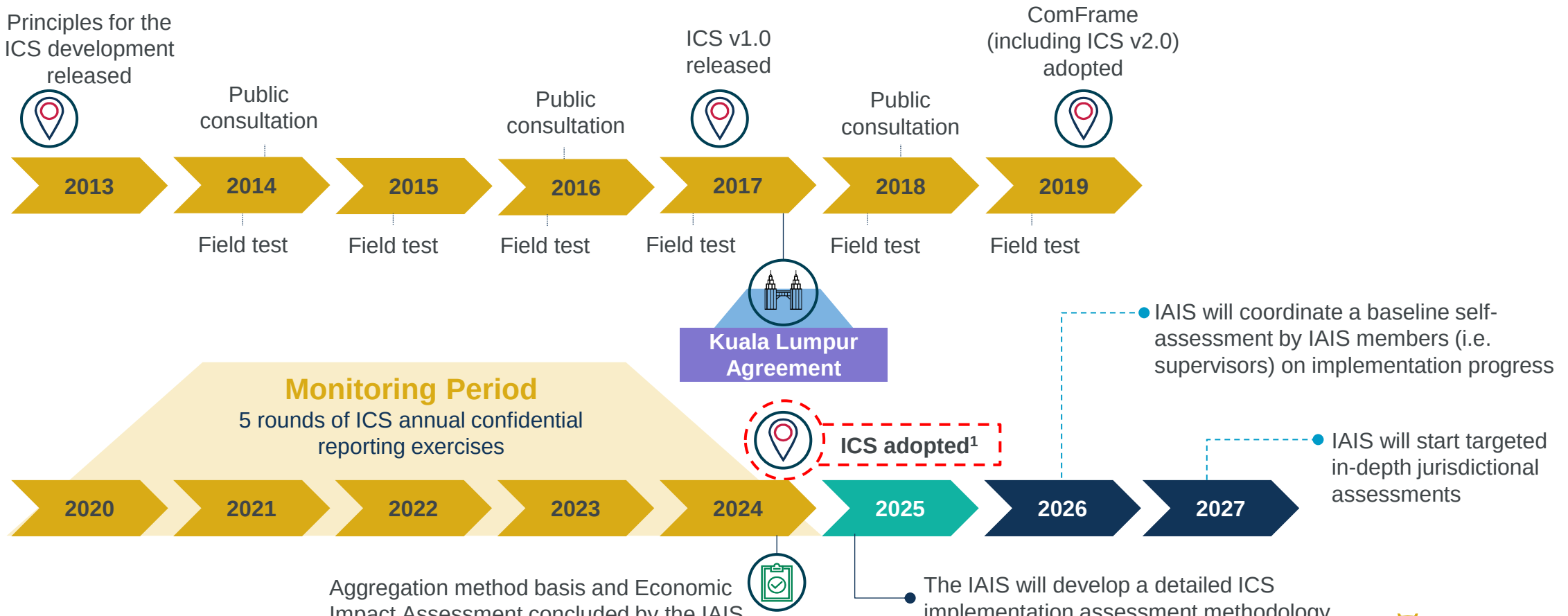
Development of the ICS



[1] Two minor amendments were made on the final ICS as compared to the version used in monitoring period published in June 2024 (mapping of credit risk ratings and the determination of non-insurance risk)

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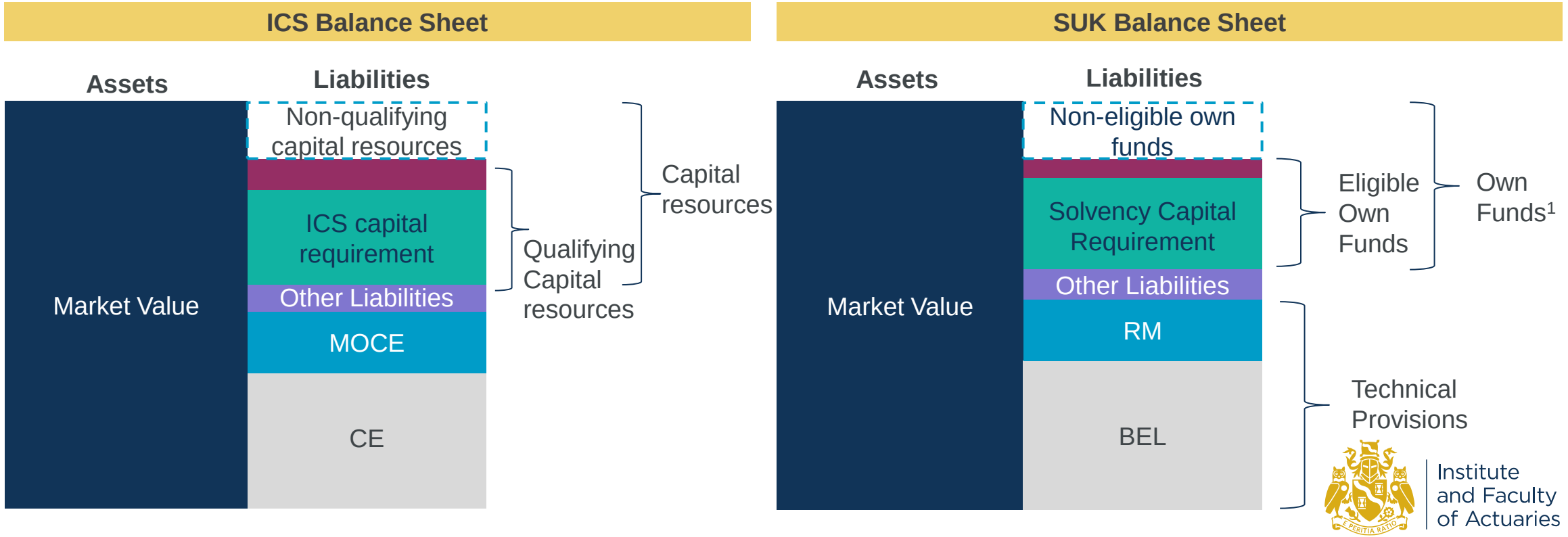
ICS vs Solvency UK (SUK)

Balance Sheet

The ICS balance sheet is broadly similar to the Solvency UK (SUK) balance sheet, with differences in the detail / terminology:

- Current Estimate (CE) under ICS is akin to Best Estimate Liabilities (BEL) under SUK
- Margin over Current Estimate (MOCE) under ICS is akin to the Risk Margin (RM) under SUK
- ICS does not apply any ring-fenced fund (RFF) restrictions to capital resources



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Discount Rates

The ICS current estimate is calculated under the “Three Bucket” discounting approach, where insurance liabilities are allocated to the Top / Middle / General buckets, with the discounting approach (i.e. spread adjustment to risk-free rates) varying for each bucket.

Key differences between ICS and Solvency UK are the ICS Middle Bucket and no liabilities are discounted at risk-free rates only.

	Top Bucket	Middle Bucket	General Bucket
Examples of products	In-payment and deferred annuities, structured settlements	Single premium income annuities, fixed index annuities, bank and corporate owned life insurance, single premium whole life, universal life, group annuity, yearly renewable products with discretionary future premiums	All other products (e.g. non-life)
Eligible investments *(not exhaustive)*	▪ Cash, bonds, loans, mortgage-backed securities, other structured securities, infrastructure debt	• Same as Top Bucket	N/A
Spread adjustment calculation	▪ Asset mix: IAIG’s own asset mix ▪ Spread yields: IAIG’s own asset yields ▪ Risk correction factor: IAIS prescribed	• Asset mix: IAIG’s own asset mix • Spread yields: IAIS prescribed • Risk correction factor: IAIS prescribed	• Asset mix: IAIS prescribed • Spread yields: IAIS prescribed • Risk correction factor: IAIS prescribed
Key criteria *(not exhaustive)*	▪ Assets replicate the expected liability cash flows (CFs), with CF mismatch addressed by excess asset CFs at previous maturities (subject to a restriction) ▪ No future premiums ▪ No surrender option, or only where the surrender value does not exceed the assets at reporting date and all future dates	▪ No future premiums, or only future premiums that are contractually fixed or at the discretion of the IAIG ▪ No surrender option, or only where surrender value does not exceed the assets at reporting date ▪ ICS lapse risk charge is not more than 5% of the current estimate at risk-free rates	▪ All other liabilities not in the Top or Middle Buckets (or where liability obligations are replicable by a portfolio of assets)
SUK equivalent	**Similar to Matching Adjustment**	**No equivalent**	**Similar to Volatility Adjustment**

Margin over current estimate (MOCE)

The MOCE reflects the inherent uncertainty in future cash flows arising from fulfilling insurance obligations. The MOCE is calculated using a percentile approach, which is different to the cost of capital approach for the Risk Margin (RM) under Solvency UK.

ICS	SUK
• Percentile approach • Calculated as the 85th percentile (life) or 65th percentile (non-life) of a normal distribution with: – Mean equal to the Current Estimate of life (and non-life) obligations, and – 99.5th percentile equal to the life (and non-life) risk charge • Formulaic representation: $MOCE_{life} = 85^{th} percentile\ of\ X$ $MOCE_{non-life} = 65^{th} percentile\ of\ X$ Where: • $X \sim N(\mu, \sigma^2)$ with mean of Current Estimate of life (and non-life) obligations and 99.5th percentile equal to the life (and non-life) ICS capital requirement	• Cost of capital approach • Calculated as a fixed percentage of 4% (cost-of-capital rate) of the sum of the discounted SCR for both life and non-life business • Formulaic representation: $RM = 4\% \cdot \sum_{t \geq 0} \frac{SCR(t) \cdot \max(\lambda^t, 0.25)}{\left(1 + r(t+1)\right)^{t+1}}$ Where: • SCR(t) = reference undertaking notional SCR after t years • λ is the risk tapering factor (0.9 for long-term insurance and reinsurance obligations; 1.0 for general insurance and reinsurance obligations), with λ^t subject to a floor of 0.25 • r(t+1) is the basic relevant risk-free interest rate term structure selected in accordance with the currency used for the firm's financial statements

Capital Requirements: calculation methods

ICS	SUK
Standard Method	**Standard Formula**
Other permitted methods: • **Internal Models** • **Supervisor-owned and controlled credit assessment processes** (SOCCA): *this is an alternative approach for assessing credit risk for unrated exposures for IAIGs that can use US National Association of Insurance Commissioners (NAIC) designations for credit ratings*	**Other permitted methods:** • **Partial or full internal models** • **Undertaking Specific Parameters (USP)**

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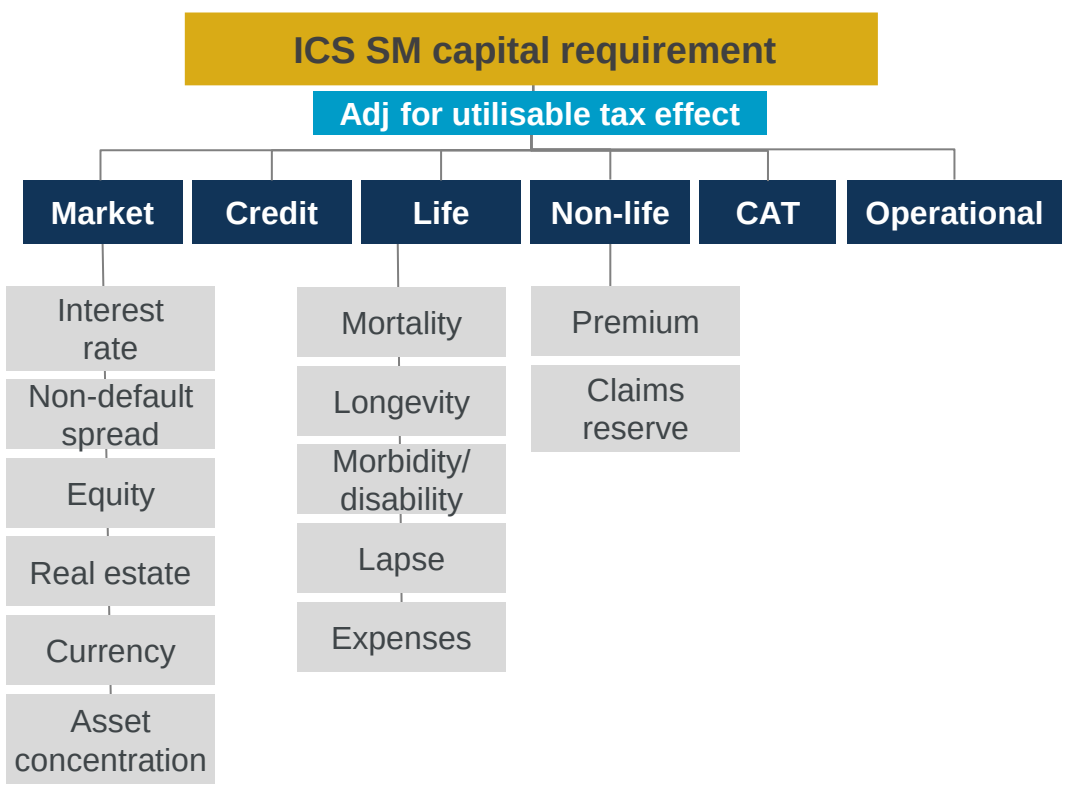
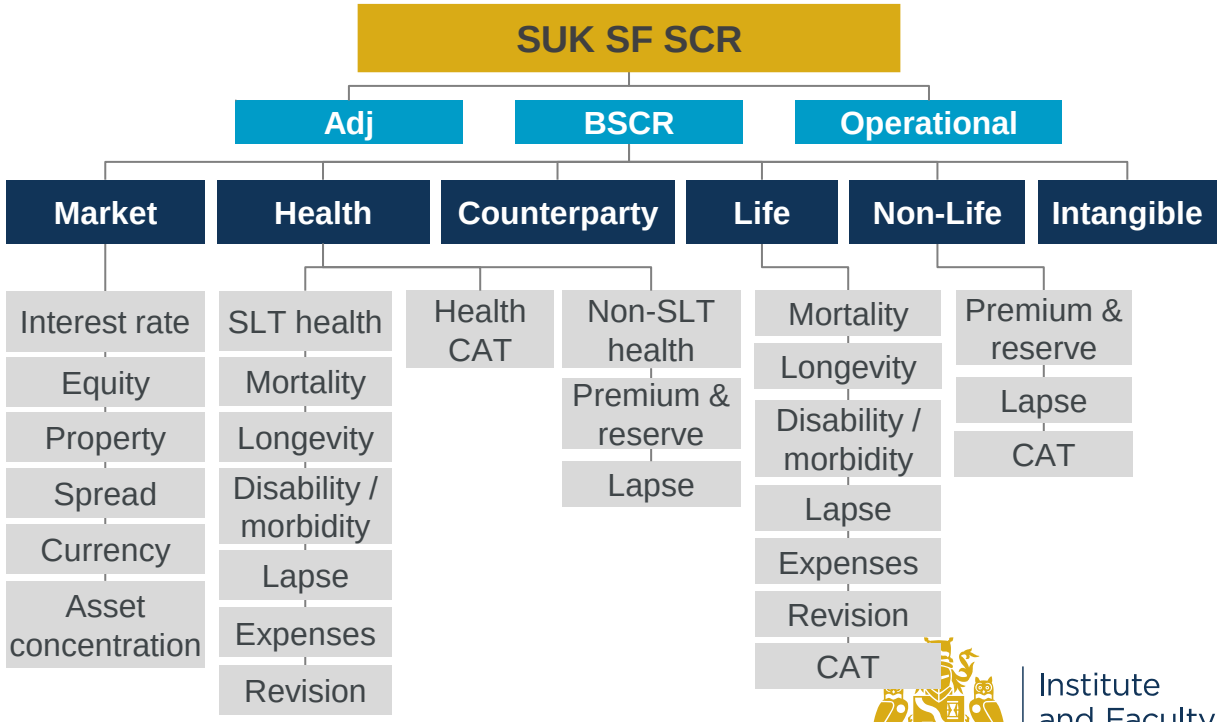
Capital Requirements: ICS standard method

Risks covered under ICS standard method (SM) and SUK Standard Formula (SF), with the following main structural differences:

- Catastrophe risk is a separate risk module under ICS (sub-module in life, non-life and health risk under SUK SF)
- Health risk is not a separate module under ICS. It is covered under the life risk module and non-life risk module
- The credit and non-default spread risk modules under ICS differ from the counterparty and spread risk modules under SUK

Both approaches use correlation matrices to aggregate within risk modules and across risk modules





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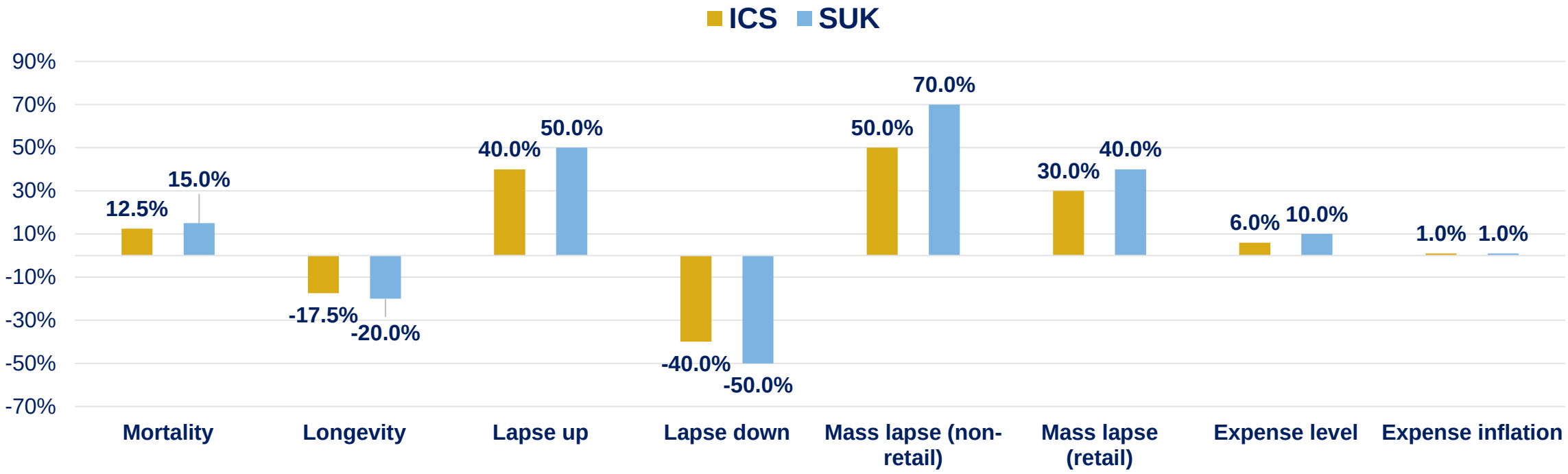
Capital Requirements: ICS Standard Method

Life underwriting risks calibrations



Notes:

- Mortality and longevity figures shown reflect stresses to mortality rates. ICS mortality stresses vary by geographical segment, ranging from 10% (Japan) to 15% (China) with other markets at 12.5%
- Lapse up/down stress figures shown reflects impacts to lapse rates. ICS lapse up/down stress is +/-40% for all geographical segments, except Japan at +/-20%
- Mass lapse stress figures reflect an immediate surrender of policies
- Expense level and expense inflation stresses vary by geographical segment
- Morbidity / disability risk stresses not shown above

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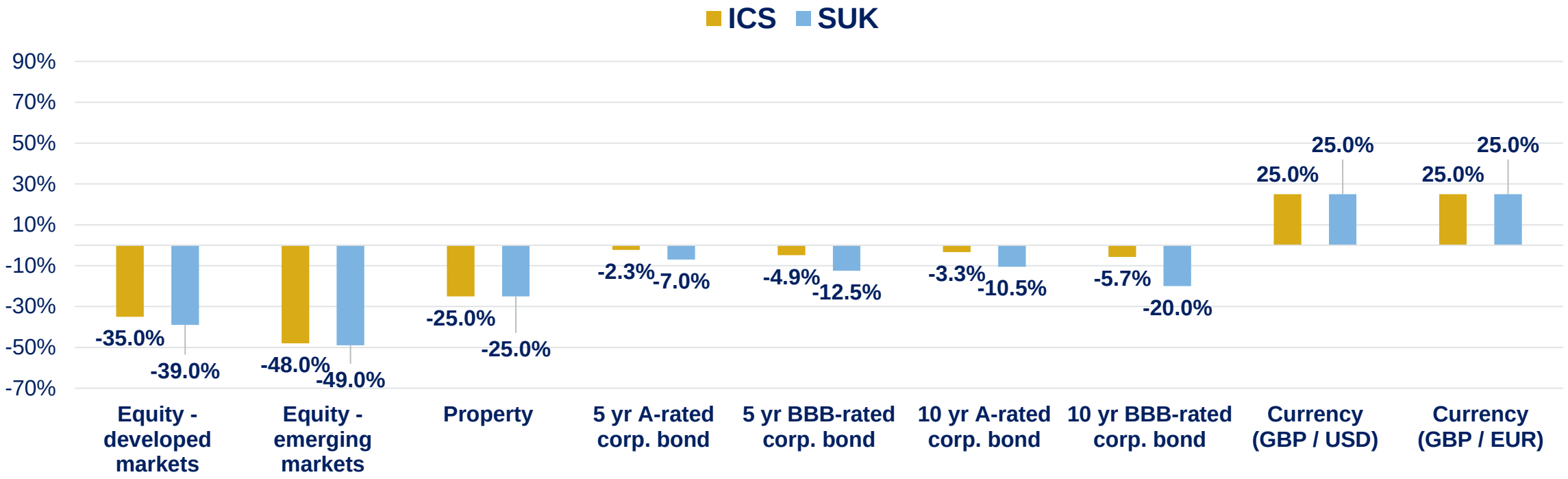
Capital Requirements: ICS Standard Method

Market and credit risks calibrations



Notes:

- Equity and property risks figures reflect the stress impact to asset values
- The corporate ("corp") bond figures reflect the stress impact to asset values under the Credit risk module for ICS and Spread risk module for SUK. Note that the ICS figures exclude the Non-default spread risk (NDSR) module (which are not shown above).
- NDSR captures expected changes in spreads excluding the default component which is captured in ICS Credit risk. NDSR upward and downward stresses are a relative stress of -75% and +75% of spreads at each maturity up to the Last Observable Term (LOT), subject to a cap and floor.
- Currency risk figures reflect increase / decrease to the value of the foreign currency against local currency
- Reinsurance is captured under ICS Credit Risk and SUK Counterparty Default risk (which are not shown above)

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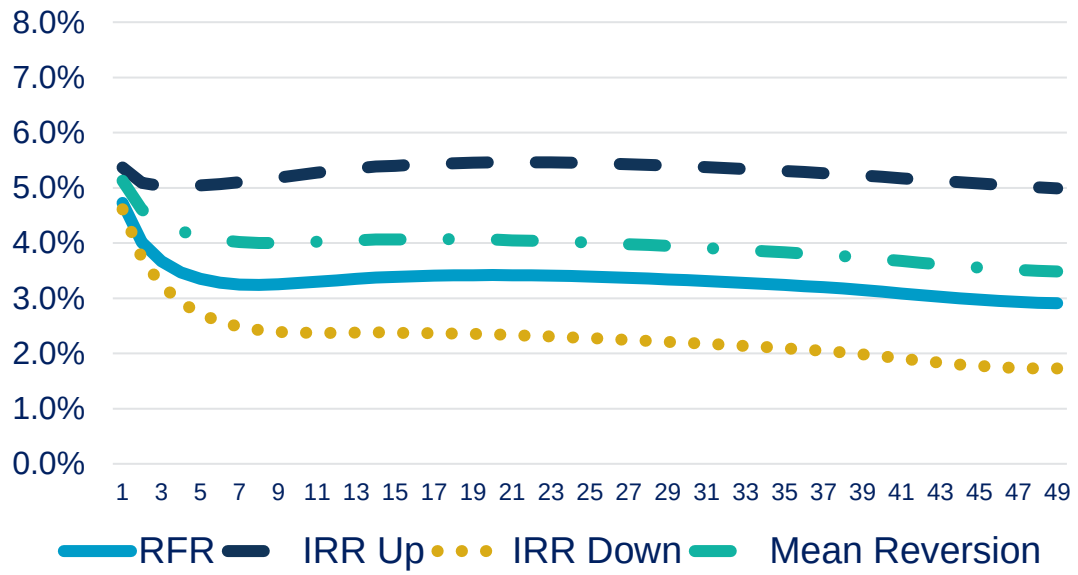
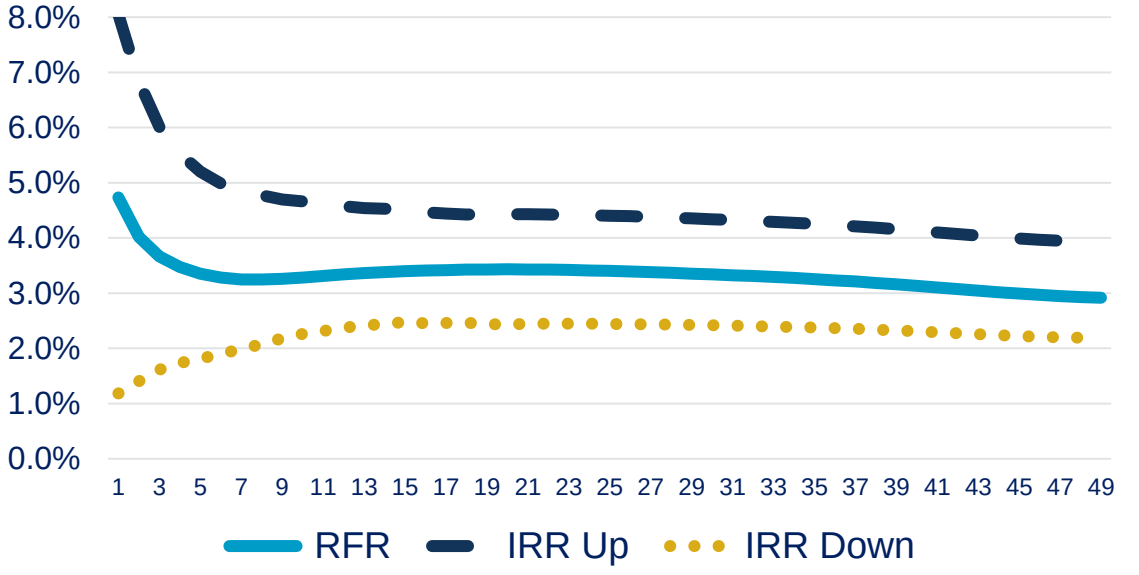
Capital Requirements: ICS Standard Method

Interest rate risk (IRR) calibrations

ICS



SUK



Notes:

- Figures above reflect GBP currency at 31 December 2023
- RFR = risk-free rates
- ICS IRR stresses are calibrated based on Dynamic Nelson Siegel modelling with 3 stress scenarios generated: shift up, shift down and mean reversion. The aggregate IRR requirement is calculated using direct simulation
- SUK IRR applies 2 stresses: shift up and shift down. The capital requirement is the maximum of the up stress and down stress

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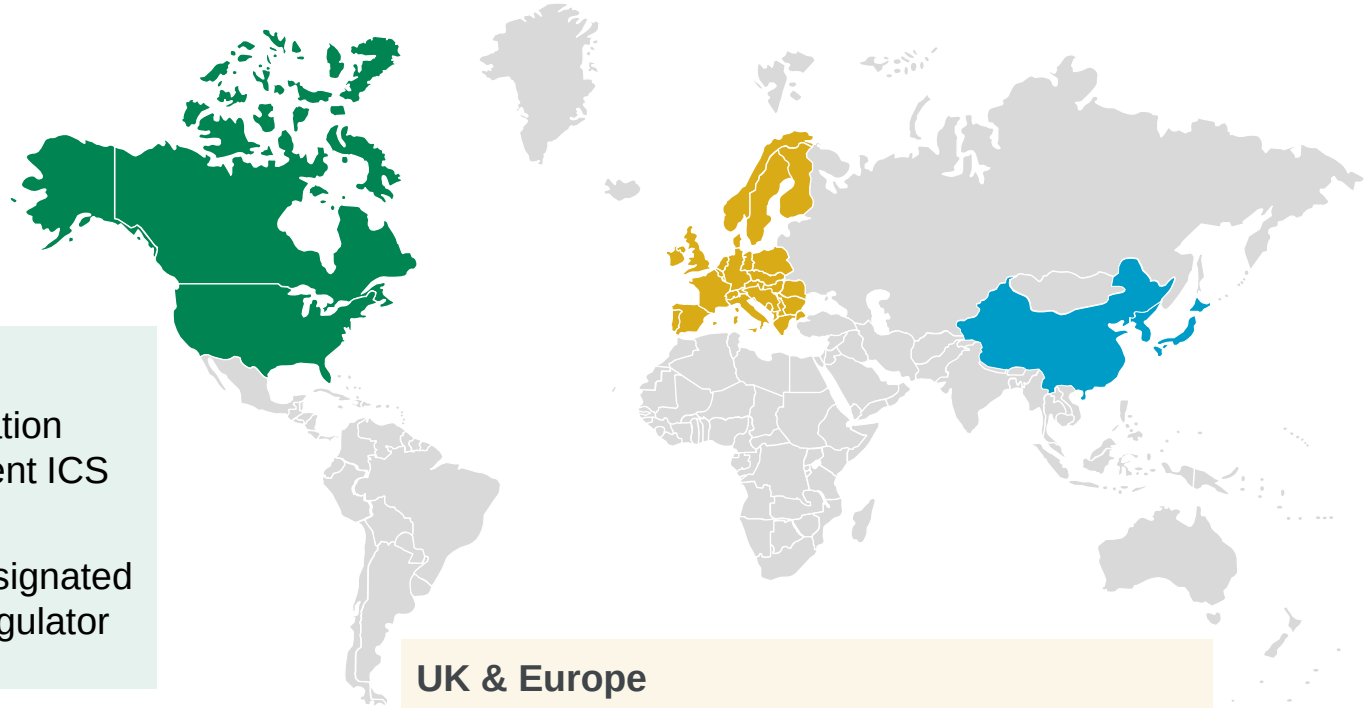
Regional Developments

Regional perspectives



North America

- US to use Aggregation Method to implement ICS (see next slide)
- Two new IAIGs designated by the Bermuda regulator

UK & Europe

- ICS implementation was a key concern during monitoring period, e.g. firms wanted to avoid dual reporting of ICS & Solvency II
- Allowance of internal models in ICS
- Treatment of internally rated assets in ICS

Asia

- Significant influence on some developing local regimes
- Japan: new solvency regime, Economic Solvency Ratio, effective from 31 March 2026
- Taiwan: new solvency regime, TW-ICS, effective from January 2026

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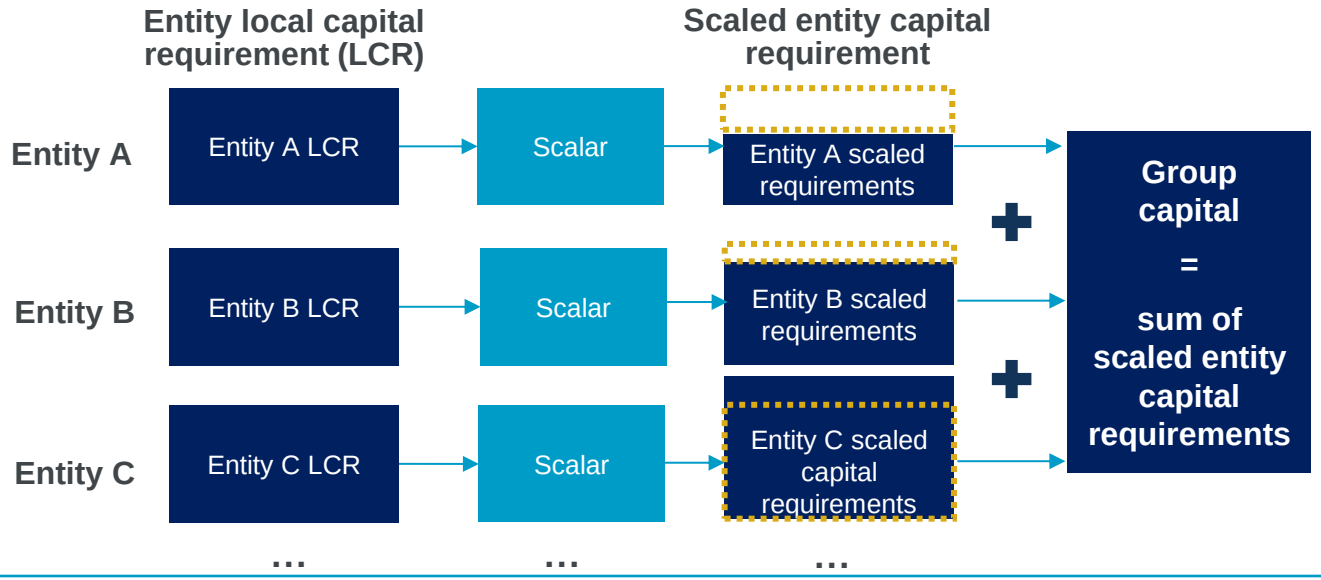
Aggregation method

What is the aggregation method (AM)?

- Alternative group capital approach based on the concept of adding up individual legal entity level results
- Legal entity figures are adjusted to remove double-counting and scaled to provide more comparable measures of capital adequacy across jurisdictions/sectors
- The scalars are specific to each entity's regime and intended to bring required capital across different solvency frameworks to a common level



Latest updates

- In November 2024, the IAIS concluded that a US AM provides a basis for implementation of the ICS to produce comparable outcomes
- The assessment of implementation of the US' implementation of ICS will be subject to the same timing as ICS implementation assessments in other jurisdictions and subject to a consistent methodology (including both qualitative and quantitative analysis)
- The assessment will be addressing whether the jurisdictional implementation at least meet the ICS, whilst also focusing on the AM specificities

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What happens next?

What happens next?

- In June 2024 IAIS ExCo set out high level timeline for its plan to assess the comprehensive and consistent implementation of the ICS across jurisdictions
- The timeline recognises that it will take some time for jurisdictions to finalise any necessary regulatory and supervisory changes to align with the ICS, taking into account jurisdictional circumstances, and for the IAIS to prepare for implementation assessment
- In 2025, the IAIS will develop a detailed ICS implementation assessment methodology, leveraging the IAIS' general principles and methodologies for assessing its standards, while taking into account the quantitative nature of the ICS
- In 2026, the IAIS will coordinate a baseline self-assessment by IAIS members of their progress in implementing the ICS, which will serve as a baseline for future implementation progress monitoring
- In 2027, the IAIS will aim to start in-depth targeted jurisdictional assessments
- Not fully clear yet on how Solvency II / UK will interact with ICS as a minimum global standard

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Questions

Comments

Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

The views expressed in this presentation are those of the presenter.

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Feedback