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Plenary 4: Panel Discussion: Harmonising Solvency Frameworks Across a Region

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Developing a Risk-Based Solvency Regime – Singapore’s Experience

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Agenda

- Risk Based Capital (RBC): Singapore’s experience
  - Drivers and considerations for RBC 2
- IAIS global insurance capital standard (ICS)
  - Singapore’s interest in the ICS
  - Relevance of ICS to other Asian regulators and players
- Design of risk-based solvency regimes: Lessons learnt

Singapore’s experience: Pre-RBC vs RBC

	Pre-RBC	RBC
Valuation of insurance contracts	Prescriptive assumptions relying on hidden margins with crude approximations	Best estimate assumptions and market consistent interest rates
Valuation of assets	Lower of book and market value	Market value
Capital adequacy requirements	Prescribed percentage of liabilities, ignoring assets and mismatching risks	• Explicit charges for liabilities, assets, mismatching and concentration risk • Clearer definitions on forms of capital

- More transparent valuation and risk sensitive capital requirements, reflecting true financial conditions, enabling early intervention
- Greater incentive for active financial risk management; greater discipline in product pricing
- More complex valuation tools needed; greater reliance on actuaries & auditors

Singapore's experience: Current RBC

Valuation	Required Capital (Risk Requirements)	Available Capital (Financial Resources)
• Assets – Market value • Liabilities – Best estimate value plus risk margin (provision for adverse deviation) • Risk Discount Rate – Best estimate investment rate (for participating business), risk-free rate* (other life business)	• C1 – Liability risk charges • C2 – Asset and Mismatching risk charges (e.g. Equity, Debt, Loan, Property, Duration Mismatching, Foreign Currency Mismatching, Miscellaneous assets) • C3 – Asset Concentration risk charge • Total = C1+C2+C3	• Tier 1 with deductions for reinsurance and others, e.g. loans to related companies, charged assets • Tier 2 • Limits on certain Tier 1 and 2 • Up to 50% of provision for future non-guaranteed surplus (subject to conditions)

Financial Resources ("FR")/ Total Risk Requirements ("TRR") ≥ 100% for each **insurance fund**;
At **company (includes branch)** level, FR/TRR ≥ 100% or $5m, whichever is higher (120% is early warning level)

** Based on SGS government bond yields, with a flat long-term smoothed rate for 20 years & beyond*

Singapore's experience:Implementing RBC

- More complex valuation tools and reporting systems required
- Lack of familiarity and differences in interpretations by insurers

Led to operational issues such as errors in reporting initially

What we did: *Conducted parallel runs, thematic inspections, leveraged external auditors, held regular industry dialogues*

- Greater reliance on actuary's work as now assumptions are based on actuary's professional judgment

Required expertise and resources to validate and challenge the assumptions

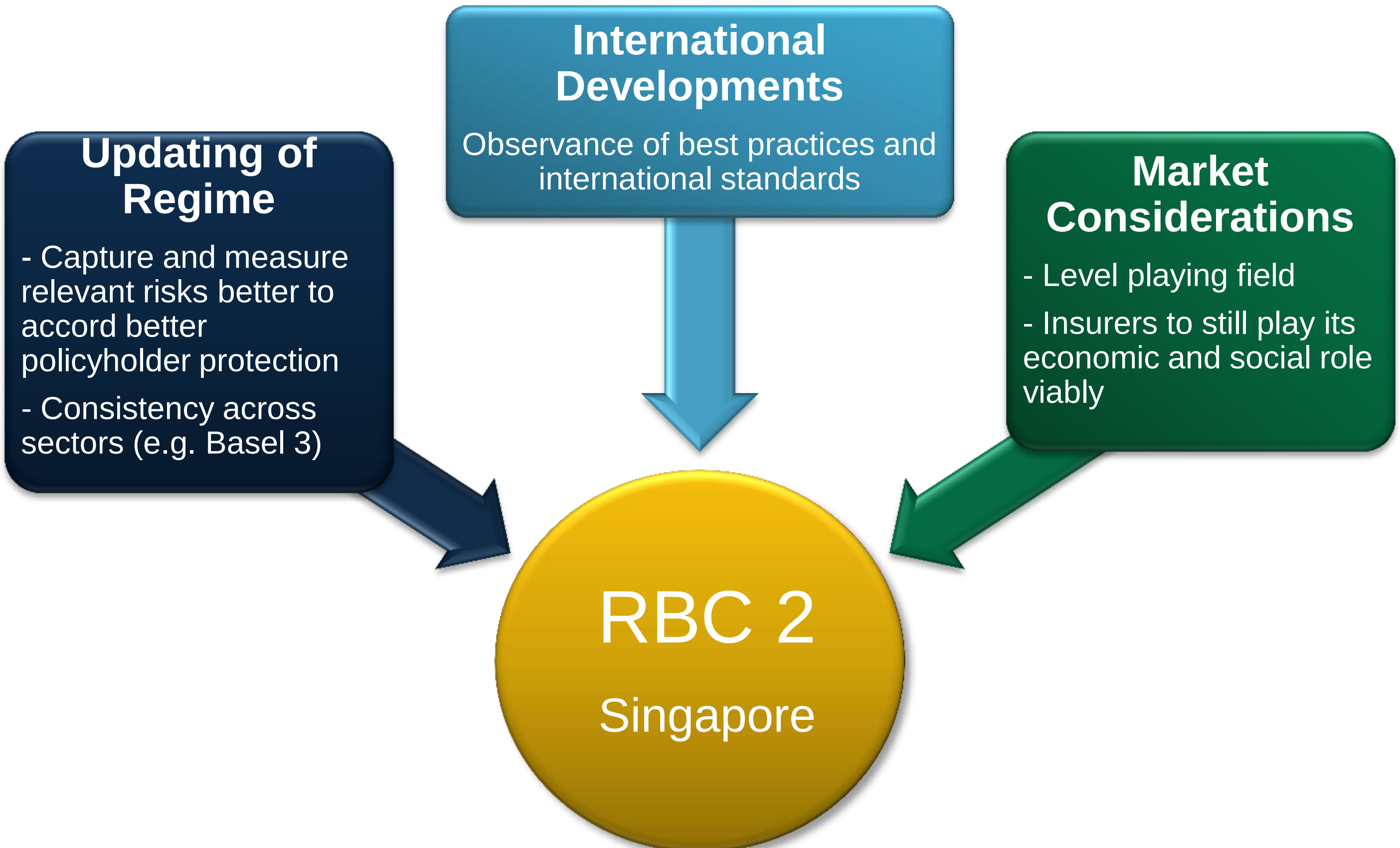
What we did: *Introduced fit and proper criteria, worked with actuarial body to set standards, conducted inspection and off-site review of assumption-setting process, strengthened actuarial expertise within MAS, introduced power to get external peer review where necessary*

- Avoid unintended consequences of the framework.

Need to carefully monitor the impact on e.g. investment and product strategies

What we did: *Engaged and consulted industry early, conducted extensive impact studies and parallel runs, monitored changes in insurers' strategies, regularly reviewed the adequacy of framework*

Drivers and considerations for RBC 2



RBC 2 Review is not expected to result in a significant overhaul to the current framework. It was not triggered due to concerns with the level of capital held by the insurers under current RBC. Instead it aims to improve the comprehensiveness of risk coverage and risk sensitivity of the existing framework.

Key Features of RBC 2

Required Capital (Risk Requirements)

- Introduction & Reorganisation of Risks (e.g. insurance catastrophe, operational and spread risks)
- Recalibration of Risk Requirements to 99.5% VaR over one year
- Allowance for diversification benefits in aggregating risk requirements

Available Capital (Financial Resources)

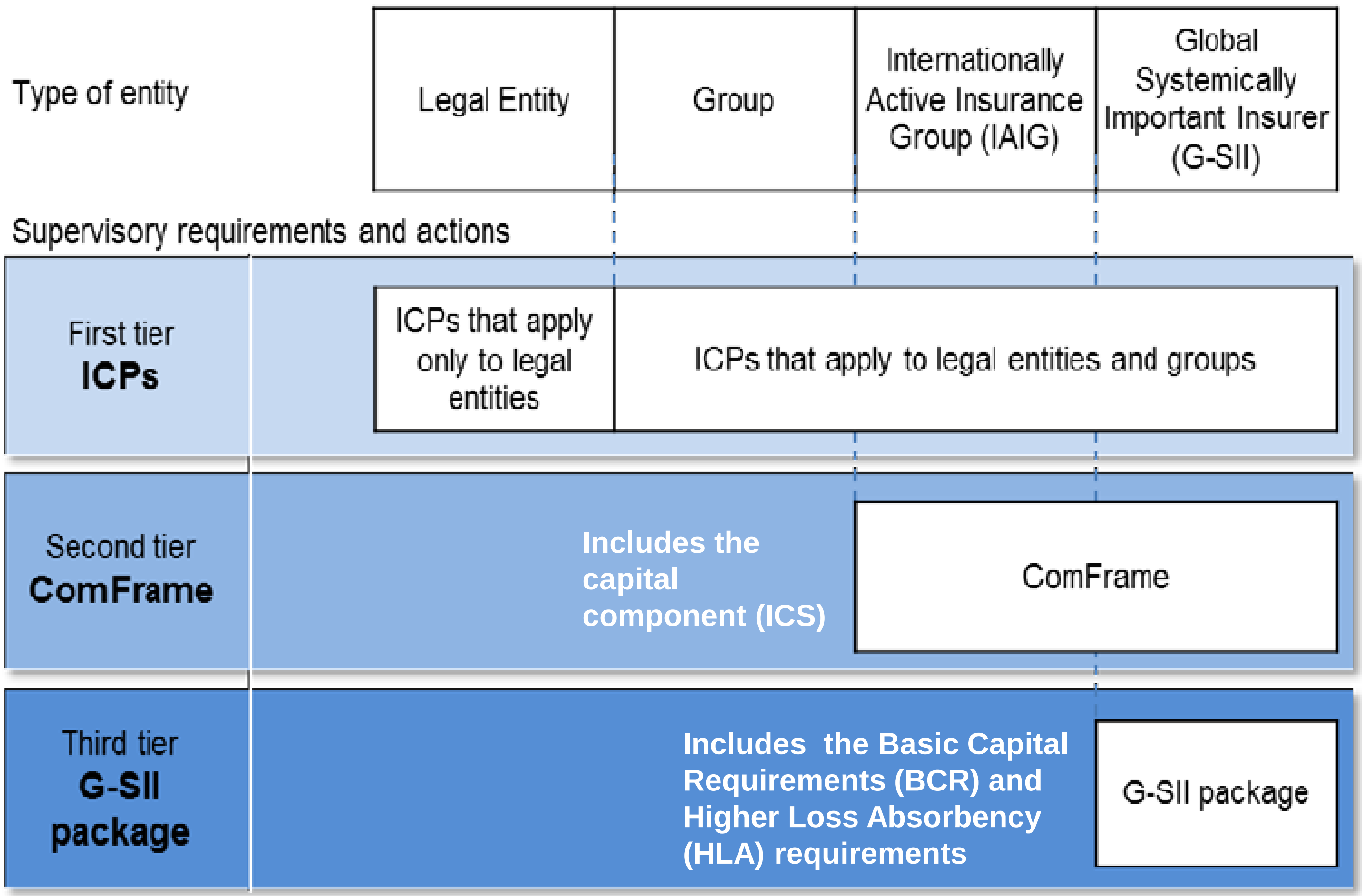
- Incorporation of useful and appropriate features from Basel 3
- Changes to Reinsurance Adjustment e.g. not to take into account of licensing status

Other Elements

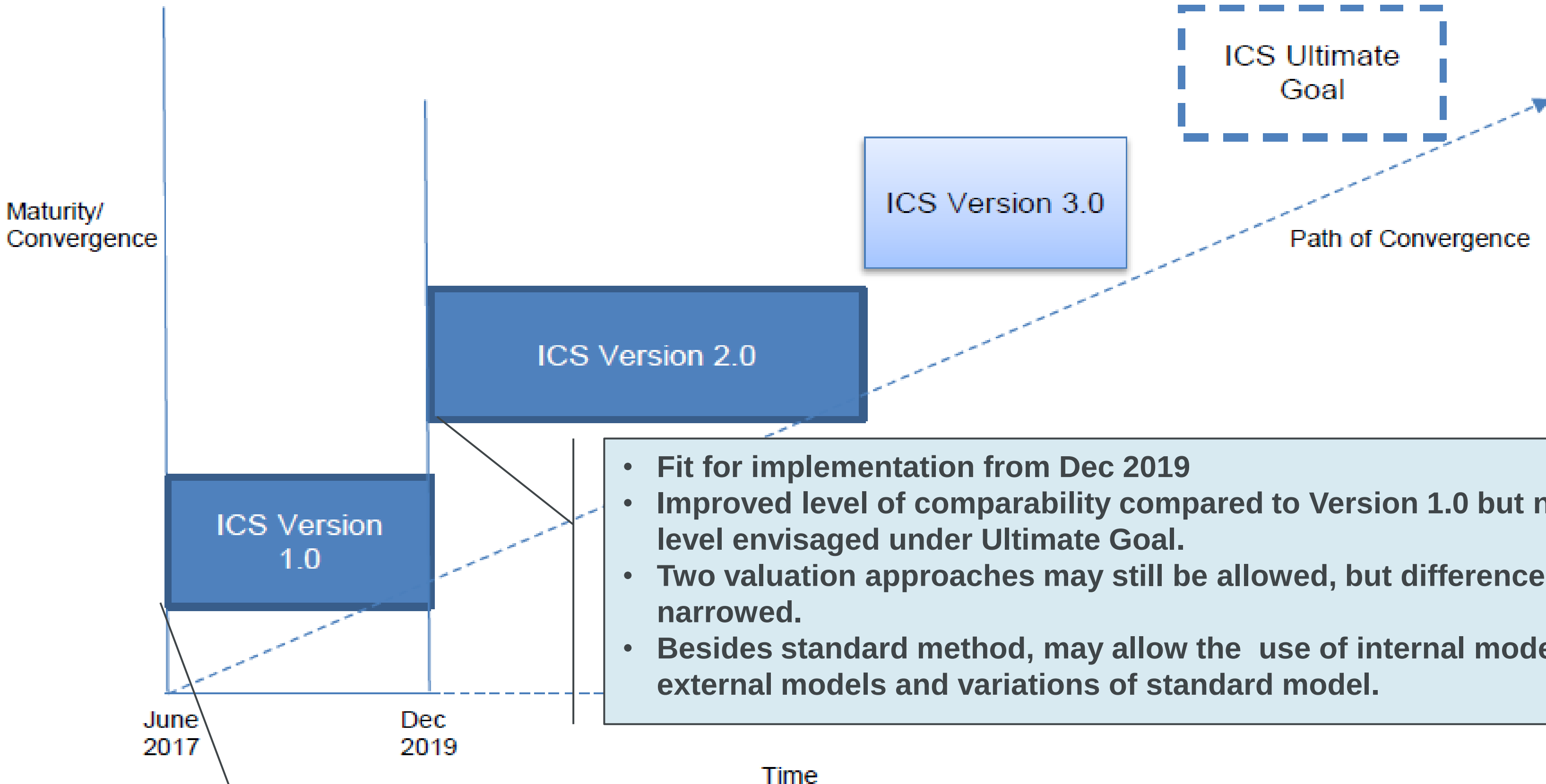
- Two explicit levels of solvency intervention – Prescribed Capital Requirement (PCR) & Minimum Capital Requirement (MCR)
- To take into account of the illiquid nature of long-term insurance liabilities in the valuation (e.g. matching adjustment concept)
- Introduction of ERM (with ORSA)

We have rolled out ERM requirements progressively since 1 Jan 2014. Public disclosure requirements (akin to Pillar 3) have also been rolled out in 2014

Applicability of IAIS' initiatives



Timeline for global insurance capital standard



- **Fit for implementation from Dec 2019**
- **Improved level of comparability compared to Version 1.0 but not at level envisaged under Ultimate Goal.**
- **Two valuation approaches may still be allowed, but differences narrowed.**
- **Besides standard method, may allow the use of internal models, external models and variations of standard model.**

- **For confidential reporting from mid 2017, based on the two identified valuation approaches (Market-adjusted Valuation Approach and GAAP with Adjustments Approach) and a standard method for calculating capital requirements.**
- **Upon completion, use of other internal models, external models and variations of standard model, including use of national jurisdictions' framework, will be considered.**

Singapore's interest in the ICS

- Fully support the work by IAIS. Besides being on the parent committees of IAIS, also an active member of the Capital Development Work Group
- May have insurance group(s) that may qualify as IAIGs, for which ICS will be applicable
- Host to many IAIGs operating in Singapore
  - Need to draw comfort in the comparability of group capital adequacy ratio when assessing parental or head office support
- Useful learning experience and sharing of best practices across jurisdictions; issues are more common than you think
- Useful check or validation of our own work

Should other Asian regulators/ players be equally interested?

- Yes!
  - ICS is fast taking shape and progressing as planned. In other words, it is no longer a remote possibility
  - Asian participation in field testing is critical to ensure that the ICS is appropriate for Asian IAIGs and other non-Asian IAIGs with significant presence in Asia
  - Likely that there are common ICS design issues/unintended consequences that we should be concerned about for Asian countries. Be the voice of reason
  - For some jurisdictions, ICS may even be an “off-the-shelf” solution, if local circumstances permit, for solo entities

What could be the issues for Asia?

- Inferring from our own RBC 2 consultation feedback, it could be in the areas of:
  - Treatment of unrated bonds and bonds which may not be rated by recognised external credit rating agencies: Asia has a significantly larger proportion of such bonds (though generally of good quality)
  - Discounting approach and calibration of risk charges for long-dated bonds and equities: In Asia, there is generally a lack of long-dated, deep and liquid assets to match the long-dated liabilities
- Certain proposed treatment/computation under ICS may also be unsuitable for Asian markets due to differences in product offerings or level of sophistication
- Market development considerations (e.g. ageing demographics, rising affluence and lower insurance penetration rates in Asia)

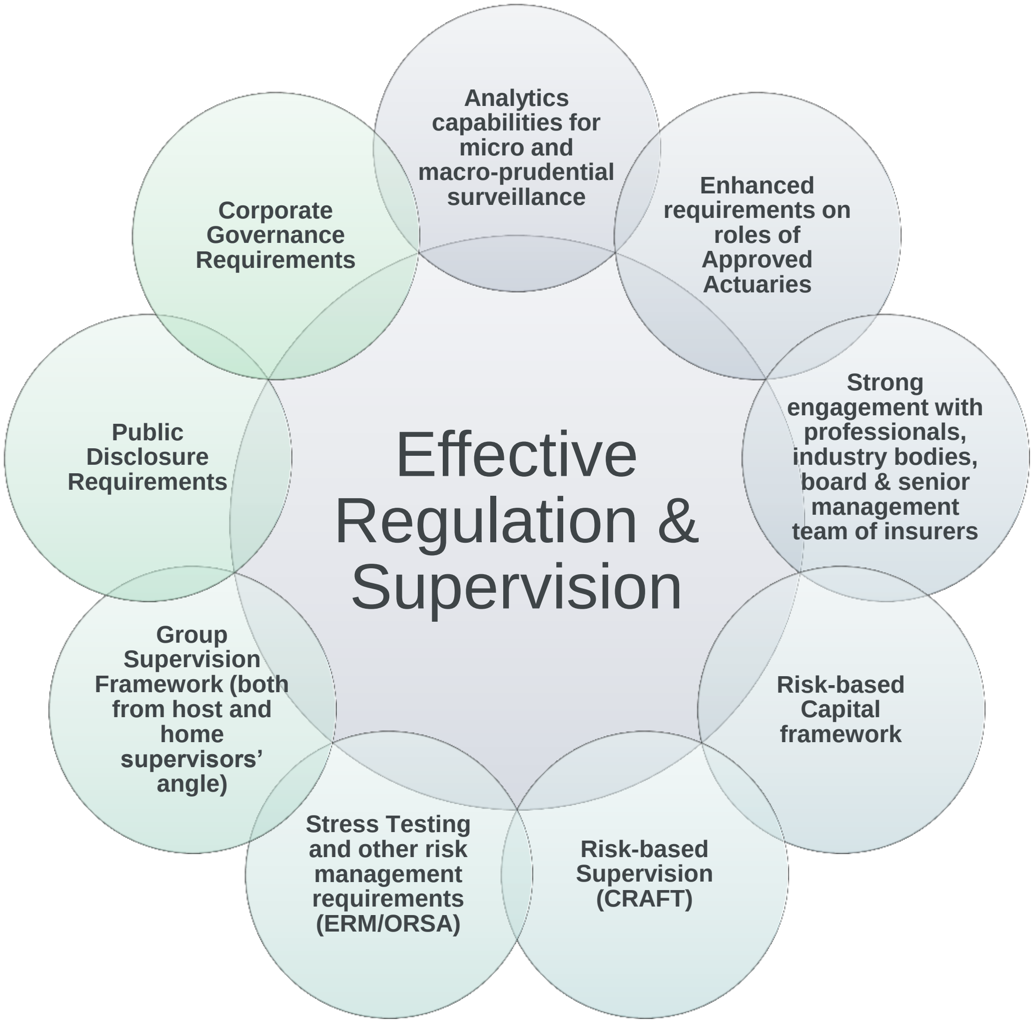
Lessons learnt on design of risk-based solvency regimes

- Do not lose sight that one of the primary objectives of the capital is for policyholder protection
- Should be risk-based as far as possible, but not all risks need to be quantified
- Need not strive for perfection, make incremental enhancements
- Do not underestimate the unintended consequences
  - Consult and test the proposals extensively
  - Monitor how market/ industry behaviour changes after implementation
  - Strive to achieve an optimal balance between these objectives: policyholder protection, financial stability and market development

Lessons learnt on design of risk-based solvency regimes (cont'd)

- Be practical and outcome-focused, taking local circumstances into consideration
- Learn from the experience of other jurisdictions, including banking
- Capital is not the panacea to all problems

Capital is not everything!



Questions

Comments