FRS 117 *Insurance Contracts* Vs MAS' Risk-Based Capital 2 (Part 4)

Guidance from ISCA's IFRS 17 Working Group

ALVIN CHUA, HARRY LEE AND CHARLES CHIU

TAKEAWAYS

- Differences exist in the basis of calculations used for economic assumptions under FRS 117 ad RBC 2.
- The risk adjustment under FRS 117 relates only to non-financial risk, and diversification benefit is allowed. The provision for adverse deviation under RBC 2 is not limited to non-financial parameters, and consideration of diversification benefits is not explicit.
- Through various mechanisms, the profit pattern under FRS 117 is expected to be smoother compared to RBC 2.

The third article of the series by the IFRS 17 working group, published in the December 2022 issue of this journal, in collaboration with the committee members of the Singapore Actuarial Society (SAS) Life IFRS 17 Workgroup, explored specific considerations around the measurement of insurance liabilities for life insurance business under FRS 117 *Insurance Contracts* (FRS 117) and Risk-Based Capital 2 (RBC 2) in the following areas:

1. Level of aggregations;
2. Component of liabilities;
3. Contract boundaries;
4. Valuation methodology;
5. Expense.

In this fourth article, the IFRS 17 Working Group, also in collaboration with the SAS Life IFRS 17 Workgroup, discusses specific considerations around the measurement of insurance liabilities for life insurance business under FRS 117 and RBC 2 in the following areas:

1. Economic assumptions;
2. Risk adjustment vs provision for adverse deviation;
3. Contractual service margin and profit emergence.

1. ECONOMIC ASSUMPTIONS

The economic assumptions used in FRS 117 are required to be current and consistent with observable market variables. The discount rates should only reflect the time value of money, the characteristics of the cash flows and the liquidity characteristics of the insurance contracts. Under the 'bottom-up' approach, the risk-free rates would often be the starting point for the construction of discount rate curves, with a possible further adjustment for the difference between the liquidity characteristics of

the insurance cash flows and the risk-free assets. The method to allow for the illiquidity premium (IP) is not specified in FRS 117 but should be consistent with available market information where possible.

Similarly, the calculation of policy liabilities under RBC 2 in many cases also involves application of discount curves that are based on the market risk-free rates, although other forms of discount rate are used for certain classes of business (such as for participating fund policies, which are described below). Entities may apply IP or matching adjustment (MA) on the risk-free rates when discounting the liability cash flows, subject to prescribed conditions being met. Overall, the determination of IP and MA under RBC 2 is dependent on the composition of the investment assets that are backing those liabilities. The IP is determined on an industry level based on the spreads of corporate bonds held by life insurers, while the MA considers the specific spreads of the assets in an insurer's MA[1] portfolio. In contrast, FRS 117 discount rates should consider only the liability characteristics and could be largely independent from the asset strategy.

Under RBC 2, the best estimate cash flows component for participating fund and universal life policies also consider the discount rates based on the expected long-term investment return of assets backing the policy liabilities of the participating fund and universal life portfolio respectively. These approaches may not meet FRS 117's requirements of consistency with observable market variables and reflecting liquidity characteristics of the liabilities.

Under FRS 117, for contracts measured under the general model, contractual service margin (CSM) adjustments would be measured using economic assumptions that are locked in at the inception of the contracts. There is no CSM requirement under RBC 2, hence, locked-in economic assumptions would not be required.

For reinsurance contracts held, the FRS 117 discount rate is not necessarily identical to the discount rate for underlying insurance contracts. The extent of dependency between the cash flows of reinsurance contracts held and the underlying insurance contracts should be evaluated according to FRS 117. For RBC 2, the valuation of reinsurance cash flows is not separated from the underlying contract's cash flows, therefore, the discount rate would generally be consistent with underlying contracts' cash flows.

2. RISK ADJUSTMENT VS PROVISION FOR ADVERSE DEVIATION

Under FRS 117, the risk adjustment (RA) is an explicit adjustment to the estimate of the present value of future cash flows to reflect the compensation that the entity requires for bearing the uncertainty about the amount and timing of the cash flows that arise from non-financial risk. The RA only relates to non-financial risk and diversification benefit is allowed.

Under RBC 2, entities explicitly make a provision for adverse deviation (PAD) to increase the prudence of policy liabilities. PAD is not limited to non-financial parameters and consideration of diversification benefits is not explicitly stated under RBC 2.

FRS 117 does not prescribe the level of sufficiency built nor the method of computing RA, but it requires confidence-level disclosure in the financial statements. Under RBC 2, certain short-term

policies issued as part of the insurer's life business and any policy that provides accident and health benefits are subject to 75% level of sufficiency. For other policies that are not within the scope of the requirement under RBC 2, SAS guidance similarly proposes for PAD to be set at a minimum 75% level of sufficiency and relate to calculation of policy liabilities, and it is a general industry practice to derive PAD by applying margins on the valuation assumptions.

3. CONTRACTUAL SERVICE MARGIN AND PROFIT EMERGENCE

Under RBC 2, the PAD and the flooring of negative reserves could be viewed as additional margins or buffers in the policy liabilities. These buffers delay the recognition of economic value of writing profitable new business, and act as a mechanism that affects the rate that economic gains are recognised in the regulatory balance sheet.

If new business profitability were to be assessed on this basis, insurers may expect that during periods where the policy liabilities are floored at zero, any policy cash flow would directly change an entity's net asset position. When the policy liability flooring is no longer effective, the surplus emergence would generally commensurate with the run-off of PAD and experience variance of policy cash flows. In contrast, FRS 117 is designed to give a profit recognition pattern that is in line with the pattern of service provided to policyholders. The main mechanisms controlling the profit recognition pattern are as follows:

- **CSM:** Explicit unearned profit provision set up on initial recognition of each contract. For profitable new contracts, it offsets the best estimate liability and RA such that no profit or loss is recognised at the point of contract inception. As the CSM is floored at zero, a loss component is created when the group of contracts is onerous at inception and the negative amount must be recognised immediately in profit or loss.
- **Coverage unit:** The CSM is recognised over the contract's coverage period based on the pattern of coverage units, which represents the level of insurance (and investment) service that is provided to policyholders in each period, for example, for policies with fixed level of insurance coverages, the CSM would be expected to be amortised at similar rates through the policy term, leading to smooth profit recognition.
- **Measurement model:** Contracts with significant assets-linked benefits (such as investment-linked and participating fund policies) would be measured under the variable fee approach. Recognising that these contracts' profitability could be dependent on future economic environment, FRS 117 allows for the impact of economic changes and variances to adjust the CSM and be recognised over the coverage period. This mechanism allows a smooth profit pattern to emerge and lessens the distortions from short-term market fluctuations.

Through the above mechanisms, the profit pattern under FRS 117 is expected to be smoother compared to RBC 2.

In the upcoming article, the IFRS 17 Working Group will attempt to address measurement issues faced by an entity applying the premium allocation approach (PAA) under FRS 117, and highlight the differences between FRS 117 and RBC 2 when adopting the PAA.

This is the fourth in a series of articles from the IFRS 17 Working Group (set up under the ambit of the ISCA Insurance Committee) to help insurers in Singapore navigate through the differences between FRS 117 and RBC 2.

Alvin Chua is Chairman of the IFRS 17 Working Group (WG) and Director, KPMG Services Pte Ltd; Harry Lee, a WG member, is Co-Chair of the SAS Life IFRS 17 Workgroup and Programme Director, IFRS 17 Programme Office, Prudential Assurance Company Singapore; and Charles Chiu is Co-Chair of the SAS Life IFRS 17 Workgroup and Actuarial & Pricing, Group Finance, Great Eastern Life Assurance Co Ltd.

---

[1] Prior approval from MAS is required before MA can be used on the liabilities in an MA portfolio.

This article was first published in the IS Chartered Accountant, Issue date (January/2023). Re-published with permission from the Institute of Singapore Chartered Accountants (ISCA).