



**Canadian
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Subject: Draft LICAT Guideline – Segregated Fund Guarantee Capital Framework

The Canadian Institute of Actuaries (CIA) is pleased to provide comments on the revisions to the Segregated Fund Guarantee (SFG) Capital Quantitative Impact Study (QIS) 7 for the Office of the Superintendent of Financial Institutions (OSFI) LICAT Guideline. We will also provide these comments to the Autorité des marchés financiers (AMF) in relation to the draft CARLI Guideline.

We are committed to contributing to the development of rigorous standards in the Canadian financial system, which encourage sound risk management and serve the public interest. Overall, the CIA encourages OSFI and the AMF to apply international standards as defined by the International Association of Insurance Supervisors (IAIS), most notably in the *Insurance Core Principle 17 Capital Adequacy* (ICP 17).

We have aligned our comments to specific sections of the guideline when possible.

Approximations and simplifications

Although certain approximations and simplifications are permitted under QIS 7, there are still some elements in the proposed framework that remain operationally complex for many companies to calculate in a quarterly production environment (which is typically 4-5 weeks and includes calculating base runs, producing sensitivity testing and analyzing results). The operational complexity of the standard approach also impacts other regulatory processes like Financial Condition Testing and Own Risk and Solvency Assessment.

When the new segregated fund capital requirements are put into production, insurers may identify approximations that result in materially the same answer as a full calculation. We welcome the opportunity to discuss with OSFI and the AMF in the future where approximations may be appropriate.

Calibration

We believe that the following should be considered when completing the calibration of the proposed standard approach.

1. The proposed framework is affected by market conditions through the required capital and the liability restatement. Given this sensitivity, it is important to ensure the standard approach is calibrated to be adequate under a variety of market conditions.

2. Several components of the proposed framework have been postponed or have not yet been considered until after implementation, including interest rate risk (and the corresponding hedging credits when applicable), foreign exchange volatility risk, basis risk and future deposits risk. These items may be material and should be considered in the calibration of the standard approach.
3. The approach relies on IFRS 17 valuation (except for discount rate and expected return assumptions that are restated). Using IFRS 17 as the foundation of the new framework is practical and robust due to peer review and CIA guidance. However, this approach may reward an insurer that uses less conservative accounting methodologies and assumptions (by recognizing a higher available capital). Once the new framework is in effect, we encourage OSFI/AMF to review the IFRS 17 range of practice for future calibration purposes, similar to the approach when other changes to capital requirements are introduced.

Smoothing mechanism

Under current SFG capital, a smoothing mechanism is permitted for insurers using either the internal model approach or a factor-based approach. This smoothing was introduced so that point-in-time calculations for LICAT did not inappropriately create volatility in capital requirements for products with distant payment obligations, inconsistent with the true changes in the risk.

This volatility remains, and is possibly even greater, under the new standard approach using IFRS 17 valuation models. It would be appropriate to include a smoothing mechanism to dampen the volatility of SFG capital quarter-over-quarter, similar to the smoothing mechanism that is permitted under the current framework.

Absence of interest rate risk and other risks

The proposed framework considers more risks for the segregated fund guarantees than the current framework. However, during the development of the proposed framework, some risks such as interest rate risk (and their corresponding hedging credits when applicable), foreign exchange volatility risk and basis risk have been postponed to a later date. Some risks such as future deposits risk (misestimation risk on future deposit assumptions) do not appear to have been considered. This does not align with standards established by the IAIS (see ICP 17.7¹) as we believe the calibration of the proposed framework should also consider the impact of these risks.

Alignment between OSFI and AMF

The CIA is aware that a sensitivity test add-on request has been sent by the AMF to companies in addition to the QIS 7. We understand from that request that final calibration of the standard approach could be different between OSFI and the AMF. Since the basics underlying the development of the standard approach are the same, it is not clear why the final calibration should be different between the regulators.

Finally, both OSFI and the AMF will offer the standard approach starting in January 2025. However, after December 2024, the AMF will continue to offer an internal model approach with

¹ ICP 17.7: "The supervisor addresses all relevant and material categories of risk in insurers and is explicit as to where risks are addressed, whether solely in technical provisions, solely in regulatory capital requirements or if addressed in both, as to the extent to which the risks are addressed in each [...]"

hedge recognition while OSFI will not. This difference in approach taken by OSFI and the AMF will create an uneven playing field in the Canadian industry for the segregated fund business.

Section 2.1.2.9 – Deduction for negative reserves

The CIA notes that the scope of the deduction for negative reserves will be broadened to include segregated fund products, which resurfaces general questions regarding the treatment of negative reserves in LICAT (previously raised to OSFI by the CIA).

The capital required by OSFI for lapse risk is significantly different when looking at OSFI's expectations for the Total ratio (100% supervisory target) vs. the Core ratio (70% supervisory target):

- Based on the Total ratio, Tier 1 or Tier 2 capital is necessary to cover for the lapse risk base solvency buffer (BSB).
- Based on the Core ratio, Tier 1 capital is necessary to cover both 70% of lapse risk BSB and 100% of the deduction for negative reserves. This deduction counts as lapse capital requirement since losses from negative reserves can only be triggered by lapses. Indeed, the deduction models the impact of a perfectly anti-selective lapse scenario. The deduction is significant, representing a reduction of 15% in the Core ratio as of December 31, 2023, for the industry (\$19B deduction).

Based on the above, OSFI's lapse risk tolerance as defined by the Core ratio seems excessively conservative and inconsistent with the lapse risk tolerance defined by the Total ratio

Since this deduction is significant (probably as large as the BSB lapse risk), the CIA encourages OSFI/AMF to transparently explain its rationale (as aligned with ICP 17.6²). The review of other key capital frameworks (Solvency II and IAIS's ICS) suggests this deduction is not conceptually required.

Section 7.1 – Restated liabilities with updated discount rate and expected return assumptions

Deduction for restatement

A restatement for the measurement of the BSB may be appropriate in certain circumstances (similar to using prescribed discount rates for the non-segregated fund products in Chapter 5), however we believe that the proposed deduction in available capital for the restatement of segregated fund liabilities is inconsistent with the approach in LICAT for other products.

Our stance is that the nature of the guarantees offered needs to be considered, as well as the "money-ness" of the guarantees.

At one extreme, if there were a guaranteed maturity/accumulation guarantee that was deep in the money and it could be exercised in the short term, then the zero-illiquidity premium view may be appropriate. At the other extreme, if there were a maturity guarantee that was out of the money and/or whose exercise was many years in the future, then the zero-illiquidity premium view would be unreasonable.

² ICP 17.6: "The regulatory capital requirements are established in an open and transparent process, and the objectives of the regulatory capital requirements and the bases on which they are determined are explicit [...]"

Similarly, adverse market experience is likely to make guaranteed minimum income benefits even less liquid rather than pushing them to the liquid end of the spectrum.

The QIS 7 approach seems to be too narrow and not sufficiently nuanced.

CDOR versus CORRA

The Canadian swap curve reference is transitioning from CDOR to CORRA which implies a reduction in the level of interest rates used for determining the restated liabilities.

By consequence, we encourage OSFI/AMF to consider this significant element in the development of the new framework and to clarify it to ensure a homogeneous application of the requirements.

Section 7.2.2 – Market risk

QIS 7 defines volatility shocks based on forward equity volatilities while still allowing shocks based on spot equity volatilities using a second set of shock values. Providing this flexibility to insurers is viewed positively as long as the outcomes from the two methods generate the same results.

Section 7.2.3.2 – Lapse risk interrelation with equity risk

Lapse risk exposure for segregated fund products significantly increases during periods of stress as guarantees become more in-the-money. This is an important difference compared to other insurance products.

For companies using dynamic best-estimate lapse assumptions, the equity shock captures the ripple effect on future expected lapses.

As for the lapse risk, it is measured assuming a normal market environment (not stressed), which suggests that some of the interrelation with equity risk has not been captured (regardless of whether a dynamic best-estimate lapse assumption is used). Since LICAT aims at preventing failure from an extreme period of stress that might include simultaneous market downturns and lapse adverse events, the lapse risk should, in theory, be measured under a stressed market environment.

The CIA understands the interrelation not explicitly captured might be considered implicitly (for example, the +/-30% lapse shock might implicitly include it) or it may be deemed immaterial. If it is the case, the CIA would encourage OSFI/AMF to document it, as aligned with ICP 17.7.³

Section 7.2.3.2 – Lapse sub-risks

Under QIS 7, lapse risk for segregated fund products is a permanent +/-30% shock to dynamic best-estimate lapse assumptions (dynamic assumption is the common practice in the industry).

For other products, lapse risk is the sum of:

³ ICP 17.7: "The supervisor addresses all relevant and material categories of risk in insurers and is explicit as to where risks are addressed, whether solely in technical provisions, solely in regulatory capital requirements or if addressed in both, as to the extent to which the risks are addressed in each [...]"

- A permanent +/-30% shock to best-estimate assumptions, which represents the misestimation risk of the best-estimate assumption (level-trend risk)
- One-year volatility shock
- One-year catastrophe shock

At first glance, QIS 7 seems to adequately cover the misestimation risk and to ignore volatility and catastrophe risks; however, the CIA understands that good reasons could have led to the QIS 7 construct. For example, QIS 7 could be adequate if OSFI/AMF assumes lapse misestimation risk for segregated fund products to be lower than for other products and that OSFI/AMF implicitly includes volatility and catastrophe risks in the permanent +/-30% shock. Also, volatility and catastrophe risks could have been ignored if deemed immaterial.

In all cases, the CIA would encourage OSFI/AMF to document the underlying rationale, as aligned with ICP 17.7.

Section 7.3 – Recognition of equity hedges

The use of a stochastic-on-deterministic approach using 20 prescribed equity scenarios seems less consistent with a standard approach in terms of complexity and operational challenges. Although the objective of the methodology is to determine a hedge credit, the results may contain non-negligible collateral impacts like, for example, the passage of time which may not be intended by the framework.

The proposed framework defines a minimum in percentage (i.e., 10%) of the change in the liabilities under which the hedge effectiveness conditions (i.e., within [70%,130%]) is not tested. We assume the purpose of this minimum is to eliminate situations where hedge effectiveness would be out of a normal range, but this has minimal impact on company's results. In this case, we suggest OSFI/AMF to consider introducing an additional condition in order to avoid the situation where the liabilities are close to zero and a change of the liabilities is high in percentage but low in amount and thus, has minimal impact on company's results.

Section 7.4 – Simplified option

The \$100M limitation in this section seems very restrictive. We suggest OSFI/AMF introduce a risk-based limit rather than a fixed dollar amount.

Section 8.2.3 – General required capital

Depending on the final calibration of the proposed standard approach, the impact on required capital for operational risks could be significant, since it is measured as a percentage of segregated fund guarantee required capital.

The CIA would encourage OSFI/AMF to keep the level of required capital for operational risks for segregated funds unchanged as it is not expected that insurers' operations will be different in 2025, other than the calculation of the capital requirement for segregated fund business.

The CIA appreciates the opportunity to provide feedback on these issues, and we would welcome further discussion with you throughout this process.

If you have any questions, please contact Chris Fievoli, FCIA, Actuary, Communications and Public Affairs, at 613-236-8196 ext. 119 or chris.fievoli@cia-ica.ca.

Sincerely,

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