



INSURANCE COMMISSION
OF THE BAHAMAS



Technical Assistance for the Insurance Commission of The Bahamas

Design and Analysis of Quantitative Impact Study
Capital Requirement for Long Term Life Insurers

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INTRODUCTION

Overview

The Insurance Commission of The Bahamas (ICB) wishes to conduct a 3rd Quantitative Impact Study (QIS 3) to refine the risk based capital adequacy framework for Long Term Life insurers.

Two earlier QISs were conducted in 2022 and 2023 however, it was not possible to conclude on the updates needed to the capital adequacy framework owing the quality of the submissions.

The International Accounting Standards Board (IASB) has issued new International Financial Reporting Standards (IFRS), in particular IFRS 17 Insurance Contracts, IFRS 9 Financial Instruments and IFRS 16 Leases.

The calculation of the Regulatory Capital Ratio (RCR) is set out in the Long-Term Insurance Capital Adequacy Guidelines dated January 2019. These Guidelines apply to both domestic and foreign insurers in respect of insurance business both inside and outside of The Bahamas.

The current target RCR is 150%.

In light of the above, the objective of the QIS 3 is to refine the capital adequacy framework and evaluate the impact of the above changes.

Approach

The existing capital adequacy framework has been adjusted to allow for the key impacts of the changes being made to the IFRS. A capital charge for operational risk and a credit for diversification of risks have also been included in the calculation.

The changes made in this QIS 3 compared to the prior QIS 2 are as follows:

- A risk factor of 2% for investment rated reinsurers and 15% for all other reinsurers was introduced in the calculation of the capital requirement for asset default risk in respect of reinsurance contracts held assets. The risk factor was previously 2% for all reinsurers.
- The Excel template has been adjusted to clarify that the Contractual Service Margin is to be included as Available Capital for foreign insurers.

A review of the factors applicable to assets that are impacted as a result of the application of IFRS 9 will be done to the extent possible when the QIS 3 results are submitted in conjunction with the December 31, 2023 financial statements.

The minimum target level of required capital will be reviewed after an analysis of the QIS 3 results is completed.

Insurers are required to use the IFRS 17 discount rates they have developed internally for the QIS 3 exercise.

Feedback and communication channels

We encourage the insurers to provide feedback when the results are submitted. If there is an alternative method/approach that an insurer would like to propose for any particular risk category, please do so with supporting rationale.

SECTION I – INSTRUCTIONS

The insurer should submit the following to the ICB by October 21, 2024.

All figures provided should be as at December 31, 2023.

- RCR calculations in accordance with the Long Term Insurance Capital Adequacy Guidelines dated January 2019. The detailed Excel spreadsheet should be submitted.
- Revised RCR calculations, based on IFRS 17 financials and incorporating the changes and additional risk categories indicated below. The revised capital adequacy worksheet is provided.
- If an insurer has produced its own calculation under the Canadian LICAT requirements as at December 31, 2023, please provide a copy of the LICAT worksheet.
- Disclosure items as set out in Section 7.

SECTION 2 – CAPITAL AVAILABLE

Acceptance as capital for capital adequacy purposes will be based on satisfaction of the following criteria:

- Availability¹
- Permanence²
- Absence of mandatory fixed charges or encumbrances³
- Subordination⁴

CHANGES TO CAPITAL AVAILABLE

The methodology used to calculate capital available is the same as outlined in the Long-Term Insurance Capital Adequacy Guidelines except for the items below:

- The calculation should be based on the IFRS 17 balance sheet as at 31 December 2023.
- Cash surrender value deficiencies are to be calculated net of reinsurance on an aggregate basis within sets of policies by product type. Deficiencies are calculated relative to fulfilment cashflows (i.e. including the risk adjustment for non-financial risk but excluding the Contractual Service Margin (CSM)) and are floored at zero.
- Negative reserves are unlikely to exist under IFRS 17, however insurers are asked to construct negative reserves for use in the calculation of available capital on a policy by policy basis on best estimate assumptions (i.e. excluding risk adjustment and CSM) and net of reinsurance.
- The CSM has been included in the Available Capital calculation for both domestic and foreign insurers.

[1] Instrument is issued and fully paid for in cash, or other property with the approval of the ICB, and can be accessed/used to absorb losses.

[2] Instrument is available for an open-ended period i.e. there is no maturity date.

[3] Instrument is free from mandatory payments or fixed charges against earnings.

[4] Instrument is subordinated to the rights of the insurer's policyholders and other creditors in the event the insurer becomes insolvent or winds up

SECTION 3 – CAPITAL REQUIRED FOR ASSETS

CREDIT RISK (ASSET DEFAULT)

The calculation of capital required for asset default risk remains the same as set out in guideline 5.A except:

- Insurers are asked to use the IFRS 17 balance sheet value of the assets (i.e. net of IFRS 9 provisions).
- Some assets were renamed for consistency with IFRS 17 terminology e.g. 'reinsurance contracts held assets' in place of 'due from reinsurers' and 'asset for insurance acquisition cash flows' in place of 'deferred acquisition costs'
- A risk factor of 2% for investment rated reinsurers and 15% for all other reinsurers was introduced in respect of reinsurance contracts held assets.

Note that insurance receivables (receivables from agents, premium receivables) are included in the asset default calculation despite these items no longer being shown explicitly as assets on the IFRS 17 balance sheet.

Disclosure of the total IFRS 9 provision included on the IFRS 17 balance sheet as at December 2023 is also required.

Asset default factors for assets impacted by the adoption of IFRS 9 will be reviewed as part of the QIS 3 in conjunction with the December 31, 2023 financial statements.

OFF BALANCE SHEET ASSET RISK CHARGE

Guideline 5.B remains unchanged in the QIS 3.

FOREIGN EXCHANGE RISK

The factors are unchanged and differ by whether the issuing country is investment grade (2%) or not (8%). The liabilities used in the calculation of open positions are to be determined in accordance with IFRS 17 requirements.

ASSET LIABILITY MISMATCH RISK CHARGE

Guideline 5.D remains unchanged in the QIS 2 except that the liabilities to be used in the calculation should be net of reinsurance fulfilment cashflows (i.e. incorporating risk adjustments but excluding contractual service margins).

SECTION 4 – CAPITAL REQUIRED FOR LIABILITIES

POLICY LIABILITIES DEFINED

The approach being used to calculate the capital requirements in respect of mortality, morbidity, lapse and interest margin pricing risks is unchanged for the QIS 3.

However, all references to policy liabilities / reserves should be interpreted as net of reinsurance IFRS 17 liabilities including the risk adjustment but excluding the contractual service margin.

Net amounts at risk for use in the calculation of the capital requirement for mortality risk would be based on this definition of policy liabilities.

SECTION 5 – OPERATIONAL RISK (ADDITIONAL RISK)

Operational Risk is the risk arising from inadequate or failed internal processes or systems, behaviour of personnel, or from external events. Operational risk includes legal risk and the portion of conduct risk that affects insurers but excludes strategic and reputational risk.

The required capital for Operational Risk is calculated as 10% of the total required capital before the provision for Operational Risk.

SECTION 6 – DIVERSIFICATION CREDIT (NEW)

Losses arising across some risk categories are not perfectly correlated with each other. Hence, a company is not likely to incur the maximum possible loss from each type of risk simultaneously. Consequently, an explicit credit for diversification is permitted between the sum of credit and market risk requirements, and the insurance risk requirement so that the total capital required for these risks is lower than the sum of the individual requirements for these risks.

The diversification credit is calculated using the following formula. Note that this is automatically calculated in the worksheet.:

$$\text{Diversification Credit} = (A + I) - (A^2 + I^2 + 2 \times R \times A \times I)^{1/2}$$

where:

A is the asset risk margin, which is the sum of capital required for:

- credit (asset default) risk;
- off-balance sheet risk; and
- market risk, including asset liability mismatch risk, foreign exchange risk, and other market risk exposures.

I is the insurance risk margin, which is the sum of capital required for:

- policy liabilities

R is the correlation factor between A and L, equal to 50%.

SECTION 7 – CALCULATING THE RATIO AND DISCLOSURES

REGULATORY CAPITAL RATIO

The RCR ratio is to be calculated as below:

$$\text{RCR Ratio} = \frac{\text{Total Available Capital} + \text{Risk Adjustment}}{\text{Total Required Capital}}$$

Where

Total Available Capital is equal to:

- Tier 1 Capital + Tier 2 Capital – Deductions (for Domestic Insurers)
- Total amount of initial deposit in accordance with s. 43, Insurance Act, 2005 (“the Act”), and the statutory funds held in trust in accordance with s. 45(4) of the Act, plus any excess assets in The Bahamas less the total liabilities and reserves required in The Bahamas, plus the net contractual service margin (for Foreign Insurers).

Total Required Capital is equal to the sum of required capital for the following risks less a Diversification credit in respect of the asset and insurance risks:

- Assets
 - Asset Default
 - Off Balance Sheet
 - Market (asset liability mismatch, foreign exchange)
- Insurance
 - Mortality / Longevity
 - Morbidity
 - Lapse
 - Interest Margin Pricing
- Operational

The Risk Adjustment is the compensation required by the insurer for bearing the non-financial risk of the underlying insurance contracts. It reflects the entity’s perception of the risk and its risk tolerance. The Risk Adjustment included in the ratio calculation is net of reinsurance.

REQUIRED DISCLOSURES

Companies are required to disclose various items including:

- IFRS 17 balance sheet
- Reconciliation of the insurance contract liability from IFRS 4 to IFRS 17
- Product portfolio split of various items including best estimate actuarial liabilities, risk adjustment and CSM
- The IFRS 17 discount rates used by the insurer in the exercise showing the adjustments that were made for sovereign risk and illiquidity.

Please refer to the “Disclosure Items” tab within the template for a complete listing of the information to be supplied.



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