AR-GUID-2025/01-0002

GUIDELINE FOR APPOINTED ACTUARIES

Requirements for the Valuation of Actuarial Reserves and

Other Policy Liabilities for Life Insurers

FINANCIAL SERVICES COMMISSION

October 2024

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1. GENERAL REQUIREMENTS

1.1. Regulatory Requirements

Section 44 of the Insurance Act, 2001 ("the Act") requires insurance companies to appoint actuaries (AA) to value the actuarial reserves and other policy liabilities of the company at the end of each financial year. The valuation must be conducted in accordance with regulations, generally acceptable actuarial practice and with such changes as may be given by the Financial Services Commission (FSC)[1]. The results must be submitted to the FSC using the prescribed form[2].

Section 26 of the Act stipulates that registered insurers shall submit to the FSC, within ninety days after the end of the financial year, an annual statement and related documents, which include the insurer's annual audited financial statements. The annual statement must be certified by the company's independent auditor.

Regulations 31 and 32 of the Insurance Regulations, 2001 state that the annual statements of life and general insurance companies must be based on the audited financial statements of the company.

Section 44(8) requires the AA to provide an opinion whether the annual financial statements present fairly the results of the valuation.

1.2. Purpose

The purpose of this Guideline is to set out the FSC's expectations with respect to (a) certain aspects of the actuarial valuation and (b) the form and content of the Appointed Actuary's Report ("AAR") produced in accordance with Section 44(12) of the Act. It sets out the information to be presented, including information on the results of certain supplementary calculations, and covers the nature of the discussions to be included. This Guideline is based on the Memorandum to the Appointed Actuary issued in 2023 by the Office of the Superintendent of Financial Institutions (OSFI) in Canada. It has been updated to reflect the changes introduced in the OSFI Memorandum to the Appointed Actuary (2024).

The AAR is expected to form a key part of the valuation control process and should, therefore, provide a record of the justifications underlying key decisions made in the process in sufficient detail to enable an informed audience (such as a reviewing actuary) to assess whether the documented process, data, assumptions and outcomes are reasonable. The AAR is a detailed report that comprehensively documents, among other things, the following:

- the data, methodology, assumptions, outcomes and reconciliations performed as part of his valuation process;
- commentary;
- the opinion of the AA and the work done to substantiate the AA opinion;
- exhibits and appendices that present the quantitative analysis and supporting information; and
- schedules and supplementary tables (in accompanying Excel spreadsheets).

[1] Regulations 76 and 78 of the Insurance Regulations, 2001 as amended by Insurance Amendment Regulations, 2022
[2] Section 44(12) of the Act

The AAR should also include text, calculations and information used to support and complete the insurer's Life Insurance Capital Adequacy Test.

In forming his/her opinion, the AA shall assess:

- the valuation of actuarial reserves and other policy liabilities,
- the presentation of these results in the audited financial statements, including the notes, and
- any other matter directed by the FSC regardless of the International Financial Reporting Standard (IFRS) that applies (typically IFRS 9, IFRS 15 or IFRS 17).

The FSC's review of the AAR of an insurer as a key component of its assessment of the insurer's financial position, condition and profile. The insurer is responsible for ensuring that the AAR complies with the requirements of the Act and the FSC.

The AAR is not solely a report from the insurer's AA to the FSC's actuaries. It is also intended for the insurer's management team and will be read by regulators who may not be actuaries but who are knowledgeable about insurance. Therefore, the AAR should be presented in a manner generally understandable to both the insurer's management and the regulator.

1.3. Effective Date

This guideline becomes effective for AAR's related to reporting periods beginning on or after January 01, 2024

1.4. Application of Professional Standards to the Appointed Actuary's Valuation

When performing a valuation of an insurer's actuarial reserves and other policy liabilities and preparing an AAR for submission to the FSC, the FSC expects AAs to comply with the following:

1. The requirements of the Act and its regulations,
2. The requirements set out in this Guideline,
3. The Code/Rules of Professional Conduct of the AA's governing body, and
4. Generally accepted actuarial practice.

This Guideline does not contain any requirements that override, or limit generally accepted actuarial practice.

No deviation from the requirements of the Act or regulations is permitted. Any deviation from generally accepted actuarial practice or any other of the requirements of this Guideline must be disclosed in the AAR and justified.

In complying with generally accepted actuarial practice, the AA must meet a standard of care with respect to the data used in valuations. Standard of care is to be interpreted with reference to Section 2.5 Data Quality of the CAA APS0: General Actuarial Practice Standard, which requires the AA to assess whether there is sufficient and reliable data to perform the actuarial valuation and to take reasonable steps to review the consistency, completeness and accuracy of the data used (e.g. consistency of current valuation data with previous valuation data, with financial statements and records of policy movements). The AA must describe the verification, the assessment and review in the AAR.

Where an AA uses another person's work regarding the accuracy of the data used in the valuation, the AA, in addition to fulfilling the requirements of generally accepted actuarial practice, shall obtain a signed statement from the other party(ies) in the following format and include the signed statement(s) below in Section 2.4.2.10 of the AAR.

STATEMENT OF ACCURACY OF POLICY RECORDS

I, **Name, Title** of **Company Name, Address of Company** hereby affirm that the listings and summaries of policies and contracts as of **31 December 2024**, prepared for and submitted to **Actuary Name** are to the best of my knowledge and belief substantially accurate and complete.

____

Signature of **Name**

____

Address of Company Name

The words in **bold** should be adapted to the situation.

1.5. Filing Requirements for the AAR

The filing deadline for the AAR, which includes the supplementary tables to the AAR, is ninety (90) days after the end of the calendar year.

For the AAR, the insurer is required to submit:

- One hard copy with a signed opinion,
- One electronic copy of the report, that has been converted to PDF format. Scanned copies are not acceptable. The reports should not be security protected, and exhibits should be in a format that can easily be transferred to a spreadsheet. A scanned copy of the signed opinion must be included in the electronic submission
- One electronic copy of the required supplementary tables in Excel format.

When filing the AAR report, the AA must complete and submit the file "Life AAR Supplementary Tables". The tables must not be modified by adding rows or columns. The AA must ensure that all tables are completed in the specified format. Column headings should not be changed or reordered. If no data is available, cells should be left blank. If changes are required to the workbook, the insurer is asked to send the request to Actuarial@fscjamaica.org.

The Life AAR Supplementary Tables are based on the tables supporting the IFRS 17 Life Memorandum to the Appointed Actuary issued in 2023 by OSFI in Canada.

The contract asset and liabilities detailed in the AAR, accompanying supplementary tables and Audited Financial Statements are expected to be consistent. Table 2 of the supplementary tables serves as the reconciliation table, identifying and explaining differences between the AA's estimates and the financial statements.

1.6. FSC's Review Process

Reviews of the annual financial return and AAR may reveal that an AA's valuation calls for further assessment and questioning. Where the FSC is of the view that actuarial reserves and other policy liabilities are inappropriate, Regulation 23 of the Insurance (Actuaries)(Life Insurance Companies) Regulations 2001 gives the FSC the authority to reject assumptions and methods. Since the review of an AAR may take place over an extended period after filing, the FSC may request the AA to provide supplemental detail to sufficiently assess the assumptions and methods. The AA shall respond promptly to all supplemental requests. Working papers and documentation required to support the computation of the actuarial reserves and other policy liabilities reported in the annual financial return and the AAR shall be available at all times at the company's head office and should be made available to the FSC upon request.

Where the FSC assesses that the assumptions or methods do not sufficiently demonstrate the appropriateness of the actuarial reserves or other policy liabilities, the FSC shall require the AA to choose other acceptable assumptions or methods, and to re-compute the actuarial reserves and other policy liabilities. In such a situation, the AA must re-file the AAR. The FSC may also require the insurer to amend the annual financial return. Alternatively, the FSC may ask the insurer to reflect the changes in the annual financial return for the following year. The FSC may, in accordance with Section 44(5) of the Act request a report from an independent actuary.

2. GENERAL LAYOUT

The format and order of presentation specified in this Guideline must be followed. The report is ordered so that summary total insurer information is presented first. This should give the reader an overview of the insurer's actuarial reserves and other policy liabilities. The data should be ordered to be consistent with, first, the way that the insurer is reported externally and, second, the way that the insurer is managed, analysed and reported internally.

A uniform manner of presentation allows the FSC to compare methodologies and assumptions more easily between insurers. Even if a section is not applicable to an insurer, it must still be included in the report.

To facilitate the FSC's review, the AAR should include a table of contents and have clearly identified sections and numbered pages. Reference to such pages should be part of the table of contents.

2.1. Overview

2.1.1. Overview of Insurer

The overview section of the AAR must include:

- An executive summary, which shall summarize the key findings of the report and any recommendations,
- A description of the AA's statutory responsibilities and role at the insurer including the AA's role in the preparation of the insurer's annual financial statements,
- a brief description of the insurer's structure,
- an overview of its operations,
- any changes in structure,
- any acquisitions/divestitures,
- any key material events affecting the actuarial reserves and other policy liabilities,
- any changes in the philosophy towards the valuation of actuarial reserves and other policy liabilities,
- any material new categories of business, and
- any deviations from generally accepted actuarial practice or from the requirements of this Guideline.

The AA should identify and describe changes in the external or internal environment, changes in assumptions and methods, and other changes that affect the valuation. For the purposes of this disclosure, changes could involve policies, strategies, operations, business model, leadership, lines of business, underwriting, claims processes, or other similar issues that influence the AA's use of data, use of the work of others, or selection of methods, assumptions, or findings.

This discussion should include (where applicable) subjects such as:

- significant transactions or changes in reinsurance arrangements
- investment strategy (where discount rates use own assets as a reference portfolio or are based on actual underlying asset returns)
- changes in accounting policies used to account for some or all of the insurer's liabilities
- assumptions, methods, and models used to determine the liabilities
- model refinements and correction of errors.

While the above should be disclosed in the overview section of the AAR, insurers should disclose any extensive product specific details in the appropriate product sub-sections.

2.1.2. Expression of Opinion

In forming his/her opinion, the AA shall assess:

- The valuation of actuarial reserves and other policy liabilities;
- The presentation of these results in the annual financial statements, including the notes; and
- Any other matter directed by the FSC regardless of the International Financial Reporting Standard (IFRS) that applies (typically IFRS 9, IFRS 15 or IFRS 17).

An AA who is in a position to give an unqualified opinion shall use the wording specified in **Appendix 1**. The FSC will consider any opinion that varies from this wording to be qualified. The AA may not use the wording in **Appendix 1** unless the AA takes responsibility for the work done and the report, including taking responsibility for information prepared by, work done by and methodologies and assumptions set by another person. The FSC will consider any opinion that varies from the wording in **Appendix 1** to be qualified.

In deciding whether to take responsibility for items set by or done by others, the AA should bring to the fore of his/her mind the requirements of Section 1.5 of this Guideline. The following questions[3] may assist the AA during that determination:

- Is the policy or method or assumption that has been set by another party consistent with a reasonable interpretation of the IFRS 17 standard?
- Is the policy or method or assumption that has been set by another party consistent with generally accepted actuarial practice?
- Is the policy or method or assumption similar to what the AA would have chosen or if not similar, would the outcome not be materially different?
- Has the AA considered the other person's qualifications, competence, integrity, and objectivity? Has the AA considered discussions and correspondence between the AA and the other party regarding any facts known to the AA that are likely to have a material effect upon the information used? Is the other person aware of how the AA intends to use that person's work? Does the AA need to review the other person's supporting papers?
- Is the AA able to judge the appropriateness of the policy or method or assumption set by another party without performing a substantial amount of additional work beyond the scope of the assignment?

The opinion must contain an original signature of the AA, the AA's name (in block letters), the date and location of signing.

The actuarial opinions presented to the shareholders and policyholders of the insurer should be essentially the same as the opinion filed with the FSC. Should this not be the case, the AA must disclose in writing in the AAR to the FSC any material differences between the opinions, as well as the rationale for such differences.

2.1.2.1. Qualified opinion

Any qualification or limitation concerning any aspect of the valuation must be noted in this section of the AAR. Comprehensive explanations should be provided in the relevant sections of the report. These sections should be cross-referenced in the opinion. The qualifications or limitations should be similar to the ones

[3] CIA Education Note, Role of the Appointed Actuary Under IFRS 17

included in the annual financial statements presented to the shareholders and policyholders. Caveats or any form of disclaimer should be excluded from the opinion but could be included in supplementary information supporting the opinion. **Appendix 2** provides two examples of situations where a reservation in reporting is required. The list is not exhaustive, and the examples are meant to be illustrative. The AA is required to amend the opinion to fit the circumstance which gave rise to the qualification.

2.1.1 Materiality Standards

The AA should describe the materiality standard applied in their work and how they determined that amount. The AA should compare their materiality to the external audit materiality.

2.2. Total Insurer Data

2.2.1 Summary Reporting of Data

The AA must complete the following summary tables of the accompanying supplementary table spreadsheet:

- **Table 2.1a** Unconsolidated Liabilities/Assets for (Re-) Insurance Contracts Issued and Reinsurance Contracts Held and Investment Contracts with DPFs by Portfolio and by Groups of Contracts
    - Groups of contracts must be separately shown for the following levels as in paragraph 16 of IFRS 17:
        - Groups of contracts that are onerous at initial recognition,
        - Groups of contracts that at initial recognition had no significant possibility of becoming onerous subsequently, and
        - Groups of remaining contracts

  If a portfolio has multiple groups, then more than one entry in this table must be filled in. For example, if a portfolio has a group of contracts that are onerous and a group of remaining contracts, then two entries would be filled in this table.

  If the insurer is subdivided into more than the above groups, the AA should map them to the groups that are most appropriate.

- **Table 2.1b** – Unconsolidated Liabilities/Assets for (Re-)Insurance Contracts Issued, Reinsurance Contracts Held and Investment Contracts with DPFs by Portfolio and by Product Type
- **Table 2.2a** – Risk Adjustment for Non-Financial Risk by Risk Where Margin Approach is Used – (Re-) Insurance Contracts Issued and Reinsurance Contracts Held only
- **Table 2.2b** – Risk Adjustment for Non-Financial Risk by Risk Where an Approach Other than the Margin Approach is used – (Re-) Insurance Contracts Issued and Reinsurance Contracts Held only
- **Table 2.3a** – Assumption and Methodology Changes Related to Non-Financial Risk – (Re-) Insurance Contracts Issued and Reinsurance Contracts Held only
- **Table 2.3b** – Assumption and Methodology Changes Related to Financial Risk by Quarter – (Re-) Insurance Contracts Issued and Reinsurance Contracts Held only. Examples of assumption and methodology changes include, but not limited to, a change in the interpolation method to grade from the last observable rate to the ultimate rate in the discount curve; a change in the approaches/methods or assumptions used to develop the discount curves (for example a change in developing the illiquidity premium); a change made to a stochastic modelling used for valuation;

other change in methodology (such as arising from an improvement in valuation systems or a refinement of methodology)

- **Table 2.3c** – Changes Related to Market Impacts by Quarter – (Re)Insurance Contracts Issued and Reinsurance Contracts Held Only. The market impacts include, but not limited to, change in risk free rates, credit risk premiums, currency exchange rates, etc.

The following minimum levels of detail must be followed for these tables:

- **Insurer/Branch**: Data must be presented separately for each legal entity that is consolidated in the annual financial return. This is required since the assets and liabilities are in separate legal entities.
- **Par or Non-Par:** Participating lines of business must be shown separately.
- **Portfolio:** Data must be presented separately for each portfolio of (re-) insurance contracts issued or reinsurance contracts held.
- **Product Type**: The definition of product type for the purpose of reporting in the AAR should be determined by the AA based on the circumstances of the insurer. Product type should be reported separately in the AAR consistent with how the products are managed in the portfolio.

The above defines a cascade of levels of reporting that must be presented in the AAR. There is no requirement to do further breakdowns of data exclusively for AAR reporting, except where this is explicitly required in this Guideline.

This reporting structure and format must be followed to allow for easier comparison between insurers. Table modifications are not permitted. If the tables require a value at a more granular level than the insurer's practice (e.g. CSM cannot be provided by product type in Table 2.3a), an allocation approach should be used to provide the detailed reporting levels and a description of the allocation approach used. For tables that request product type information (for example, Table 2.1b), if a portfolio contains more than one product type, then one row per product type should be used in the table.

The dollar amounts shown in Section 2.2 tables must be expressed in thousands and in Jamaican currency. If the products were sold in another currency, please state in the comments section of the Instruction tab, the currency exchange rate used to convert the currency to Jamaican dollars.

Values reported at the total insurer summary level must reconcile to those reported in the detailed product sections. If a product type is shown separately in Table 2.1b, the same product type must be reported on separately in the detailed product sections.

For each row with reported data, all datapoints (except the ones that are colour-coded in light yellow) must be filled in for that row. If the value is zero, input "0" and do not leave the cell blank. If, however, a row is unused, all fields in that row should be left blank.

2.2.2 Summary Reporting of Risk Adjustment for Non-Financial Risk

The AA should describe the methodology for setting the RA and provide rationale to support the RA that reflects the compensation the insurer requires for uncertainty in its cash flows. The AA should disclose the confidence level of the risk adjustment at the insurer level.

The AA must complete Table 2.2a and/or 2.2b of the accompanying supplementary table spreadsheet for the risk adjustment information.

Table 2.2a should report the risk adjustment by risk for the current year and prior year where the margin approach is used or if an insurer uses the margin approach to replicate the aggregate risk adjustment derived from other approaches (other than the margin approach). The AA should describe how diversification benefits are included in the reported risk adjustment. If diversification benefits by product type cannot be quantified as required in Table 2.2a, entities may disclose the diversification benefits at a higher level than the product type level. The AA should explain why the diversification benefits cannot be quantified at the product type level specified in the table.

The AA is only required to complete Table 2.2b if the risk adjustment for the current and prior years is determined using an approach other than the margin approach.

2.2.3 Summary Reporting of Changes in Methods and Assumptions

Table 2.3a and 2.3b show the assumption and methodology changes in liabilities/assets for (re-)insurance contracts issued and reinsurance contracts held related to non-financial and financial risks, respectively.

Multiple changes must not be netted in a manner where material changes are offset by one another, and the net impact does not reflect the magnitude of the individual changes. The changes should be described at the level of granularity required in tables 2.3a, 2.3b, and 2.3c, at a minimum.

The AA should confirm that the total changes at an insurer level are reconciled to the values reported in the annual financial return.

The description of the changes shown in the tables should be succinct. Detailed descriptions of the changes must be included in the product section of the AAR. Allocations are permitted when the assumption changes are determined at a higher level.

Each of the changes in assumptions or methodology must be disclosed separately. If more than one change is made to any of the product types, the AAR must show separately the effects of each change, i.e. netting should not be used.

Assumption and methodology changes could have an impact on CSM and loss component. The AA should report the full assumption and methodology change impact on CSM without reflecting the amount that goes to loss component. For example, if the CSM balance is $50 and an assumption change impact is $60, with $10 going to the loss component, then the AA should report the full $60 impact in Table 2.3a rather than the $50 impact on the CSM.

The AA should disclose the changes in (re-)insurance contract assets/liabilities by portfolio and by quarter due to market impacts such as, but not limited to, change in risk free rates, credit risk premiums, currency exchange rates, etc. in Table 2.3c.

2.2.4 Portfolio Mapping (Unconsolidated)

The AA must complete Table 2.4 of the accompanying supplementary table spreadsheet for information related to each portfolio.

2.2.5 Liabilities for Investment and Service Contracts

The AA must complete Table 2.5 of the accompanying supplementary table spreadsheet for the liabilities for investment and service components and the liabilities for distinct investment or service components where the components are separable from the host insurance contracts.

2.3. General Valuation Information

According to paragraph 3 of the IFRS 17 standard, an insurer shall apply IFRS 17 to:

a) insurance contracts, including reinsurance contracts, it issues,
b) reinsurance contracts it holds; and
c) investment contracts, with discretionary participation features, it issues, provided the insurer also issues insurance contracts.

Section 2.3 and 2.4 apply to these contracts only.

2.3.1. Level of Aggregation

The AA should disclose the different levels at which (re-)insurance contracts issued and reinsurance contracts held are aggregated.

The AA should provide a high-level description of each of the portfolios in Table 1 under column (04) of the accompanying supplementary table spreadsheet. The AA should explain how a portfolio of (re-)insurance contracts issued, or reinsurance contracts held is classified into groups according to the degree of profitability at initial recognition using the following criteria:

For insurance and reinsurance contracts issued,

1. Groups of contracts that are onerous at initial recognition,
2. Groups of contracts that at initial recognition have no significant possibility of becoming onerous subsequently; and
3. Groups of remaining contracts

For reinsurance contracts held,

1. Groups of reinsurance contracts are in net gain position at initial recognition,
2. Groups of reinsurance contracts that at initial recognition have no significant possibility of becoming in a net gain position subsequently; and
3. Groups of remaining reinsurance contracts

The AA should explain how contracts are grouped by issue date (i.e. cohorts by issue year, quarter, etc.)

The AA should describe any new or changed portfolios established in the past year.

2.3.2. Construction of Discount Rates for Cash Flows that Do Not Vary with Underlying Items

The AAR must disclose the following by currency and provide the rationale and sufficient information to support the inputs, assumptions and methodologies used:

- The approach(es) used to develop the discount rate curves including the treatment of sovereign risk.
- Whether the discount rates derived are expressed as forward or spot rates and the reasons for the choice of presentation.

The AA should report the discount rate curves used to discount cash flows that do not vary based on the returns on the underlying items in Table 3.2a of the accompanying supplementary table spreadsheet. The AA should disclose the discount curves by currency, by liquidity category and by spot/forward basis. Under special circumstances (such as small, run-off blocks of business) where these blocks are immaterial in size and low risk, the FSC will consider different details of reporting where appropriate. Please contact Actuarial@fscjamaica.org for further discussion of these specific circumstances.

2.3.2.1. Bottom-Up Approach

If the bottom-up approach is used, provide the following information in detail:

Risk-free rates by currency

- Describe the method(s) used to construct the observable portion of the risk-free curve (use government bonds, etc.). Disclose the sources of information used to construct the risk-free rates and any adjustment(s) made to the data.
- Provide the approach(es) and rationale supporting the setting of the last observable point.
- Provide the risk-free rates by currency and year for the observable and non-observable period in Table 3.2b of the accompanying supplementary table spreadsheet.
- Describe the interpolation method between the last observable point and the ultimate point, and provide the rationale for the selected method.
- Describe the technique(s) used to develop risk-free rates and rationale of the selection beyond the observable period including (but not limited to):
  - i. Timing and level of ultimate rate as well as sources of information used to set the ultimate rate
  - ii. Definition of ultimate rate (i.e. spot versus forward rate)
  - iii. Extrapolation technique from the ultimate rate

Illiquidity Premium

- List the types of products (Term, Whole Life, etc.) in each liquidity category (i.e. the most liquid, the most illiquid, and other category(ies) in between), and explain how the categorization was determined.
- Describe the considerations used to assess the liquidity characteristics of insurance contracts (e.g. product features, exit value, inherent value, exit cost, etc.) for each liquidity category.
- Describe the technique(s) used to derive the illiquidity premium in the observable period by currency and liquidity category.
- Describe the interpolation method to grade from the last observable rate to the ultimate rate and the rationale of the selection.
- Describe the technique(s) used to derive the illiquidity premium in the observable period by currency and liquidity category in detail.

Describe the techniques(s) used to derive the illiquidity premium beyond the observable period by liquidity class including the following, but not limited to:

a) Timing and level of the ultimate illiquidity premium
b) Interpolation technique between the last point of observable input and the ultimate illiquidity premium, as well as the length of the interpolation period
c) Extrapolation technique of the ultimate illiquidity premium to the last year of future cash flows.

The AA should provide any additional explanations and information pertinent to choices made in implementing the Bottom-Up approach.

2.3.2.2. Top- Down Approach

If the top-down approach is used, the following information should be disclosed in detail:

- For each liquidity category, describe whether the insurer's asset mix or a hypothetical asset mix is used as a reference portfolio and explain why the selected reference portfolio is appropriate for the liquidity category. Describe the types of assets that are expected to be included for each liquidity category and explain the appropriateness of the choice.
- Describe all adjustments to yield curve(s) to eliminate factors that are not relevant to the insurance contracts (i.e. credit risk, market risk and/or other risk adjustments, etc.). Provide details of what factors are eliminated and the methodologies for determining the adjustments by each asset class (for example - corporate bonds, public equity, non-fixed income assets other than public equity).
- Describe any further adjustments to reflect the differences in liquidity characteristics of insurance contracts and the reference portfolio.
- Describe the technique(s) used to derive the ultimate rate in the unobservable period, including the timing and level of the ultimate rate as well as the sources of information used to set the ultimate rate and when is the starting point of the ultimate rate.
- Describe the interpolation method between the last observable point and the ultimate point in the unobservable period and provide the rationale for the selection method.

The AA should provide any additional explanation and information pertinent to choices made in implementing the Top-Down approach.

2.3.2.3. Ultimate Rate for Business in Jamaican Currency

Ultimate risk-free rate and ultimate illiquidity premium of reference curves will be determined by the FSC. The AA must explain any differences between the FSC's and the insurer's ultimate risk-free rate and ultimate illiquidity premium.

2.3.3. Reference Curves for Liquid and Illiquid Categories – (Re-)insurance Contracts Issued/Reinsurance Contracts Held in Jamaican Currency

Liquid and illiquid reference curves will be determined by the FSC.

2.3.3.1. Construction of Reference Curves for the in-between liquidity category(ies)

If the insurer has more than two liquidity categories (i.e. liquid or illiquid), the AA must

- Describe how the reference curves for the in-between liquidity categories are constructed and provide details on the reference portfolios for the in-between liquidity categories, including but not limited to, its credit rating by asset type, its assets mix.
- Disclose whether the FSC data were used to derive the illiquidity premium, provide the rationale for the choice, and complete Table 3.3 of the accompanying supplementary table spreadsheet.

2.3.3.2. Compare the Insurer's Discount Curves to the Reference Curves – Jamaican Business Only

The AA should provide rationale if the insurer's discount curves are the same as the FSC's reference curves for the liquid and illiquid categories.

Excluding the cash flows that vary with the returns on the underlying items, the AA should provide the following:

- A comparison of the present value of the estimates of future cash flows, obtained using the insurer's discount curves to the present value obtained when using the FSC's reference curves.
- A comparison of the present value of the estimates of future cash flows obtained using the insurer's discount curves to the present value obtained when using the FSC's reference curve parameters for the unobservable period.

The results should be presented based on territory in Table 5.1 and by portfolio in Table 5.1a of the accompanying supplementary table spreadsheet in columns(5) to columns (10)

The AA should also present a graph comparing the insurer's discount rates and the FSC's reference curves.

The result should be reported in Table 5.1 of the accompanying supplementary table spreadsheet in columns (J) to (O).

2.3.4. Expenses

The AA should disclose how directly attributable expenses are determined and how total insurer expenses are allocated among acquisition, policy administration and maintenance costs and other (refer to the examples noted per paragraphs IFRS 17.B65(f), B65(l), etc.) (if any)). The information should be split by portfolio. The AA should detail this information in Table 3.4 of the accompanying supplementary table spreadsheet, excluding annual expenses in the current year related to IFRS9 investment contracts, IFRS15 service contract, and other IFRS standards (i.e. expenses that are not within the scope of IFRS17). Maintenance expenses include investment expenses[4]. If the actual and/or expected directly attributable expense cannot be determined based on the same calendar year information, then the AA should explain the timing differences between the actual and expected expenses (e.g. if the actual reported directly attributable expenses are based on an expenses study that does not align with the AAR calendar year reporting cycle, the AA should explain the timing differences).

The AA should further disclose:

- the method for determining the allocations of fixed and variable overheads (such as the costs of accounting, human resources, information technology and support, building depreciation, rent, and maintenance and utilities) that are considered directly attributable to fulfilling insurance contracts.
- The method for determining the allocations of all directly attributable acquisition costs in a portfolio to groups in that portfolio, and of any acquisition costs directly attributable to any future renewals of contracts (outside the boundary of the new contracts) to future groups using a systematic, consistent and rational basis;
- The treatment of the acquisition costs for contracts with the coverage period that is one year or less.
- The type of investment expenses considered directly attributable.

Insurance acquisition cash flows incurred before the recognition of their related groups of insurance contracts are held as assets. These assets will be referred to as the asset for insurance acquisition cash flows.

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[4] IFRS17 amendment B65(Ka)

The AA should disclose the results of two recoverability tests (required per IFRS 17.28E and B35D) on insurance acquisition cash flows if facts and circumstances indicate that the asset may be impaired.

2.3.5. Reinsurance Contracts Held

2.3.5.1. Non-Performance Risk

The AA must explain how the allowance for the effect of any risk of non-performance by the issuer of the reinsurance contracts held is measured. The AA should indicate whether the adjustment is applied to the cash flows directly, to the discount rates, or a combination of the two.

The AA should detail all factors considered in the risk of non-performance by issuers of the reinsurance contracts held, including but not limited to, items such as the effect of collateral and losses from disputes.

2.3.5.2. Assumptions Used to Measure the Estimates of the Present Value of Future Cash Flows

The AA should disclose any reinsurance contracts held where the IFRS 17 measurement method or assumptions are different from the measurement of the underlying insurance contracts and explain the drivers of the different methods or assumptions are between the (re-)insurance contracts issued and reinsurance contracts held. The AA should disclose where the contract boundary of the reinsurance contracts held is materially different than the underlying direct contracts and the reasons for such differences.

2.3.6. Comparison with Other Reporting

The AA should compare the expected non-financial assumptions used in the valuation of the (re-)insurance contracts issued and reinsurance contracts held with the comparable expected non-financial assumptions used in other reporting or actuarial analysis. Comparisons include:

(i) the assumptions underlying the base scenario for the annual stress testing projections required pursuant to Regulation 72H of the insurance Amendment Regulations, 2022,
(ii) the current pricing assumptions compared to the valuation assumptions for the same blocks of new business in the current year,
(iii) any comparable assumptions underlying the current business plan for the insurer, if applicable.

It is accepted that there could be valid reasons for any differences in expected non-financial assumptions, but if there are such differences, the AA must comment on the reasons.

2.3.7. Valuation System and Model Governance

The AA should disclose the model and version numbers for the valuation system(s) used. The AA should also include whether the valuation system is an in-house system or a commercially purchased system. Any changes in valuation systems (e.g. moving from an in-house system to a commercially purchased system, new valuation system, changes in providers, etc.) should be disclosed and the effects quantified. As well, the AAR should describe the results of any audit or review related to changes in valuation systems and who performed the audit or review. It should also be noted if changes in valuation systems have not been subject to audits or reviews.

Additionally, the AA should include a summary or commentary on the governance framework as it relates to selecting the valuation model and the process for setting and changing assumptions.

2.4. Details by Portfolios and Product Lines – Actuarial reserves and other policy liabilities valued using IFRS 17

The section of the AAR should document the portfolios and product type details of the valuation of the (re-)insurance contracts issued reinsurance contracts held, investment contracts with DPFs as per paragraphs 3 and 29 of IFRS 17.

This section of the AAR must follow the same order as is shown in Summary Table 2.1b. Thus, this section must follow the same cascade of insurer/branch/par or non-par/portfolio/ (re-)insurance contracts issued, reinsurance contracts held, investment contracts with DPFs/ product type.

The FSC recognizes that not all the elements that are requested to be disclosed are calculated at the same level of detail. For example, the actual to expected experience studies may be carried out at a more summarized product level.

Similarly, some of the descriptions of methodology or some assumptions may be the same for more than one product type (e.g. the same mortality table is used for several product types), portfolio, or group. If this is the case, the information need only be disclosed once in the AAR at the appropriate summary level (i.e. aggregating information across portfolios or product types), but the detailed product sections must make direct reference to it. If reinsurance contracts held have the same assumptions as direct contracts, the AA should provide references to the assumptions of the direct contracts.

Each product section must be self-contained. It must have either the data within the section or an explicit reference to a specific section or page at a different summarized level. The reader of the AAR should not have to search through non-cross-referenced sections of the AAR.

If allocation method(s) is/are used for any items (e.g. CSM by product type), the AA should describe the allocation approach. The FSC expects the allocation approach should be consistent year after year. However changes (if any) should be specifically disclosed and explanation for the change should be provided.

2.4.1. Portfolio Reporting

The reporting of each portfolio should include the following:

2.4.1.1. Measurement Approach

- The AAR should disclose the measurement approach for each portfolio such as,
  i. the general measurement approach (GMA), variable fee approach (VFA) or premium allocation approach (PAA) approach.
  ii. With respect to methodology, the AAR should contain identification of major accounting choices that deviate from industry norms where known (for example, use of general measurement model for lines of business that qualify for premium allocation approach or variable fee approach)
- For contracts measured under the PAA, provide explanation for:
  i. how the insurer has satisfied the eligibility requirements of IFRS 17 (when applicable, provide a summary of the calculations or tests that have been performed),
  ii. the method chosen to recognize insurance acquisition cash flows,
  iii. the process or procedure used to determine onerous contracts, and
  iv. any discount rates applied in valuing the liabilities.

- For contracts measured under the VFA, provide details on how the contracts meet the definition of insurance contracts with direct participation features.

2.4.1.2. Estimates of Future Cash flows

The AA should discuss the determination of the probability weighted cash flow distribution including how this complies with the IFRS 17 Standards. For skewed distributions, the AA should explain what adjustments were made to the distributions to reflect extreme scenarios.

The AA should briefly discuss any unique circumstances in determining the contract boundaries for individual products, such as term conversion.

The AA should discuss how the estimate of future cash flows takes into account policyholder behaviour including the expected effect of anti-selection, lapses based on the returns on underlying items, etc.

For participating contracts, the AA should describe the approach(es) used to determine the future policyholder dividend scales assumed in the valuation, including any prospective changes in the assumed dividend scales relative to the current dividend scales.

For products with discretionary cash flows (such as participating, adjustable and universal life products), the AA should describe how the non-guaranteed (other than participating dividend) elements are reflected in the valuation of the (re-) insurance contracts issued and reinsurance contracts held.

For products with the cash flows that vary based on the returns on underlying items, the AA should disclose whether the estimated cash flows are separate from cash flows that do not vary based on the returns on underlying items and the methodology used. For cash flows that are blended, indicate the rationale for commingling.

The AA should discuss how future new business (not yet written) for reinsurance contracts issued and held are reflected in the estimates of cash flows.

For reinsurance contracts issued or held, the AA should describe how future cash flows are estimated reflecting the recapture clauses, including but limited to, recapture fee, restrictions on recaptures and likelihood of recapture.

The AA should discuss the details for the modelling of the cost of guarantees in Section 2.4.2.4.

The AA should provide the annual estimate of future cash flows in Table 4.1.2a, b and c of the accompanying supplementary table spreadsheet, which vary by measurement approach. The cash flows should be disclosed separately by portfolio and liquidity category. If a product has both cash flows that do and do not vary with underlying items, there is no requirement to split the cash flows, solely for the FSC's purposes. If the bifurcation of the cash flows into vary and do not vary with underlying is not undertaken, then the combined cash flows should be reported in the column "Combined cash flows that do not and vary with the underlying" in the table.

If any portfolio uses a stochastic approach, the AA should provide the estimate of future cash flows at the zero conditional tail expectation "CTE(0)" level. The reporting of such cash flows should be consistent with how they are categorized in the valuation. Cash inflows (e.g. policyholders' premium) should report as is positive cash flows and cash outflows (e.g. claims benefit) should report as is negative cash flows in the tables.

2.4.1.2.1. Other Items to Include in the Estimates of Future Cash Flows

For items that were separately reported as liabilities under IFRS 4 but are now included, as part of the estimates of future cash flows, such as policy loans, amounts on deposit, dividends on deposit, prepaid premium accounts, experience rating refunds, claim fluctuation reserves, premium stabilization reserves, market conduct provisions, etc., the AA should describe how these items are included in the estimates of future cash flows (such as methodology, models and assumptions, and if the amounts are treated as time zero cash flows) and provide the rationale to support the selected approach(es) underlying the results in Table 4.1.2.1 of the accompanying supplementary table spreadsheet.

The liabilities in Table 4.1.2.1 are not required to be reported in detail by product line. However, more details are expected to be provided in the Product Line Reporting (Section 2.4.2) for liabilities that are material. In particular, the AA should describe in detail how the incurred but not reported claims, reported but not admitted claims, experience rating refunds, claims fluctuation reserves, premium stabilization reserves, market conduct provisions are treated in the future cash flows. If the “other” item is significant, the AA should describe the specifics in detail (e.g. how the IBNR provision is determined including the processes, systems, assumptions and methodologies).

2.4.1.3. Risk Adjustment for Non-Financial Risk

The AA should disclose the methodology chosen including the equivalent confidence level of the calculated risk adjustment. The AA should provide rationale to support why the chosen methodology reflects the compensation the insurer requires for uncertainty. The AA should describe how the confidence level is determined for the chosen methodology. The confidence level of the risk adjustment (either on a gross or net basis) for non-financial risk at the insurer level should be disclosed in Table 2.1a.

The AA should describe the considerations taken in quantifying the amount of non-financial risk transferred to the reinsurer.

If the insurer has chosen different risk adjustment confidence levels by portfolio or other more granular level, the AA should disclose the approach(es) and rationale. If the risk adjustment is determined at a higher level than the group of contracts, the AA should describe the approach to allocate the risk adjustment to the different levels. If the insurer chooses to reflect the benefits of diversification in its risk adjustment, then the AA should disclose the techniques used to determine the diversification benefit, such as a correlation matrix.

The AA should describe how the discount rate curve, if applicable, used to discount the risk adjustment is constructed and if the discount rate curve is different from the one used for the associated future cash flows. The AA should also provide the rationale for the approach chosen.

The AA should disclose the following information for various methodologies used to determine the risk adjustment.

<u>Margin Approach</u>

The AA should disclose how the margins for each of the non-financial risks are determined and explain the differences between current and prior year.

If crossover points are used to determine the lapse margin, the AA should disclose the steps used to determine the crossover points.

Cost of Capital Approach

The AA should disclose the projected average capital amounts, cost of capital rate and discount rates used to determine the risk adjustment at the insurer level in Table 4.1.3i of the accompanying supplementary table spreadsheet. In addition, the AA should disclose:

- The techniques used to determine the average capital amount and any adjustments made in the capital amount for calculating the risk adjustment (for example, removal of the capital component(s) related to risks other than the non-financial risks in scope of the risk adjustment.)
- The approach and considerations in selecting the cost of capital rate.
- How the aggregate risk adjustment be allocated amongst the portfolios/group of contracts.
- The quantile techniques (i.e. VaR or CTE) used to determine the confidence level of the risk adjustment.

Quantile Techniques Approach

The AA should disclose:

- The approach used (i.e. probability distribution for present value of cash flows, Monte Carlo simulation or other scenario modelling) to generate the risk distribution.
- The quantile techniques (i.e. VaR or CTE) used to determine the confidence level of risk adjustment.
- How the aggregate risk adjustment is allocated amongst the portfolios/group of insurance contract.

Hybrid approach

In addition to the above information required under the margin approach, the AA should disclose the target range for the confidence level corresponding to the aggregate risk adjustment, or the range for the target cost-of-capital rates in Table 4.1.3i if the cost of capital approach is used to calibrate margins.

2.4.1.4. Contractual Service Margin

The AA should discuss the approach used to determine the discount rate locked-in at initial recognition for the measurement of CSM under the GMA and the approach used to determine the interest to accrete on the CSM.

For insurance contracts with direct participation features, the AA should disclose how financial instruments held to mitigate risk, are considered in the valuation. The AA should disclose whether the insurer chooses the option of not adjusting the CSM for changes in the fair value of underlying items, or the fulfilment cash flows relating to future services. If the insurer chooses the option, the AA should discuss how the conditions set out in paragraph B116 of IFRS 17 are met. If any conditions cease to be met, the AA should also disclose the facts and circumstances.

For insurance contracts without direct participation features, but with discretionary cash flows, the AA should specify the basis on which it expects to determine its commitment under the contract; for example, based on a fixed interest rate, or on returns that vary based on specified asset returns.

2.4.1.4.1. Loss Component

The AA should explain the key drivers for:

- the loss component for each of the groups of onerous contracts at initial recognition,

- the loss component for each of the groups of contracts for which a loss component arises at subsequent measurement; and
- subsequent changes to the loss component for each of the groups of onerous contracts.

Where a reinsurance contract held covers only a portion of the group of underlying onerous contracts, the AA should disclose the systematic and rational allocation method to determine the portion of losses of the onerous group that is reinsured. The AA should disclose how the loss-recovery component is established.

The AA should describe the approach used to allocate the changes in the fulfilment cash flows of the liability for remaining coverage specified in paragraph 50(a) of IFRS 17.

For insurance contracts for which the PAA is used, the AAR should provide commentary on the facts and circumstances associated with each group of insurance contracts for which a loss component arises at subsequent measurement, and must contain the amount of the loss components on a group basis and on a portfolio basis.

2.4.2. Product Type Reporting

Within each portfolio, the AA must separately discuss the valuation of the products within the product types that have been disclosed in Table 2.1b.

The reporting of each product should include the following:

2.4.2.1. Product Data

The AA must fill out the information requested in Table 4.2.1 and 4.2.1a of the accompanying supplementary table spreadsheet. The amount of liabilities must reconcile to the amounts shown in Summary Table 2.1a. The purpose of showing face amounts, account values, and annualized premiums is to give an overview of the size of the product, which may not always be understood from the size of the liabilities. Face amounts should be shown for life insurance products. Account values should be shown for universal life, equity-linked and annuity contracts. If cohorts are based on an issuing period that is less than one year, the sum of cohorts issued during the reporting period should be reported between row (19) and row (57) in Table 4.2.1 (e.g. if quarterly cohorts is used then the insurer should report sum of the four quarters numbers in the table).

If any requested values are determined by allocation methods to more detailed reporting levels (such as CSM, insurance revenue), please provide details of the allocation method(s).

2.4.2.2. Description of Products

The AAR must include a description of the products, including key features such as guarantees, nonguaranteed or adjustable items, benefits, contract boundary, types of dividends for participating policies, etc. The level of detail in this description should be sufficient to provide information to support the methodology and assumptions used. The AAR must disclose for each product whether it is open, closed, or closed but open for new deposits.

The AA should discuss the key risks for each of the main product types.

For participating products, the AA must describe whether a contribution to participating account surplus (e.g. as a percentage of premiums/dividends) is expected and the insurer’s practices (if any) on changes to the contribution to surplus.

For products with minimum interest rate guarantees, the AA should disclose the key information pertaining to the minimum interest rate guarantees for material blocks (e.g. (re-) insurance contracts liabilities, account value by product, issue year and guarantee rate).

For example, Universal Life with Level Cost of Insurance:

Minimum Guaranteed Interest Rate	Issue Year	Current Year Insurance Contract Liabilities	Account Values
5%			
6%			
…			

If the (re-)insurance contracts liabilities by minimum guaranteed interest rate are not available, allocation methods can be used. Please provide details of the allocation method(s) used.

2.4.2.3. New Products

The AAR should disclose details on the features of the new products, guarantees, benefits, contract boundary, etc. This description should be sufficient to support the assumptions and methodology used. Where the product is novel or experimental, and relevant experience data is not available, the AA should describe the work performed to measure the risk associated with these new contingencies.

For new participating products, the AAR should also disclose if the new product(s) are in the same dividend class or participating sub-account as the in force participating products. The AA should provide the rationale and considerations for the associated practice, and a description of how the insurer ensures that inter-generational equity is maintained.

2.4.2.4. Modelling for the valuation of contracts with financial guarantees

The AA should disclose how the provision for the financial guarantees is determined, including details such as the valuation approaches, modelling, market variables and parameters, and assumptions used to determine the market consistent valuation for insurance contracts that contain financial guarantees. Th AA should provide the rationale for the choices made.

2.4.2.4.1. Stochastic Models

For products with financial guarantees using a stochastic approach to measure the market consistent value of the guarantees, the AA should explain the appropriateness of the model being used and that the range of stochastic scenarios adequately reflects the liability cash flows.

Discussion should include, but not be limited to, the description of the interest rate model, equity return model, calibration process, and types of tests performed to ensure that the number of scenarios used were appropriate. Discussion is expected to include, but not be limited to, the following by currency and by type of product, as appropriate:

- The modelling of the cash flows;
- Description of the random number generator(s);
- Description of the economic scenario generator(s), including:

  - Description of the interest rate, bond indices and equity return model, calibration process and parameters (e.g. mean, volatility, mean-reversion level and speed, etc.)
  - Modelling of discount rates
  - Assessment on the appropriateness of the number of scenarios used to ensure the convergence of the valuation of the actuarial liabilities
  - The sources of data used
  - Rationale for the choice of the use of a specific model;
  - Adjustments made to the model to reflect differences between the embedded options/guarantees and the financial instruments used to derive the market observable inputs;
  - Basis risk modelling; and
  - Any approximations and simplifications made to stochastic modelling.

The AA is expected to discuss the above by various product types as follows:

i. Equity-linked contracts;
ii. universal life insurance contracts; and
iii. other types of contracts with financial guarantees such as Participating products with guaranteed minimum dividends, adjustable products, annuity contracts with minimum interest guarantees, and accumulation contracts with indexation guarantees.

2.4.2.4.2. Non-Stochastic Models

For products with financial guarantees using a non-stochastic approach to measure the market consistent value of the guarantees, the AA should explain how this approach meets the objective of consistency with observable market variables based on the specific facts and circumstances.

If a replicating portfolio is used, the following information should be disclosed:

- The types of products where a replicating portfolio is used for valuation including the rationale for choosing this approach
- How the replicating portfolio is constructed – that is, how the insurer ensures that the replicating portfolio (IFRS 17 Paragraph B46) has the cash flows that exactly match the cash flows of the contract liability in amount, timing and uncertainty; and
- At a high level, the types of assets that are expected to be included for each replicating portfolio, along with the rationale for decisions made.

2.4.2.5. Use of Reinsurance to Mitigate Risks for the Underlying Contracts

Where reinsurance is material for product type, the AA should provide a description of the reinsurance structure with respect to risks and allowances. The AAR should also disclose any new reinsurance treaty or other arrangement. Disclosure should include the effective and expected termination dates, recapture clause, the type of reinsurance, a description of the products covered, whether there is significant insurance risk transferred, and any significant impact to liabilities for insurance and investment contracts and capital.

2.4.2.6. Expected Experience Assumptions for Non-Financial Risk

The AA must document all expected experience assumptions for non-financial risk used in the valuation, including description of rationale, justification, and validation. Where assumptions are changed, the prior as well as the current assumptions should be disclosed in the AAR. These include mortality, morbidity, mortality improvement, morbidity improvement, lapses, directly attributable expenses, inflation, renewal/conversion, disability/recovery, transaction-based taxes, investment income tax, policyholder behaviour (such as dynamic lapse (if applicable) function and sample rates, base lapse rates, full lapse rates, partial withdrawal rates, fund transfers, future deposits, and for living benefit products - utilization rates and payout levels) and any other contingencies that are applicable. If an assumption is common to several products, the AA can then specify where the relevant assumption is discussed in the AAR.

For lapses, the AA must report on the extent to which the assumption reflects variables such as product type, term to maturity, surrender charge period and degree to which the contract is in-the-money. The formula should produce relatively low or zero lapses in situations where the contract is deep in-the-money and close to maturity.

While the FSC expects all assumptions to be documented, the AA must use judgement in deciding on the amount of detail included in the AAR with respect to assumptions. A description of the processes and approaches used to conduct experience studies, such as number of years of data used, frequency of conducting the study, how data are analysed, use of predictive analytics, etc., should be included.

The AAR must disclose how the expected experience assumptions were determined with specific reference to insurer experience studies and industry data as applicable. The credibility of the insurer data is to be disclosed, as is any blending of insurer and industry data.

If industry tables are available, but not used, the AA should provide the rationale for the choice made and show broadly how the selected assumptions compare with a relevant industry table. For assumptions where limited experience exists, the AA should disclose the basis and rationale for determining the assumptions selected.

Any use of implicit assumptions or approximations requires disclosure, discussion and justification in the context of the assessment of appropriateness of the valuation

The AA should disclose when the expected experience assumptions were last updated or reviewed, and briefly describe the policy (ies) and guidelines that govern how frequently each expected experience assumption is to be updated or reviewed. For material assumptions, the FSC expects the period for review should be at least annual. The AA must disclose when the expected experience assumptions were last updated or reviewed. The AAR should also note if the frequency of updating or review of expected experience assumptions is not governed by any policy or guideline.

A comparison of actual experience versus expected experience assumptions should be shown separately for each material assumption within each product and for the last three years if the data is available. The AAR should document where such studies are done at a more aggregate level than the product level. This comparison should be shown separately for the key risk assumptions. The results for lapse should be shown separately for lapse-supported products and non-lapse supported products.

Where a full formal experience study is not conducted, the comparison can be based on an analysis of expected experience per the valuation system versus actual experience taken from the accounting data should be disclosed with consistent differences in one direction and large swings explained. If such actual to expected comparisons are done for only a portion of the product lines, the AAR should show the proportion that is measured. The AAR should also disclose if such studies are not available.

2.4.2.7. Construction of Discount Rate for Cash Flows that Vary with Returns on Underlying Items

The AA should discuss how the financial risk is reflected in the valuation per IFRS 17 paragraph B74 (b)(i.e. whether discount rates reflect the effects of financial risk or adjust cash flows for the effect of financial risk or some combination).

Under IFRS 17, it is possible to separate the insurance contract cash flows between those that vary with returns on underlying items and those that do not vary, and to use different discount rates to discount different sets of the cash flows.

If a separation of cash flows is used, the AA is required to explain in detail the methodology or methodologies used to determine the corresponding discount rate curves used for cash flows that vary with returns of underlying items, including the underlying assets, and the relationship between the actual yield rates and discount rates.

If the cash flows being valued are not separated, the AA should explain what valuation approach is used and how the discount rate curve is developed for discounting the cash flows. The AA should disclose the discount rate used in Table 4.2.7 of the accompanying supplementary table spreadsheet.

2.4.2.8. Method and Assumption Changes:

The changes must be described by quarter (if applicable). If the assumptions/methods are changed, the AAR should explicitly document the previous assumptions/methods. This will allow for easier comparisons.

2.4.2.9. CSM Amortization

The AA should disclose the coverage unit chosen for each product type, and the setting of the discount rate if the insurer opted to use discounting to determine the coverage units. If there are multiple coverages within a group of contracts, the AA should also describe the approach to combine the coverages in development of coverage units.

The AA should comment on the non-financial assumption unlocking where there is material impact on the CSM and coverage units. Other events, such as de-recognition of contracts, could materially have an impact on the CSM and coverage units.

2.4.2.10. Internal Control Analysis of Actuarial Reserves and Other Liabilities

The AA typically makes use of some method(s) of internal analysis to verify or validate the actuarial reserves and other policy liabilities. This can take a variety of forms. Examples are (i) ratios of face amount to (re-)insurance contracts issued liabilities/assets, (ii) trend analysis, (iii) ratios to fund values, etc. The AA should discuss the internal analysis used to validate the actuarial reserves and other policy liabilities and disclose the numbers from this process in the AAR.

In particular, the AA should describe the type of data provided and the review and verification procedures applied and the procedures and steps undertaken to ensure that the valuation data is sufficient, reliable and accurate. For example, data for liabilities should be reconciled between the source administration systems and the valuation system. Where any information is found to be inconsistent, the AA should explain what actions have been taken to adjust/correct for any errors found.

It is the FSC's expectation that the AA has established suitable procedures to verify that the data utilized is reliable and sufficient for the valuation of actuarial reserves and other policy liabilities.

The AA should describe 1) any use of the work of another actuary or other professionals; 2) the scope of such use; 3) a rationale for such use and 4) the extent of the review of the other person's work.

2.4.3. Product Descriptions in respect of actuarial reserves and other policy liabilities not valued using IFRS 17

For those contracts that are not in the scope of IFRS17, only high-level descriptions of the products are required.

2.5. Additional Liability Disclosures

2.5.1. Scenario Testing of Discount Rates

The AA is also asked to disclose the effect of using the following discount rates as valuation rates:

- Less flat 100 basis points on the discount rate curve.
- Add flat 100 basis points on the discount rate curve.

* If a stochastic approach is used, each scenario is shifted +/- 100 basis points.

- Use curves specified by the FSC.

The above sensitivity tests should be performed on a company-wide basis for the (re-)insurance contracts issued and reinsurance contracts held. The future cash flows and other adjustments to reflect the financial risks related to the future cash flows should be determined assuming the interest rate scenarios mentioned above. The present value of future cash flows and the risk adjustments are to be disclosed separately. Locked-in CSM interest rates should not be changed per IFRS17 paragraph 44b. However, the insurer is required to recalculated CSM to reflect the ripple effect due to the change in discount rates used to discount the future cash flows and risk adjustment (e.g. any lapse assumption changes with interest rates changes). Insurers should disclose the (re-)insurance contracts liabilities/assets and reinsurance contracts held assets/liabilities for all lines of business for the base run and for each sensitivity scenario in Table 5.1 of the accompanying supplementary table spreadsheet.

Distinct investment and service components embedded in the insurance contracts, as well as liability for remaining coverage using the PAA are excluded from the sensitivity tests. For Jamaican business, the (re-)insurance contracts issued liabilities/assets and reinsurance contracts held assets/liabilities should be further disclosed in three categories:

1) "Cash flows that do not vary with returns on underlying items" – this category includes (re-)insurance contracts issued and reinsurance contracts held with cash flows that do not vary with returns on underlying items. If the (re-)insurance contracts issued and reinsurance contracts held have both cash flows that vary and do not vary with returns on underlying items such as universal life insurance contracts, and the insurer can segregate the cash flows that do not vary from cash flows that vary with returns on underlying items, then the cash flows that do not vary should be included in this category, and the cash flows that vary should be included in category 2, as described below.
2) "Cash flows that do vary with returns on underlying items" – this category includes (re-)insurance contracts issued and reinsurance contracts held with cash flows that do vary with returns on underlying items.

3) “Other” – this category includes all other (re-)insurance contracts issued liabilities/assets and reinsurance contracts held assets/liabilities not included in category 1 and 2. If the (re-)insurance contracts issued and reinsurance contracts held have both cash flows that vary and do not vary with returns on underlying items such as universal life insurance contracts, and the insurer cannot segregate the cash flows that do not vary with cash flows that vary with returns on the underlying items, then the insurance contracts will be included in this category.

Insurers should include all ripple effects (this includes but is not limited to impacts on risk adjustment, cash flows of products that have cash flows that vary with underlying items, etc.) resulting from the shocked scenarios. The tests should be based on data at the financial year-end. The above shocks are defined on a spot rate basis; insurers should increase/decrease the discount rate curve by the magnitude of these shocks on spot rate basis. Each shock should be performed independently.

In addition, insurers should further break down the (re-)insurance contracts issued liabilities/assets and reinsurance contracts held assets/liabilities by present value of future cash flows, risk adjustment, and contractual service margin. If the margin approach is not selected to calculate the risk adjustment, the AA should report the constant risk adjustment in the table.

The sensitivity tests are the same for all jurisdictions and could result in negative interest rates in certain scenarios and countries/regions. In these instances the rates should not be floored at zero.

For assumed inflation rates, Investment Income tax, participating policyholder dividends, adjustable features and minimum credited interest rates, the AA should reflect the interest rate scenarios as mentioned above. For example, for a universal life contract that has minimum interest guarantees and a stochastic valuation is used, the market consistent value of the guarantees should be projected as a cash flow at time zero, and should be revalued under the scenarios mentioned above so that the change in the market consistent value of the guarantees in response to movements in interest rates is appropriately captured.

Under each scenario, the AA should discuss the impact on participating policyholder dividends and/or participating surplus resulting from the use of the discount rates.

2.5.2. Bulk Provision

The AAR must disclose the amounts of any bulk provisions, with each disclosed separately for the last two years in Table 5.3 of the accompanying supplementary table spreadsheet. Bulk provisions are expected to be temporary in nature and calculated outside the core valuation platform.

Examples of such provisions that fall into this category include:

(i) manual adjustment reserves that are the result of the absence, or the inadequacies, of a valuation system,
(ii) a bulk reserve to cover potential data problems,
(iii) liabilities held to cover cyclical fluctuations,
(iv) a manual adjustment that does not have a natural run-off pattern based on the underlying policies, and
(v) manual adjustments used to offset current experience fluctuations, etc.

The above are examples only and should not be considered an exhaustive list.

The disclosure should include the reasons for holding these provisions, the methods and assumptions used to determine the provisions, and policies for releasing these provisions in the future, and the allocation methodology of the bulk provisions to portfolio level. Any changes in these provisions must be disclosed as a methodology/assumption change and reported by quarter in Table 2.3a or 2.3b. and annually in Table 2.3a.

The FSC expects entities to have approved policies describing the purpose and criteria for building and releasing such provisions. The AA should disclose the purpose, the criteria for determining and releasing the provisions.

2.5.3. Reinsurance Program

The AA must document the insurer's reinsurance program. The AA should describe significant changes in its reinsurance arrangements (e,g. changes in retention limits), and the rationale for change, if any. The scope of the descriptions should include contracts accounted for under IFRS17 as well as other international financial reporting standards[5]. . The disclosure should also include any insurer policies with respect to the maximum exposure allowed to a single reinsurer.

The AA should give a list of all reinsurance agreements and indicate whether the arrangements are with related parties as defined by the insurance legislation. The AA should detail the type of reinsurance, a description of the products covered, portfolio(s) the products belong to, key risks transferred, amount of risk ceded, retention limits, the effective and expected termination dates, experience or profit share arrangements, any cancellation or adjustability clauses, and recapture clause. The AA should also clearly describe stop loss and catastrophe arrangements.

The AAR should also detail the treatment of expense sharing between the reinsurer and the direct writer.

The FSC is concerned about the use of back-to-back reinsurance contracts. Any reinsurance arrangements where an insurer cedes a block of business to a reinsurer and then accepts the same, or a similar, block of business back on a different basis requires full disclosure in the AAR. The FSC does not permit entities to take capital credit for these arrangements.

The AA must disclose information about any financial reinsurance agreements where there is no significant transfer of insurance risk between the ceding insurer and the reinsurer, or where there are other reinsurance agreements or side letters that could offset the financial effect of the first reinsurance agreement. If no such agreements exist, the AA must state that there are no financial reinsurance agreements. The AA should also describe the process or assessment to evaluate the risk transfer used to reach the above conclusion. Entities should not use insurance contract accounting for transactions that are substantially a form of financing, or principally involve the transfer of financial risks.

The AAR must list all of the assumption reinsurance agreements entered into or exited from during the last three years. This information, which is expected from both the ceding and the assuming entities, should include the:

- date of the transaction,
- line of business involved,
- size of the liabilities at the time of the transaction and

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[5] OSFI Memorandum to the Appointed Actuary (2024)

- name of the insurer.

The AA should disclose any reinsurance arrangement which involve multiple reinsurers, specialized large risk transfers that may include statutory approvals, or multiple transitions from reinsurer(s) to reinsurer(s)/retrocessionnaires, how the liabilities were determined, and the impact on capital.

The AA should disclose any related party reinsurance. This includes reinsurance to or from a parent insurer, a subsidiary insurer or any affiliated insurer, whether Jamaican or foreign. The disclosure should include the:

- parties involved,
- type of reinsurance deal,
- amount,
- issue date and
- maturity date.

The AA should disclose whether there are any material risks from possible recapture of existing reinsurance agreements.

The AA should discuss any risk mitigation techniques in place, including but not limited to trust accounts, letters of credit, etc. The AAR should include a list of the reinsurance agreements that incorporate trust accounts or letters of credit.

In cases where a reinsurance financing arrangement significantly alters the pattern of liabilities, the AA should discuss the extent to which this arrangement involves a complete transfer of risk to the reinsurer. The FSC may request the AA to calculate and disclose capital requirements as if the particular arrangement had not been in place.

The carrying amounts of reinsurance contracts held assets/liabilities across all lines of business must be aggregated by reinsurer. The resulting ten largest reinsurers, based on the carrying amounts of reinsurance contracts held assets/liabilities, ceded outstanding claims and other amounts owed, must be disclosed in the form of **Table 5.4**. The FSC expects this disclosure to be done by product type. This top-ten list must be assembled by insurer groups, and not by individual subsidiaries of a reinsurance conglomerate.

The AA should describe and discuss significant internal reinsurance arrangements that are not otherwise identified where one entity within the corporate group cedes risk to another entity within the corporate group.[6]

2.5.4. Liability Roll Forward

The liability roll forward schedules are shown in Table 5.5.a to 5.5.c of the supplementary table spreadsheets, separately for insurance contracts and reinsurance contracts held. The AA is requested to provide the liability roll forward schedules by participating and non-participating, and by portfolio for Jamaica. For other regions, please provide the liability roll forward schedule by participating or non-participating for each region. These tables are constructed to enable users to reconcile information within the AAR to the annual financial return, as per the following:

[6] OSFI Memorandum to the Appointed Actuary (2024)

For (re-)insurance contracts issued:

- Liability Roll Forward (Analysis by measurement component ((Re-)Insurance contracts issued not measured under the PAA));

For Reinsurance contracts held:

Liability Roll Forward (Reinsurance contracts held analysis by measurement component (Contracts not measured under the PAA));

2.5.5. Currency Exchange Rates

If applicable, the AA should show the currency exchange rates used in the financial statements for the last two years in Table 5.7 of the supplementary table spreadsheets.

2.6. Asset Liability Management (ALM)

In order to better understand the risks associated with mismatches between asset and liability cash flows, the FSC is continuing to request ALM information. The AA in the AAR should describe the (re-)investment strategies, ALM philosophy, objectives, policies and practices of the insurer as detailed below.

This section of the AAR should document the asset segment details of the insurer's ALM. In the reporting for each interest sensitive asset segment, the AAR must include an overview of the asset liability risk management practice for that segment. The AA should describe what product types are included in each asset segment for ALM purposes. This should include, but are not limited to:

- The ALM strategy employed for each segment such as cash flow matching, average Macaulay or modified duration matching, key rate duration matching, convexity matching, value at risk or CTE measures, etc. Please provide detail on the asset mix, types of asset used, credit rating, etc.
- The specific operating guidelines such as asset mix guidelines, mismatch tolerance limit, concentration limits, currency mix, etc.
- The processes in place, by asset segment, to manage interest rate risk.
- Key metrics or sensitivity testing used to measure asset liability mismatch position, and the frequency of measurement and reporting for monitoring purposes These include, but not limited to, duration, convexity, term, for asset segment.
- Governance structure for managing asset liability mismatching risk.
- The reinvestment strategies applied.
- The term for fixed income assets which are used to immunize/match liabilities and the use of non-fixed income assets to support liability cash flows after this term.
- Reasons to employ non-fixed income assets in the investment strategies.
- Any major changes during the year in the ALM and Investment strategies and guidelines should be disclosed.
- Details on hedging strategies used to manage the ALM risks.

The AA should provide the details of the asset and liability mismatch position as of the current year-end.

The composition of each asset segment must be documented separately in the Table 6.1 of the accompanying supplementary spreadsheet. The methodology for the determination of the liability cash flows used for ALM purposes for each asset segment should be documented in this section of the AAR.

Similarly, some of the descriptions of methodology or some assumptions may be the same for more than one asset segment. This only needs to be disclosed once in the AAR at an appropriate summary level, with a direct reference, where applicable. An example of this would be where the ALM is the same.

The AA should disclose the policy for determining the type of assets used to back the liabilities in this asset segment.

The statement asset values (excluding the surplus segments if they are separated from the liability segments) should be the same as are used in the annual financial return.

Any inter-segment notes should be shown as positive and negative amounts in Table 6.1.

If there are any "other assets", "other liabilities", or "other investments" which are material to that asset segment, the AA is expected to provide more detail.

If the asset mix, such as bond quality, has changed materially between years, the reason should be discussed.

If the investment policy, strategy, or ALM approach, practice and process has changed during the year, including any changes related to IFRS 17 requirements and/or implementation, this should be discussed.

The use of assets other than bonds, mortgages, equities, real estate, policy loans and cash to back (re-)insurance contract issued liabilities/assets must be disclosed. Such assets include, but are not limited to, inter-segment notes, derivatives, goodwill, loans to subsidiaries or parents, etc.

Briefly describe where the use of intersegment notes as a part of the insurer's investment policy framework and the controls associated with their use.

The AA should disclose the current year yield rates for fixed income assets and the actual/expected returns for non-fixed income assets (where applicable) by asset segment in Table 6.2 of the accompanying supplementary table spreadsheet. The non-fixed income actual/expected returns should include dividend/income return and capital gain separately (if possible), used for ALM purposes. If it is not possible to separate them, the total actual/expected returns should be provided. The actual/expected returns are the returns earned over the past 12 months. For rows where actual/expected returns are noted, please provide the actual return if available. If this is not readily available, list the expected annual return rate. If a surplus segment is separate from the liability segment, it is not required to provide the asset information for the stand-alone surplus segment in Table 6.2.

2.7. Other Disclosure Requirements

2.7.1. New Appointment

The FSC expects Appointed Actuaries to comply with the qualification requirements outlined in Regulation 76 of the Insurance Regulation, 2001.

If the AA was appointed to the role during the last year, the AAR must include the following disclosures:

- the date of appointment;
- the date of resignation of the previous AA;
- the date on which the FSC was notified of the appointment;
- confirmation of communication with the previous AA, as required by Regulation 76(12) the Insurance Regulation, 2001; and

- a list of the AA's qualifications, keeping in mind, but not limited to, the relevant Code/Rules of Professional Conduct.

2.7.2. Annual Required Reporting to the Board or Audit Committee

The AAR must disclose the date on which the AA met with the board or the audit committee of the board as required by Section 44(9) of the Act.

2.7.3. Continuing Professional Development Requirements

The AA must disclose in the AAR whether he/she is in compliance with the continuing professional development requirements of his/her governing body.

2.7.4. Conflict of Interest Statement

The AAR must include conflict of interest statement as follows:

I confirm that there exists a potential or actual conflict of interest between myself and my client or employer and/or third party.

I confirm that there has been full disclosure of the potential or actual conflict to all parties involved (including the Commission), and that all parties have agreed that I may perform the duties of the Appointed Actuary for my client or employer.

I confirm that my ability to act fairly and objectively is unimpaired, and that I have performed my duties as Appointed Actuary without regard to any personal considerations or to any influence, interest or relationship that may impair my professional judgement or objectivity.

______________________	___________________________	__________________________
Name of Appointed Actuary	Signature of Appointed Actuary	Date

Delete paragraphs that are not applicable.

2.7.5. Reporting Relationships of the Appointed Actuary

The AAR should disclose the reporting relationships and dependencies of the AA.

For AAs who are employees of the insurer, the AAR should disclose the name and position of the person (or persons) to whom the AA reports as well as any changes in this regard over the past year. Both solid line and dotted line reporting relationships should be disclosed, as well as any anticipated change.

When the AA is not an employee of the insurer, the AAR should disclose the names and positions of the main contacts within the insurer with respect to the different functions of the AA, such as the valuation, stress testing, and capital adequacy testing.

For example, the AAR should disclose the name and position of:

- the person who has hired the AA; and
- the insurer employees with whom the AA discusses findings and reports

2.7.6. Peer Review of the Work of the Appointed Actuary

If the work of the AA was peer reviewed in the last three years, the AA should summarize the key findings or recommendations, and the status of each finding/recommendation by year. For the recommendations from peer reviews before the effective date of IFRS17, the AA should indicate whether the recommendations are still applicable under IFRS17.

2.7.7. Cash Value Deficiencies and Negative Policy Liabilities

The AA should include a report on:

(a) cash value deficiencies calculated net of reinsurance on an aggregate basis within sets of policies by product type. Deficiencies must be calculated relative to fulfilment cash flows (i.e. including risk adjustment for non-financial risk) and should be floored at zero.

(b) Total negative policy liabilities calculated policy-by-policy on best estimate assumptions (i.e. excluding risk adjustment) and net of reinsurance. The net amount is subject to a minimum of zero.

Prior and current year comparatives must be presented as follows:

	Current Year ($'000)	**Prior Year ($'000)**
Cash Value Deficiencies calculated on an aggregate basis		
Negative Policy Liabilities calculated on a policy-by-policy basis		

2.8. Capital Adequacy and Annual Stress Testing

The AAR shall include:

a) A summary of the key findings of these tests and recommendations,
b) A discussion and summary of the exposure of the company to significant risks,
c) Discussion of asset default provisions and any asset concentration and quality issues,
d) A comment on the quality and composition of assets allocated to surplus,
e) A description of the process used to measure and manage risk (e.g. liquidity, capital),
f) Completed Confirmation of Life Insurance Capital Adequacy Test requirements:

I, **Actuary Name**, Appointed Actuary, of **Company Name, Address of Company** hereby affirm that the requirements of the capital adequacy test have been followed.

______________________ ____________________________ ___________________________

Name of Appointed Actuary Signature of Appointed Actuary Date

The words in bold should be adapted to the situation.

Appendix 1: Opinion of the Appointed Actuary

I certify that:

(a) I am a member in good standing with my governing actuarial body, [Name of Organization] and comply with its [Code/Rules of Professional Conduct];

(b) I meet the qualification standards of Financial Services Commission to value the actuarial reserves and other policy liabilities of [Name of insurance company]; and

(c) The valuation of actuarial reserves and other policy liabilities was conducted in accordance with the Insurance Act, 2001 and its regulations, International Financial Reporting Standards, generally accepted actuarial practice in Jamaica and guidelines issued by the Financial Services Commission.

In my opinion, the amount of the actuarial reserves and other policy liabilities of [Name of Insurance Company] reported in its annual financial statements prepared in accordance with International Financial Reporting Standards for the year ended [Date] is appropriate for this purpose and the annual financial statements presents fairly the results of the valuation.

___________________________	___________________________	___________________________
Name of Appointed Actuary	Signature of Appointed Actuary	Date
[Name, Title, Qualification]		

Appendix 2: Two examples of circumstance requiring a qualified opinion

"Liabilities different than those calculated by the actuary

.25 If the [annual] financial statements of an insurer report [actuarial reserves and other] policy liabilities that are materially different from those calculated and reported by the actuary then the actuary would need to disclose the difference in the amounts and identify where to find an explanation for the difference. If possible, such explanation would include the important reasons for the difference. “[7]

The opinion could be as follows:

I certify that:

(a) I am a member in good standing with my governing actuarial body, [Name of Organization] and comply with its [Code/Rules of Professional Conduct];
(b) I meet the qualification standards of the Financial Services Commission to value the actuarial reserves and other policy liabilities of [Name of insurance company]; and
(c) The valuation of actuarial reserves and other policy liabilities was conducted in accordance with the Insurance Act, 2001 and its regulations, International Financial Reporting Standards, generally accepted actuarial practice in Jamaica and guidelines issued by the Financial Services Commission.

In my valuation, the amount of the actuarial reserves and other policy liabilities is $[X]. The corresponding amount in the annual financial statements is $[Y]. The sources of this difference are described in [reference].

In my opinion, the amount of actuarial reserves and policy liabilities in the annual financial statements is not appropriate and as explained in [reference] the annual financial statements do not present fairly the results of my valuation.

[7] Source: Canadian Institute of Actuaries June 2023 Consolidated Standards of Practice 2230

“Change in assumption or methodology affecting disclosure items in the annual financial statements

.27 If an item valued by the actuary is materially affected by a change in assumption or methodology that is not disclosed in the [annual] financial statements, the actuary would modify the opinion paragraph in the standard reporting language to disclose this situation.” [8]

The opinion could be as follows:

I certify that:

(d) I am a member in good standing with my governing actuarial body, [Name of Organization] and comply with its [Code/Rules of Professional Conduct];
(e) I meet the qualification standards of the Financial Services Commission to value the actuarial reserves and other policy liabilities of [Name of insurance company]; and
(f) The valuation of actuarial reserves and other policy liabilities was conducted in accordance with the Insurance Act, 2001 and its regulations, International Financial Reporting Standards, generally accepted actuarial practice in Jamaica and guidelines issued by the Financial Services Commission.

In my opinion, the amount of the actuarial reserves and other policy liabilities of [Name of Insurance Company] reported in its annual financial statements for the year ended [Date] is appropriate for the stated purpose. As explained in [reference], [the assumption/methodology for XX] was changed from that used for the previous year. Except for the absence of the disclosure of this change and its impact, the annual financial statements, in my opinion, presents fairly the results of the valuation.

[8] Source: Canadian Institute of Actuaries June 2023 Consolidated Standards of Practice 2230

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