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EDUCATIONAL NOTE

2024 Guidance to the Appointed Actuary and Valuation Actuaries of Property and Casualty Insurers

September 3, 2024



2024 Guidance to the Appointed Actuary and Valuation Actuaries of Property and Casualty Insurers

Committee on Property and Casualty Insurance Financial Reporting

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Ce document est disponible en français.

The actuary should be familiar with relevant educational notes. Educational notes are not binding; rather they are intended to illustrate the application of the standards of practice. A practice that an educational note describes for a situation is not necessarily the only accepted practice for that situation nor is it necessarily accepted practice for a different situation. Responsibility for ensuring that work is in accordance with accepted actuarial practice lies with the actuary. As accepted actuarial practice evolves, an educational note may no longer appropriately illustrate the application of standards.

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Preamble

The Committee on Property and Casualty Insurance Financial Reporting (PCFRC) of the Canadian Institute of Actuaries (CIA) has prepared this educational note to provide guidance to the Appointed Actuary and valuation actuaries (referred to as “actuaries” in the rest of this educational note) in several areas affecting the valuation of the 2024 year-end insurance contract liabilities and other responsibilities of the Appointed Actuary of property and casualty (P&C) insurers.

The educational note is structured in seven sections and one appendix. The seven sections provide guidance on recent and emerging issues. The appendix contains a list of relevant educational notes and reference documents.

Some guidance provided in the educational note titled *2023 Guidance to the Appointed Actuary and Valuation Actuaries for Property and Casualty Insurers* is still appropriate and has been duplicated in this educational note. The guidance is labelled as unchanged. Other guidance has been modified, either to reflect recent developments or to improve clarity, and is labelled as modified.

Process

A preliminary version of this educational note was shared with the following CIA committees for their review and comments:

- Committee on Life Insurance Financial Reporting (CLIFR)
- Committee on Risk Management and Capital Requirements (CRMCR)
- Appointed Valuation Actuary Practice Committee
- Workers’ Compensation Practice Committee

This educational note was also presented to the Actuarial Guidance Council (AGC) in the months preceding its approval. The PCFRC is satisfied it has sufficiently addressed the material comments received by the various committees and the AGC.

The creation of this preamble and educational note has followed the AGC’s protocol for the adoption of educational notes. In accordance with the CIA’s *Policy on Due Process for the Approval of Guidance Material other than Standards of Practice and Research Documents*, this educational note has been prepared by the PCFRC and has received approval for distribution from the AGC on August 13, 2024.

Guidance to members on specific situations

CIA members may ask¹ in confidence, the chair and/or vice-chair questions relating to the Standards of practice (SOP) and educational notes. This dialogue is encouraged; however, such discussions do not constitute a formal opinion as to whether the work in question is in compliance with the CIA SOP.

Your feedback

Questions or comments regarding this educational note may be directed to the [chair of the PCFRC](#).

¹ Rule 13 (excerpt) from the CIA *Rues of Professional Conduct*: “In order to foster education amongst members, thereby fulfilling the profession’s responsibility to the public, a member who has a question about the spirit or intent of the standards of practice, or of generally accepted actuarial practice when no standards exist, may consult in confidence with the chair (or vice-chair) of a designated council... or of an appropriate practice committee.”

1. Introduction (*unchanged*)

The PCFRC of the CIA prepared this educational note to provide guidance to property and casualty (P&C) actuaries in the valuation of insurance contract liabilities and other responsibilities of the actuaries. This educational note reviews relevant standards of practice (SOP) and other educational notes and discusses current issues affecting the work of actuaries. Links to all the CIA, Office of the Superintendent of Financial Institutions (OSFI) and Autorité des marchés financiers (AMF) documents referenced in this educational note are provided in the appendix.

2. Standards of practice (*modified*)

In June 2020, the International Accounting Standards Board (IASB) published the final version of the International Financial Reporting Standard 17, “Insurance Contracts” (IFRS 17 or the Standard). The implementation date has been set to fiscal years beginning on or after January 1, 2023. For the most current information please see the [IASB website](#). Note that an eIFRS professional account is required to access the Standard and related documents.

The Canadian Accounting Standards Board endorsed and incorporated IFRS 17 into Canadian generally accepted accounting principles (GAAP) without modification for the valuation of insurance contracts in Canadian GAAP financial statements.

At the time of writing this educational note, references to the CIA *Rules of Professional Conduct* (Rules) and to the SOP correspond to the latest versions, effective January 1, 2024, for Rules and June 1, 2024, for the SOP.

While all the [Rules](#) and [SOP](#) are important, your attention is directed to the following SOP sections that are particularly relevant:

- Subsection 1240 – Materiality
- Section 1400 – The Work
- Section 1500 – Another Person’s Work
- Section 1600 – Assumptions and Methods
- Section 1700 – Reporting
- Section 2100 – Insurance Contract Valuation: All Insurance
- Section 2200 – Insurance Contract Valuation: Canadian Considerations
- Section 2300 – Insurance Contract Valuation: International Actuarial Standards of Practice
- Section 2400 – The Appointed Actuary
- Section 2500 – Financial Condition Testing

3. Recent guidance (*modified*)

This section contains a list of guidance material published recently to assist actuaries in their year-end valuation of insurance contract liabilities and financial condition testing (FCT) work.

In 2021, the International Actuarial Association published the final version of an International Actuarial Note (IAN 100) titled “[Application of IFRS 17 Insurance Contracts](#).” The CIA AGC has reviewed the final IAN 100 and released it as an educational note titled [Application of IFRS 17 Insurance Contracts](#) in

October 2021. This educational note is accompanied by a preamble that outlines a number of additional clarifications on the topics discussed in the IAN 100, of which CIA members should be aware.

Additional IFRS 17 guidance to members has been developed by the CIA, in the form of educational notes and reports. At this time, the following guidance materials have been published:

- Educational note: [IFRS 17 Discount Rates and Cash Flow Considerations for Property and Casualty Insurance Contracts](#) (September 2024)
 - In the 2024 update, the most significant change can be found in subsection 12.4 – Unwinding claims incurred in the current period. The first paragraph of this subsection has been updated to be less prescriptive.
- Educational note: [IFRS 17 Risk Adjustment for Non-Financial Risk for Property and Casualty Insurance Contracts](#) (August 2024)
 - In the 2024 update, the most significant change can be found in Appendix 3: Quantification of the confidence level using minimum capital test (MCT). Various references to OSFI's publications have been removed and replaced by the relevant content from those documents. The analysis presented provides a framework for calibrating the risk adjustment (RA) when credible data is not available.
- Educational note: [Subsequent Events](#) (August 2023)
- Educational note: [Duration Considerations for P&C Insurers](#) (August 2023)
- Educational note supplement: [Changes to the reference curves' ultimate risk-free rate development approach outlined in the Committee on Life Insurance Financial reporting's educational note on IFRS 17 discount rates](#) (July 2023)
- Explanatory report: [IFRS 17 Discount Rate Applications](#) (March 2023)
- Educational note: [Applicability of Rules, Standards and Other Guidance to CIA Members](#) (February 2023)
- Educational note: [Role of the Appointed Actuary Under IFRS 17](#) (December 2022)
- Educational note: [IFRS 17 – Actuarial Considerations Related to Reinsurance Contracts Issued and Held](#) (September 2022)
- Educational note: [Assessing Eligibility for Premium Allocation Approach Under IFRS 17 for Property & Casualty and Life & Health Insurance Contracts](#) (June 2022)
- Educational note: [Comparison of IFRS 17 to Current CIA Standards of Practice](#) (June 2022)
- Educational note: [IFRS 17 – Actuarial Considerations Related to Liability for Remaining Coverage in P&C Insurance Contracts](#) (June 2022)
- Educational note: [IFRS 17 – Fair Value of Insurance Contracts](#) (June 2022)
- Explanatory report: [IFRS 17 Expenses](#) (June 2022)
- Explanatory report: [IFRS 17 Assets for Acquisition Cash Flows](#) (June 2022)

For guidance on valuation work not subject to IFRS 17, the actuary may refer to the following educational note:

- [Actuarial Considerations Related to Property and Casualty Valuation Work Not Subject to IFRS 17](#) (August 2022)

The following educational notes were published recently and provide relevant guidance with respect to the FCT:

- [Guidance for the 2024 Reporting of Capital, Financial Condition Testing, and Own Risk and Solvency Assessment for Life and Health, P&C and Mortgage Insurers](#) (April 2024)
- [Financial Condition Testing](#) (January 2023)

Discounting consideration

A CLIFR subcommittee (with PCFRC representation) is tasked with reviewing and recalibrating the CIA reference curve parameters annually based on most recent information. CLIFR will monitor the appropriateness of the approach to defining the CIA reference curves and their parameters on a periodic basis including when a structural change in the economy may have occurred (e.g., change in the Bank of Canada's inflation target). Finally, CLIFR might also refine approaches in the future (e.g., parameters and methods used to calculate the expected and unexpected credit losses). The 2024 review resulted in no changes to the CIA reference curve parameters.

Role of the Appointed Actuary

The educational note [Role of the Appointed Actuary Under IFRS 17](#) covers, among other things, the changes to the wording of the Appointed Actuary's (AA's) opinion in the SOP. The revised opinion "sets out the scope and purpose of the valuation, namely, that the valuation is for the purpose of inclusion in financial statements prepared **in accordance with IFRS**. Therefore, in order to give the opinion that the valuation is appropriate for this purpose, the valuation must be in compliance with applicable accounting standards." The previous opinion certified that the valuation was in "accordance with accepted actuarial practice in Canada." That statement automatically implied that it was consistent with applicable accounting standards.

As part of the standard opinion, the AA will continue to be responsible for making sure that the "financial statements fairly present the results of the valuation," and given that the IFRS 17 accounting elements presented in the financial statements (e.g., liabilities/assets for incurred claims (LIC/AIC), insurance revenue, insurance service expenses) may differ from the input and output of the Appointed Actuary's Report (AAR) (e.g., earned premiums, paid losses, case reserves), additional reconciliation and validation may be required from actuaries.

Given that there is no regulatory guidance under IFRS 17 to show specific figures in the AAR opinion page, actuaries would consider disclosing actual booked figures and how they relate to figures shown elsewhere in the AAR. In other words, actuarial figures may differ from actual booked figures and the actuary may consider whether material differences may need to be explained.

IFRS 17 restated opening balances

Some entities with year-end different than December 31 may not have produced their first year-end IFRS 17 financials yet (e.g., October 30 for banks). Actuaries are expected to be instrumental in the determination of the opening figures, given that it will be required for the first published IFRS 17 financial statements. As such, opening balances are required for both the first fiscal year of implementation of IFRS 17 for the entity as well as for the previous fiscal year. These opening balances are required to produce the liability roll forward exhibits that form part of the IFRS 17 financial statements. It is important to note that the AA would need to be fully comfortable with both opening balances to opine on the fair presentation of the results of its valuation in the published IFRS 17 financial statements.

4. Upcoming guidance (new)

The following document is expected to be published within the next year:

- Educational note: [IFRS 17 – Actuarial Considerations Related to Liability for Remaining Coverage in P&C Insurance Contracts](#)
 - Section 8 of that educational note (MCT considerations) will be updated to add more content and illustrative examples about the calculation of the MCT margin for unexpired coverage.

5. Financial condition testing (modified)

The CRMCR published an educational note titled [Financial Condition Testing](#) in January 2023 (2023 FCT EN). That educational note has been adapted to IFRS 17 and it provides guidance on interpreting the SOP. Other notable elements include an expanded discussion regarding adverse scenario selection and assessment of the percentile ranking of scenarios, an expanded discussion on the role of going concern scenarios, and expanded guidance regarding ripple effects and management actions. It also addresses the goals of stress testing by providing details from OSFI and AMF guidelines.

Appendix B of 2023 FCT EN contains a discussion of various P&C risk categories to be considered by the actuaries while conducting the FCT. Expense risk, climate-related risks, and technology and cyber risk were added to the major risk categories actuaries would consider for FCT analysis.

In April 2024, the CRMCR published an educational note titled [Guidance for the 2024 Reporting of Capital, Financial Condition Testing, and Own Risk Solvency Assessment for Life and Health, P&C and Mortgage Insurers](#) (2024 Capital and FCT EN). The 2024 Capital and FCT EN provides an overview of guidance to actuaries in several areas affecting the reporting of the 2024 regulatory capital requirements and FCT for insurers operating in Canada. Section 3 (Considerations for the 2024 financial condition testing) of 2024 Capital and FCT EN contains updated sections on the transition to IFRS 17, recent events, and some additional guidance related to the 2024 FCT.

The 2024 Capital and FCT EN also briefly discusses the OSFI and AMF Standardized Climate Scenario Exercise (SCSE). It should be noted that the SCSE will be a separate exercise from the annual FCT process and so it does not impact the consideration for a climate change scenario as part of an FCT. Please refer to sub-section “Standardized Climate Scenario Exercise” in Section 6 below for more information of the SCSE.

6. Regulatory guidance (modified)

Actuaries would refer to updated communications from provincial and/or federal insurance regulators regarding insurance contract liabilities valuation and FCT reporting. Actuaries would also keep abreast of any new regulatory disclosure requirements on climate change.

6.1 Office of the Superintendent of Financial Institutions requirements (modified)

OSFI annual memorandum for actuarial reports on P&C business

OSFI issues an annual [Memorandum to the Appointed Actuary](#) (OSFI Memorandum) which describes OSFI’s expectations in relation to the AAR. The link above also includes supplementary tables as well as the unpaid claims and loss ratio analysis exhibit expected to be filed with the AAR.

The 2024 OSFI Memorandum was substantially modified when compared to previous iterations. In particular, the 2024 OSFI Memorandum merged the memoranda for life, P&C and mortgage insurers and replaced detailed prescription of the form and content of AARs with principles. The changes reflected

OSFI's desire to provide AAs with the flexibility to adapt the AAR to their own purposes and audiences, to reduce guidance to the essentials and to reduce regulatory burden where possible.

Mindful of the increasing importance of structured data collection (for example, the AAR supplemental tables and the unpaid claims and loss ratio exhibit), OSFI has articulated more general expectations for the AAR which are consistent across life, P&C and mortgage insurers. AAs will have the freedom to adapt the form and content of the AAR to their own purposes within the general principles articulated in the OSFI Memorandum.

OSFI also plans on making some changes to the supplemental tables. For P&C insurers, these changes are expected to be minor.

Guideline E-15: “Appointed Actuary: Legal Requirements, Qualifications and Peer Review”

A full peer review of both the AAR and the FCT report is required at least once every three years. In December 2023, OSFI sent a letter to federally regulated insurance companies to clarify its expectations regarding certain aspects of the actuarial peer reviews described in the 2023 revision of Guideline E-15.

A revised version of Guideline E-15 was published in the summer of 2023. The focus of the revisions was:

1. to update the guideline for the implementation of IFRS 17; and
2. to clarify the expectations on the peer review of the actuarial components of the capital tests and the use of audit firms as peer reviewers.

As stated in the guideline, and reiterated in the clarification letter, “OSFI expects any material changes affecting the valuation of actuarial and other policy liabilities, FCT, or actuarial components of the regulatory capital test to be reviewed and reported on annually.” This would include those material changes in valuation that arise from the implementation of IFRS 17, which might include risk adjustment and discount rates. In the context of FCT, material changes might include items such as model changes, the projections of contractual service margin, etc.

With respect to the peer review cycle, for the peer review of the AAR, OSFI is not requiring insurers to alter the normal peer review cycle, given that material changes in valuation are expected to be reviewed each year. Similarly for the peer review of the FCT report, OSFI expects that material changes to the FCT that arise from IFRS 17 would be reviewed in the first year the changes were implemented as part of the normal peer review cycle. However, OSFI noted that the revised Guideline E-15 was not published until August 2023 and acknowledged that expecting material changes to be reviewed in 2023 would be impracticable. Insurers were therefore permitted to defer peer review of the material changes to the FCT arising from IFRS 17 to 2024.

Finally, OSFI provided additional context on the expectation that the external peer reviewer should review the work of the AA that is required by the OSFI Memorandum to be included in the AAR and is used in the calculation of the MCT/Branch Adequacy of Assets Test (BAAT) or Mortgage Insurer Capital Adequacy Test (MICAT). Since the 2023 OSFI Memorandum did not specify the work used in the calculation of the MCT/BAAT or MICAT to be included in the AAR, peer review of this work is expected to start in 2024 with the release of the 2024 OSFI Memorandum.

Guideline B-9: “Earthquake Exposure Sound Practices”

OSFI requires insurers to file the [Earthquake Exposure Data Form and Instructions](#) by May 31 of each year using the Regulatory Reporting System.

Guideline B-15: “Climate Risk Management”

In March 2023, OSFI issued the final version of [Guideline B-15: “Climate Risk Management.”](#) The guideline is OSFI’s first prudential framework that is climate sensitive and recognizes the impact of climate change on managing risk in Canada’s financial system. OSFI intends to review and amend this guideline as practices and standards evolve.

Guideline B-15 outlines a gradual timeline for implementation of the various components described within the guideline. For P&C insurers, the majority of these components are expected to be implemented for fiscal year-end 2025.

AAs would be familiar with Guideline B-15 as organizations may require the AA’s involvement to support them in meeting OSFI’s expectations.

Standardized Climate Scenario Exercise

In October 2023, OSFI released its “Standardized Climate Scenario Exercise – Draft for consultation.” The SCSE consultation had two parts. The first part of the consultation, on the draft methodology, concluded in December 2023. The second part, on the updated draft methodology, the [draft technical instructions](#) and a draft workbook, was done in collaboration with the AMF and concluded in June 2024. The final version of these documents, including the due date for the SCSE results, is expected to be released later in 2024. Insurers will be expected to submit a completed SCSE Workbook and Questionnaire by December 20, 2024. AAs would be familiar with the SCSE as organizations may require the AA’s involvement to support them in meeting OSFI’s expectations.

Draft Guideline E-23: “Model Risk Management”

In November 2023, OSFI released proposed updates to its [Guideline E-23: “Model Risk Management.”](#) The revised guideline expands its application to include all models used by all federally regulated financial institutions and federally regulated private pension plans. The effective date of this guideline has not yet been announced.

AAs would be familiar with Guideline E-23 as the various models used by the AA, such as in the valuation of insurance contract liabilities or in preparing the FCT, would be in scope and organizations may require the AA’s involvement to support them in meeting OSFI’s expectations.

6.2 Autorité des marchés financiers (modified)

AMF annual guides for actuarial reports on P&C business

The AMF issues specific guides to actuaries of Quebec-chartered insurers for both the valuation of insurance contract liabilities and the FCT. Those actuaries would consult these guides for the complete requirements from the AMF.

The [AMF guide regarding the mandatory insurance contract liabilities report](#) is updated annually and it addresses regulatory requirements and the report’s expected content and prescribed layout. The AMF plans to publish in September the same version as last year with minor changes. At this point, the AMF prefers to keep a version that specifies detailed expectations. The AMF guide also mandates [supplementary tables](#) for reporting results of the actuaries’ valuation. In addition, it includes the [unpaid claim and loss ratio analysis exhibits](#) for which specific instructions are included within the guide.

The [FCT guide](#) is updated annually. It mentions that actuaries would follow the CIA guidance on FCT, with some additional expectations from the AMF as discussed in the guide.

Earthquake exposure data requirements

The AMF requires insurers to follow the AMF's instructions and to file the AMF's Earthquake Exposure Data Form by May 31 of each year. Since 2023, the software used to complete P&C's regulatory financial statements, which also includes an [Earthquake Exposure Data Return](#), can be used to send the earthquake data.

Climate Risk Management Guideline

In November 2023, the AMF published for consultation the draft Climate Risk Management Guideline. The expectations in the new guideline mainly concern governance, integrated risk management, climate scenarios and stress testing, capital and liquidity adequacy, fair treatment of clients, and climate related financial risk disclosures. The consultation period ended in February 2024 and the [final guideline](#) is published in July 2024.

AAs would be familiar with the Climate Risk Management Guideline as organizations may require the AA's involvement to support them in meeting the AMF's expectations.

Standardized stress test

The AMF is not prescribing a standardized stress test this year. However, as discussed in previous sections, the AMF is partnering with OSFI in conducting an SCSE in 2024. Some AMF-regulated entities will be expected to submit a completed SCSE workbook and questionnaire. The targeted entities to complete the exercise have been notified directly by the AMF. AAs would be familiar with the SCSE as organizations may require the AA's involvement to support them in meeting AMF's expectations.

7. Emerging issues and other considerations (*modified*)

It is important for actuaries to be aware of current or emerging issues that could affect the valuation of insurance contract liabilities. Several considerations are discussed below.

7.1 Product reforms (*modified*)

Actuaries would consider the potential effect that product reforms may have on the valuation of insurance contract liabilities. For example, actuaries would consider the potential impact, if any, of the transition to a no-fault automobile insurance framework in British Columbia, changes to strata insurance in British Columbia, changes to the *Occupier's Liability Act* in Ontario, changes to the Alberta automobile insurance product including the definition of "minor injury," the changes to pre-judgment interest, and the introduction of direct compensation property damage. Actuaries would also be aware of the ongoing consultation that the Alberta government is undertaking to look at systems that could reduce the costs of auto insurance, which could include significant changes to the automobile insurance product in the province.

7.2 Recent judicial, legislative, regulatory and political events (*modified*)

Regular communication with claims professionals is essential to the work of the actuaries. These discussions would encompass the potential effect of recent court decisions, judicial events, legislative and regulatory changes, and political events that may be relevant to the valuation of insurance contract liabilities.

Actuaries would also consider any changes to the provincial or federal tax system or rates (e.g., rate cap in Alberta) that need to be incorporated into the valuation of insurance contract liabilities.

In Alberta, as of January 1, 2024, the Automobile Insurance Premiums Amendment Regulation gave the Automobile Insurance Rate Board (AIRB) the authority to design an excess profit provision. On April 22,

the AIRB released its proposed profit provision framework. Actuaries would keep abreast of further developments, as this could lead to financial impacts for insurers.

7.3 Catastrophic events (*unchanged*)

From time to time, catastrophic events occur that have the potential to affect actuaries' estimate of LIC and, in some cases, the liability for remaining coverage. Events that are considered catastrophic on an industry-wide basis may not have a catastrophic effect on a given insurer. The extent to which any event is significant in the context of the valuation of insurance contract liabilities for a specific insurer depends on the nature of the insurer's business, its exposure in the affected region, policy wordings and the date on which the event occurred.

Actuaries would consider the effect of extreme events on the following:

- Additional costs on non-catastrophic other losses due to post-event inflation in the region as well as the rest of the country.
- The payment pattern and any change that the event may have on future claims payments.
- Unallocated loss adjustment expense estimates that may need to be tempered to the extent that the factor used to calculate the provision is a ratio to unpaid losses.
- Risk adjustments.

7.4 Macroeconomic environment (*modified*)

Actuaries would consider the potential effect that the macroeconomic environment may have on the valuation of insurance contract liabilities. These could include the impact on claims, capital availability and investment results. In recent years, year-over-year inflation in Canada has been significantly higher than at any time since the 1980s, however it has moderated in the last year. Further, the risk of a recession remains possible, while other impacts are difficult to predict due to an exceptionally tight labour market. The impact of geopolitical conflicts may also contribute to high inflation and economic uncertainty and recent years have seen an escalation in geopolitical conflict.

It is important to note that an increase in the consumer price index (CPI) (one of the most widely used measures of inflation) does not necessarily translate into a point-for-point increase in insurance loss costs. In determining loss cost inflation assumptions, it would be beneficial to discuss with experts, such as underwriters, business analysts, fraud detection experts and claim adjusters to understand whether loss cost inflation has already transpired in the recent claim payments and is accounted for in the latest case reserves. The actuaries may also consult external data sources related to inflation indices (e.g., [CPI by geography/product/product group](#), [average hourly wage rate by province and North American Industry Classification System](#), [producer price indices by product](#)).

In standard reserving development methods, the age-to-age factors sufficiently incorporate the effect of past loss cost inflation when historical inflation rates are stable. The effect of inflation on recent development periods may emerge more quickly and distinctly for short-tailed reserving segments than for long-tailed ones. Consequently, for long-tailed lines, the development method may not be appropriate when there are sudden changes in inflation rates. In situation of changes in inflation, various actuarial reserving methods exist such as Berquist-Sherman method to adjust the loss development triangles for inflation. One additional impact of higher interest rates in recent years (compared to long term trends) is that pre-judgment interest (PJI) mandated by provincial governments and regulators has been higher in recent years compared to historical PJI rates. Depending on insurer case reserving practices, this could lead to historical age-to-age factors becoming insufficient for affected lines of business.

The estimation of the effect of loss cost inflation on claim liabilities requires a high degree of judgment. To better grasp the impact of the variability of the underlying assumptions on claim liabilities, actuaries may consider performing sensitivity analyses using alternative sets of assumptions with regard to magnitude, path and duration of loss cost inflation, as well as payment patterns. The actuary may also consider the impact of inflation on other non-claim related costs and operating expenses.

Actuaries would also consider the potential impact of a recession on policyholder behaviour including, but not limited to, reduction of coverage, opportunistic fraud and inability to pay premium. For commercial products recessionary impacts could include a lower premium base, policyholder insolvencies and heightened reorganization activity that would lead to higher directors' and officers' and employer liability loss costs. A recession would also affect capital markets, impacting both asset values and interest rates.

Several Canadian cities have experienced a sharp increase in auto theft, fueled by organized crime, in recent years. Actuaries would consider the impact on auto segments affected by heightened theft activity, including potentially rapid shifts to the mix of claims within a reserving segment.

Appendix – References

The following is a list of selected documents referenced in this educational note:

CIA SOP and Rules

- [Standards of Practice](#)
- [Rules of Professional Conduct](#)

CIA task force reports

- [Materiality](#) (October 2007)
- [Report of the CIA Task Force on the Appropriate Treatment of Reinsurance](#) (October 2007)

CIA educational notes

- [IFRS 17 Discount Rates and Cash Flow Considerations for Property and Casualty Insurance Contracts](#) (September 2024)
- [IFRS 17 Risk Adjustment for Non-Financial Risk for Property and Casualty Insurance Contracts](#) (August 2024)
- [Guidance for the 2024 Reporting of Capital, Financial Condition Testing, and Own Risk and Solvency Assessment for Life and Health, P&C and Mortgage Insurers](#) (May 2024)
- [Subsequent Events](#) (August 2023)
- [Duration Considerations for P&C Insurers](#) (August 2023)
- [Changes to the Reference Curves' Ultimate Risk-Free Rate Development Approach Outlined in the Committee on Life Insurance Financial Reporting's Educational Note on IFRS 17 Discount Rates](#) (July 2023)
- [Applicability of Rules, Standards and Other Guidance to CIA Members](#) (February 2023)
- [Financial Condition Testing](#) (January 2023)
- [Role of the Appointed Actuary Under IFRS 17](#) (December 2022)
- [IFRS 17 – Actuarial Considerations Related to Reinsurance Contracts Issued and Held](#) (September 2022)
- [Actuarial Considerations Related to Property and Casualty Valuation Work Not Subject to IFRS 17](#) (August 2022)
- [Assessing Eligibility for Premium Allocation Approach Under IFRS 17 for Property & Casualty and Life & Health Insurance Contracts](#) (June 2022)
- [Comparison of IFRS 17 to Current CIA Standards of Practice](#) (June 2022)
- [IFRS 17 – Actuarial Considerations Related to Liability for Remaining Coverage in P&C Insurance Contracts](#) (June 2022)
- [IFRS 17 – Fair Value of Insurance Contracts](#) (June 2022)
- [Use of Models](#) (January 2017)

Explanatory reports

- [IFRS 17 Discount Rate Applications](#) (March 2023)
- [IFRS 17 Expenses](#) (June 2022)
- [IFRS 17 Assets for Acquisition Cash Flows](#) (June 2022)

CIA blog

- [CIA Seeing Beyond Risk](#) (including the content previously available on the CIA COVID-19 Hub)

OSFI documentation

- [Memorandum to the AA](#) (2024)
- Guideline B-15 “[Climate Risk Management](#)” (March 2023)
- [Earthquake Exposure Data Form and Instructions](#) (March 2020)
- [OSFI releases new Supervisory Framework to Modernize Financial Supervision](#) (February 2024)
- Guideline E-15: “[Appointed Actuary: Legal Requirements, Qualifications and Peer Review](#)” (August 2023)
- [Standardized Climate Scenario Exercise draft technical instructions](#) (April 2024). The final version of this document is expected to be published later in 2024.

AMF documentation

- [Actuary's Guide Regarding the Liability Report for P&C Insurers](#) and [supplementary tables](#) (September 2023)
- [Unpaid claim and loss ratio analysis exhibits](#) for which specific instructions are included within the guide. (August 2023)
- “[Actuary's guide regarding the Financial Condition Testing report of P&C Insurers](#)” (April 2024)
- [Earthquake Exposure Data Form](#) and [Instructions](#) (June 2021)
- [Climate Risk Management Guideline](#) (July 2024)



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Canadian Institute of Actuaries
360 Albert Street, Suite 1740
Ottawa, ON K1R 7X7
613-236-8196
head.office@cia-ica.ca
cia-ica.ca
seeingbeyonddrisk.ca



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