IFRS 17 Accounting Policy Paper: Discount rate

Date:	November 10, 2021
Approvers / Reviewers:	Approved by: FA Accounting Committee
Subject:	Discount rate

Disclaimer:

This accounting policy paper, which is the responsibility of the Facility Association's (FA) management, is prepared solely for the FA as administrator of certain insurance pools, namely the Facility Association Residual Market (FARM) and each of the Risk Sharing Pools (RSPs). It is intended solely for the use of the FA to document management's accounting policy determinations under IFRS 17 as part of management's internal financial reporting and governance processes as applicable to the FARM and each of the RSPs.

This accounting policy paper is being made available through the FA website to member insurance companies for general information purposes only and does not constitute advice from the Facility Association. Member insurance companies are responsible for their own assessment of IFRS 17 as applicable to their financial reporting. We disclaim any responsibility to any member insurance company who may rely on this document.

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Purpose

The purpose of this memo is to document Facility Association's assessment of the requirements of IFRS 17 relating to the key management judgements and interpretations with respect to the discount rates applied to various types of cash-flows of the insurance contracts. This paper provides guidance on how the Facility Association plans to fulfil the IFRS 17 requirements to insurance contracts issued by Servicing Carriers on behalf of the member insurance companies of the Facility Association Residual Market ("FARM") and to insurance contracts issued by individual member insurance companies and ceded through the applicable Risk Sharing Pools ("RSPs") to the collective members in accordance with the transfer rules set out in the Facility Association's Plan of Operation.

Entities:

Facility Association (FA) administers three types of mechanisms on behalf of its membership. This paper covers only the two mechanisms in the scope of IFRS 17, namely:

- Facility Association Residual Market ("FARM")
- Risk Sharing Pools ("RSPs")*

* Outside the scope of this paper are requirements relating to the direct business issued by the individual members prior to transferring the business to the RSPs. Only business assumed via the RSPs will be addressed in this memo.

Topics Covered

The topics covered in this paper are as follows:

1. Do the mechanisms meet the exemption criteria listed in IFRS 17.59(b)?
2. How would each mechanism classify its cash flows from a liquidity point of view?
3. How would each mechanism classify its cash flow under a single curve method?
4. How to derive the applicable discount rate?
5. How would FA record the impact of changes in discount rates?

Dependencies and Relationships

The technical positions developed in this paper affect (i.e., have downstream dependency on) the conclusions of the following papers:

1. Scope
2. Level of Aggregation
3. Initial recognition and contract boundary
4. Initial and subsequent measurement (which includes qualification for the premium allocation approach (PAA) and onerous contract analysis)
5. Risk adjustment
6. Transition
7. Modification and extinguishment of insurance contract

Executive summary

FA reached the following conclusions regarding the requirements of IFRS 17 relating to discounting and the application of those requirements to contracts issued by servicing carriers through the FARM and to contracts ceded by individual member companies through the RSPs to the collective members:

1) Do the mechanisms meet the exemption criteria listed in IFRS 17.59(b)?
   a) FARM:
      i) The exemption criteria are not met
   b) Each RSP:
      i) The exemption criteria are not met
2) How would each mechanism classify its cash flows from a liquidity point of view?
   a) FARM:
      i) Liability for remaining coverage: Illiquid
      ii) Liability for incurred claims: Illiquid
   b) Each RSP:
      i) Liability for remaining coverage: Illiquid
      ii) Liability for incurred claims: Illiquid
3) How would each mechanism classify its cash flow under a single curve method?
   a) FARM: Illiquid
   b) Each RSP Illiquid
4) How to derive the applicable discount rate:
   a) FARM:
      i) FA proposes to use the published Canadian Institute of Actuaries (CIA) IFRS 17 Market Curves and Reference Curves to calculate discounting of liabilities under IFRS 17.
   b) Each RSP:
      i) FA proposes to use the Fiera Capital's CIA IFRS 17 Market Curves and Reference Curves to calculate discounting of liabilities under IFRS 17.
5) How would FA record the impact of changes in discount rates?
   a) FARM:
      i) Unwinding of discount rate will be recognized through the P&L in finance income/expense
   b) Each RSP
      i) Unwinding of discount rate will be recognized through the P&L in finance income/expense

Question 1: Do the mechanisms meet the exemption criteria listed in IFRS 17.59(b)?

Technical References and Guidance

IFRS 17 Standard

56 If insurance contracts in the group have a significant financing component, an entity shall adjust the carrying amount of the liability for remaining coverage to reflect the time value of money and the effect of financial risk using the discount rates specified in paragraph 36, as determined on initial recognition. The entity is not required to adjust the carrying amount of the liability for remaining coverage to reflect the time value of money and the effect of financial risk if, at initial recognition, the entity expects that the time between providing each part of the services coverage and the related premium due date is no more than a year.

59 In applying the premium allocation approach, an entity:

(a) may choose to recognise any insurance acquisition cash flows as expenses when it incurs those costs, provided that the coverage period of each contract in the group at initial recognition is no more than one year.

(b) shall measure the liability for incurred claims for the group of insurance contracts at the fulfilment cash flows relating to incurred claims, applying paragraphs 33–37 and B36–B92. However, the entity is not required to adjust future cash flows for the time value of money and the effect of financial risk if those cash flows are expected to be paid or received in one year or less from the date the claims are incurred.

Technical analysis:

Under IFRS 17 paragraph 59 (b), in applying the premium allocation approach, an entity is not required to adjust future cash flows for the time value of money and the effect of financial risk if those cash flows are expected to be paid or received in one year or less from the date the claims are incurred.

FARM:

FARM policies (contracts issued) are measured under PAA based on their coverage period not exceeding the one-year limit (Refer to initial recognition and contract boundary accounting policy paper).

Since the time between providing each part of the services and the related premium due date is not exceeding the one year limit, based on IFRS17.56, the impact of the financing component can be ignored, and no discount rate should be derived for this purpose.

However, discount rate is required for the liability for remaining coverage (LRC) cash-flows of onerous contracts (both direct and reinsurance issued), as well as for the liability for incurred claims (LIC) cash-flows given the relief on IFRS17.59 is not applicable for FARM as the LIC cash-flows are not expected to be paid in one year or less from the claim incurred. Indeed, the payment of the claim can take more than one year to be paid and as such, the FARM does not meet the exemption criteria listed under IFRS17.59(b).

FARM cannot use the exemption under IFRS17.59(b)

RSP

RSP policy is regarded as reinsurance treaty written on a losses-occurring-during basis with a coverage period not exceeding the one-year limit (IFRS17.53(b)), therefore they automatically are eligible for the PAA. (Refer to initial recognition and contract boundary accounting policy paper)
Since the time between providing each part of the services and the related premium due date is not exceeding the one year limit, based on IFRS17.56, the impact of the financing component can be ignored, and no discount rate should be derived for this purpose.

However, similar to FARM, discount rate is required for the LRC cash-flows of onerous contracts (both direct and reinsurance issued), as well as for the LIC cash-flows given the relief on IFRS17.59 is not applicable as the LIC cash-flows are not expected to be paid in one year or less from the claim incurred. Again here, the timing of the payments of the claims can exceed the 12-month limit and therefore, RSP is not eligible for the exemption.

RSP cannot use the exemption under IFRS17.59(b)

Technical position:

Mechanism	Exemption under IFRS18.59(b)
FARM	Not eligible
RSP	Not eligible

Question 2: How would each mechanism classify its cash flows from a liquidity point of view?

Technical References and Guidance

IFRS 17 Standard

36 An entity shall adjust the estimates of future cash flows to reflect the time value of money and the financial risks related to those cash flows, to the extent that the financial risks are not included in the estimates of cash flows. The discount rates applied to the estimates of the future cash flows described in paragraph 33 shall:

(a) reflect the time value of money, the characteristics of the cash flows and the liquidity characteristics of the insurance contracts;

(b) be consistent with observable current market prices (if any) for financial instruments with cash flows whose characteristics are consistent with those of the insurance contracts, in terms of, for example, timing, currency and liquidity; and

(c) exclude the effect of factors that influence such observable market prices but do not affect the future cash flows of the insurance contracts.

B72 An entity shall use the following discount rates in applying IFRS 17:

(a) to measure the fulfilment cash flows—current discount rates applying paragraph 36;

(b) to determine the interest to accrete on the contractual service margin applying paragraph 44(b) for insurance contracts without direct participation features—discount rates determined at the date of initial recognition of a group of contracts, applying paragraph 36 to nominal cash flows that do not vary based on the returns on any underlying items;

(c) to measure the changes to the contractual service margin applying paragraph B96(a)–B96(c) for insurance contracts without direct participation features—discount rates applying paragraph 36 determined on initial recognition;

(d) for groups of contracts applying the premium allocation approach that have a significant financing component, to adjust the carrying amount of the liability for remaining coverage applying paragraph 56 —discount rates applying paragraph 36 determined on initial recognition;

(e) if an entity chooses to disaggregate insurance finance income or expenses between profit or loss and other comprehensive income (see paragraph 88), to determine the amount of the insurance finance income or expenses included in profit or loss:

(i) for groups of insurance contracts for which changes in assumptions that relate to financial risk do not have a substantial effect on the amounts paid to policyholders, applying paragraph B131 —discount rates determined at the date of initial recognition of a group of contracts, applying paragraph 36 to nominal cash flows that do not vary based on the returns on any underlying items;

(ii) for groups of insurance contracts for which changes in assumptions that relate to financial risk have a substantial effect on the amounts paid to policyholders, applying paragraph B132(a)(i) —discount rates that allocate the remaining revised expected finance income or expenses over the remaining duration of the group of contracts at a constant rate; and

(iii) for groups of contracts applying the premium allocation approach applying paragraphs 59(b) and B133 —discount rates determined at the date of the

incurred claim, applying paragraph 36 to nominal cash flows that do not vary based on the returns on any underlying items.

B73 To determine the discount rates at the date of initial recognition of a group of contracts described in paragraphs B72(b)–B72(e), an entity may use weighted-average discount rates over the period that contracts in the group are issued, which applying paragraph 22 cannot exceed one year.

B74 Estimates of discount rates shall be consistent with other estimates used to measure insurance contracts to avoid double counting or omissions; for example:

(a) cash flows that do not vary based on the returns on any underlying items shall be discounted at rates that do not reflect any such variability;

(b) cash flows that vary based on the returns on any financial underlying items shall be:

(i) discounted using rates that reflect that variability; or

(ii) adjusted for the effect of that variability and discounted at a rate that reflects the adjustment made.

(c) nominal cash flows (i.e. those that include the effect of inflation) shall be discounted at rates that include the effect of inflation; and

(d) real cash flows (i.e. those that exclude the effect of inflation) shall be discounted at rates that exclude the effect of inflation.

B78 Discount rates shall include only relevant factors, i.e. factors that arise from the time value of money, the characteristics of the cash flows and the liquidity characteristics of the insurance contracts. Such discount rates may not be directly observable in the market. Hence, when observable market rates for an instrument with the same characteristics are not available, or observable market rates for similar instruments are available but do not separately identify the factors that distinguish the instrument from the insurance contracts, an entity shall estimate the appropriate rates. IFRS 17 does not require a particular estimation technique for determining discount rates. In applying an estimation technique, an entity shall:

(a) maximise the use of observable inputs (see paragraph B44) and reflect all reasonable and supportable information on non-market variables available without undue cost or effort, both external and internal (see paragraph B49). In particular, the discount rates used shall not contradict any available and relevant market data, and any non-market variables used shall not contradict observable market variables.

(b) reflect current market conditions from the perspective of a market participant.

(c) exercise judgement to assess the degree of similarity between the features of the insurance contracts being measured and the features of the instrument for which observable market prices are available and adjust those prices to reflect the differences between them.

B79 For cash flows of insurance contracts that do not vary based on the returns on underlying items, the discount rate reflects the yield curve in the appropriate currency for instruments that expose the holder to no or negligible credit risk, adjusted to reflect the liquidity characteristics of the group of insurance contracts. That adjustment shall reflect the difference between the liquidity characteristics of the group of insurance contracts and the liquidity characteristics of the assets used to determine the yield curve. Yield curves reflect assets traded in active markets that the holder can typically sell readily at any time without

incurring significant costs. In contrast, under some insurance contracts the entity cannot be forced to make payments earlier than the occurrence of insured events, or dates specified in the contracts.

B80 Hence, for cash flows of insurance contracts that do not vary based on the returns on underlying items, an entity may determine discount rates by adjusting a liquid risk-free yield curve to reflect the differences between the liquidity characteristics of the financial instruments that underlie the rates observed in the market and the liquidity characteristics of the insurance contracts (a bottom-up approach).

B81 Alternatively, an entity may determine the appropriate discount rates for insurance contracts based on a yield curve that reflects the current market rates of return implicit in a fair value measurement of a reference portfolio of assets (a top-down approach). An entity shall adjust that yield curve to eliminate any factors that are not relevant to the insurance contracts, but is not required to adjust the yield curve for differences in liquidity characteristics of the insurance contracts and the reference portfolio.

B82 In estimating the yield curve described in paragraph B81:

(a) if there are observable market prices in active markets for assets in the reference portfolio, an entity shall use those prices (consistent with paragraph 69 of IFRS 13).

(b) if a market is not active, an entity shall adjust observable market prices for similar assets to make them comparable to market prices for the assets being measured (consistent with paragraph 83 of IFRS 13).

(c) if there is no market for assets in the reference portfolio, an entity shall apply an estimation technique. For such assets (consistent with paragraph 89 of IFRS 13) an entity shall:

(i) develop unobservable inputs using the best information available in the circumstances. Such inputs might include the entity's own data and, in the context of IFRS 17, the entity might place more weight on long-term estimates than on short-term fluctuations; and

(ii) adjust those data to reflect all information about market participant assumptions that is reasonably available.

B83 In adjusting the yield curve, an entity shall adjust market rates observed in recent transactions in instruments with similar characteristics for movements in market factors since the transaction date, and shall adjust observed market rates to reflect the degree of dissimilarity between the instrument being measured and the instrument for which transaction prices are observable. For cash flows of insurance contracts that do not vary based on the returns on the assets in the reference portfolio, such adjustments include:

(a) adjusting for differences between the amount, timing and uncertainty of the cash flows of the assets in the portfolio and the amount, timing and uncertainty of the cash flows of the insurance contracts; and

(b) excluding market risk premiums for credit risk, which are relevant only to the assets included in the reference portfolio.

B84 In principle, for cash flows of insurance contracts that do not vary based on the returns of the assets in the reference portfolio, there should be a single illiquid risk-free yield curve that eliminates all uncertainty about the amount and timing of cash flows. However, in practice the top-down approach and the bottom-up approach may result in different yield curves, even in the same currency. This is because of the inherent limitations in estimating the adjustments made under each approach, and the possible lack of an adjustment for different liquidity characteristics in the top-down approach. An entity is not required to reconcile the discount rate determined under its chosen approach with the discount rate that would have been determined under the other approach.

B85 IFRS 17 does not specify restrictions on the reference portfolio of assets used in applying paragraph B81. However, fewer adjustments would be required to eliminate factors that are not relevant to the insurance contracts when the reference portfolio of assets has similar characteristics. For example, if the cash flows from the insurance contracts do not vary based on the returns on underlying items, fewer adjustments would be required if an entity used debt instruments as a starting point rather than equity instruments. For debt instruments, the objective would be to eliminate from the total bond yield the effect of credit risk and other factors that are not relevant to the insurance contracts. One way to estimate the effect of credit risk is to use the market price of a credit derivative as a reference point.

Technical Analysis:

Currently, there is no established quantitative standard for establishing the degree of liquidity of a group of insurance contracts, so FA relies on qualitative analysis. CIA Committee on Property and Casualty Insurance Financial Reporting ("PCFRC") provides the following guidance on this:

"*For the purposes of this draft[1] educational note, the LRC and LIC for particular products are identified as either "liquid" or "illiquid." An actuary may determine that it is appropriate to consider "degrees" of liquidity. The "perceived liquidity" is subject to consideration of specific contract provisions that may affect the liquidity of the LRC.*

[1] *At the time of publishing this policy paper, only the draft was made available. We will monitor the status of the educational note and will update the policy paper when the final note is published and we will make sure there was no change between the draft proposed and referred to above and the final note published.*

Liquidity of Canadian P&C Insurance Contract Liabilities		
	LRC	**LIC**
Liquidity of most standard P&C products	Liquid	Illiquid
Basis for varying liquidity	Ability of policyholder to cancel policy before expiry date and to receive value without significant exit costs.	Ability for the policyholder to obtain the exit value in advance of "normal" payment dates.
Examples of non-standard	Title insurance Warranty insurance	Long-term disability claims for which the claimant has an option to receive a lump sum payment.

The general concepts outlined above in respect of insurance contracts also apply to reinsurance contracts held (ceded) and reinsurance contracts issued (assumed).

For a group of reinsurance contracts or treaties, the liquidity of the LRC is evaluated on the basis of the ability of the purchaser of the reinsurance to cancel the reinsurance contract before its expiry date and to receive value. Most reinsurance contracts have a one-year term with limited provision for early cancellation by either party. Treaty-specific cancellation provisions are considered for the purposes of assessing liquidity.

In most cases, the LIC for a group of reinsurance contracts is likely considered illiquid based on the inability of the purchaser of reinsurance to influence the timing of claim payments."

FARM

In light of the above guidance, FA notes the following characteristics of the policies issued by the servicing carriers on behalf of the member insurance companies through the FARM:

- FARM follows the characteristics of standard P&C insurance contracts generally. In addition, there are some unique aspects of FARM (being the residual automobile insurance market for individuals who may otherwise have difficulty in obtaining automobile insurance) which are relevant to assessing the liquidity of FARM's LRC:

Characteristic[2]	**Liquidity impact**
FARM rates are generally high, giving the FARM customers greater incentive to terminate their policies as soon as they can be insured by the standard market.	Liquid
Some FARM customers are not eligible for insurance in the standard market, which may make their policies less liquid as they may have no alternative to FARM	Illiquid

[2] *FARM as referred to in the table below refers to the residual automobile market mechanism. The term "FARM" is used to simplify the analysis performed.*

Retention rates for FARM policies are lower on average compared to the industry as customers seek to move out of the residual market, which suggests liquidity.	Liquid
By nature of FARM being the residual market, there is no well-functioning standard market for these risks which suggests a lack of liquidity.	Illiquid

- With regard to LIC, the ability for FARM and the claimants to affect the timing and the amount of the cash flows related to incurred claims remains similar to the ability of standard P&C insurers. The cash flows underlying FARM LIC are deemed illiquid.

While FARM exhibits some characteristics of both liquid and illiquid LRC, we believe that in balance, the non-voluntary nature of FARM coupled with the operational advantages of using an illiquid yield curve for both LRC and LIC supports the use of an illiquid yield curve for FARM LRC.

Liability Remaining Coverage	**Liability for Incurred Claims**
Illiquid	Illiquid

RSP

In light of the above guidance, FA notes the following characteristics of each of the RSPs which are relevant to assessing the liquidity of RSP's LRC:

Characteristic	**Liquidity impact**
The policies ceded by the individual member companies to collective members through the RSP is a reinsurance contract issued where there is no ability for the parties to cancel the contract	Illiquid
Individual members can and do move risks in and out of the pool mid-term based on their own selection criteria. Members actively manage their participation in the pool.	Liquid
There are a large number of members participating in the risk sharing pools, each with their own ceding strategy. This tends to provide a diversifying effect on the timing/amount of cash flows and stabilizes the overall pattern.	Illiquid
There are eligibility rules and transfer limits on the business that can be ceded to the pool (varies by jurisdiction), which limits the potential for unexpected growth of the pool exposure.	Illiquid

- With regard to LIC, the ability for RSP and the members to affect the timing and the amount of the cash flows related to incurred claims remains similar to the ability of standard P&C insurers. The cash flows underlying RSP LIC are deemed illiquid.

While RSP exhibits some characteristics of both liquid and illiquid LRC, we believe that in balance, the non-voluntary and highly regulated nature of participation in the RSP, coupled with the operational advantages of using an illiquid yield curve for both LRC and LIC supports the use of an illiquid yield curve for RSP LRC.

Liability Remaining Coverage	Liability for Incurred Claims
Illiquid	Illiquid

Technical position:

Mechanism	Liability Remaining Coverage	Liability for Incurred Claims
FARM	Illiquid	Illiquid
RSP	Illiquid	Illiquid

Question 3: How would each mechanism classify its cash flow under a single curve method?

Technical References and Guidance

IFRS 17 Standard
Refer to Question 1

Technical Analysis

PCFRC provides further guidance on the topic of using a single discount curve for both LIC and LRC:

P&C actuaries generally assess the LIC and LRC separately for a given portfolio and for its underlying groups. Furthermore, for P&C contracts, the unexpired portion of the contracts and the incurred claims generally exhibit different liquidity characteristics: the first being generally liquid and the second being illiquid. Consequently, it is intuitive to consider that the liquidity premium or that the yield curve could be different to discount the LIC or the LRC.

However, the IFRS 17 standard does not preclude the actuary from using a single liquidity premium or a single yield curve for both the LIC and LRC for a given portfolio. IFRS 17 refers to the liquidity characteristics of the insurance contracts and not of the liquidity characteristics of the LIC or of the LRC.

Consequently, the liquidity characteristics of P&C contracts for a given portfolio could be seen as the combination of:

- *a portion that is liquid (unexpired portion and contracts with no claims); and*
- *a portion that is illiquid (expired portion of the contracts with claims incurred).*

An approach with a single liquidity curve applied to both LIC and LRC could provide the following benefits:

- *Reduce operational risks stemming from possible errors in data input and data flows*
- *Ease the analysis of changes and associated explanations to members*
- *Reduce reliance on assumptions based on qualitative criteria and expert judgment*
- *Fewer yield curves to manage. Generally, it is operationally simpler to reduce the number of calculations. This could reduce the number of curves to manage by half.*
- *Single view of the profitability of portfolios. The valuation of the fulfilment cash flows of the portfolios and groups would be more consistent when transitioning from LRC to LIC. This is especially true for long-tail coverages like auto accident benefits and auto bodily injury.*

FARM:

While the cashflow patterns related to incurred claims differ across coverages, across provinces, and across product groupings (i.e., PPV, non-PPV), the ability for FARM members and claimants to affect the timing and these amount of these cashflows remains similar across these dimensions. This would suggest the use of a single yield curve to discount LIC cashflow across portfolios.

With regard to LRC, the cancellation rights generally affect the premium cashflows in a similar pattern across coverages. While the mid-term cancellation rates may differ across product groupings and provinces, the differences are deemed insufficient to develop and maintain separate curves across

portfolios.

As per decision arising Question #2, it was concluded that the cash flows underlying both the LIC and LRC are of illiquid nature.

Aligned to the analysis performed above, FARM would classify as illiquid under single yield curve.

FARM would classify as Illiquid

RSP

While the cashflow patterns related to incurred claims differ across coverages, across provinces, and across pools, the ability for RSP members and claimants to affect the timing and these amount of these cash flows remains similar across these dimensions. This would suggest the use of a single yield curve to discount LIC cashflow across portfolios.

With regard to LRC, the cancellation rights generally affect the premium cash flows in a similar pattern across coverages. While the mid-term cancellation rates may differ across pools and provinces, the differences are deemed insufficient to develop and maintain separate curves across portfolios.

As per decision arising Question #2, it was concluded that the cash flows underlying both the LIC and LRC are of illiquid nature.

Aligned to the analysis performed above, RSP would classify as illiquid under single yield curve.

RSP would classify as Illiquid

Technical position:

Mechanism	Single Yield Curve
FARM	Illiquid
RSP	Illiquid

Question 4: How to derive the applicable discount rate?

Technical References and Guidance

IFRS 17 Standard

see above

Basis for Conclusion

BC189 These arguments did not persuade the Board. Measuring a group of insurance contracts using undiscounted cash flows would fail to represent faithfully the entity's financial position and would be less relevant to users of financial statements than a measurement that includes the discounted amounts. The Board also concluded that discount rates and the amount and timing of future cash flows can generally be estimated without excessive measurement uncertainty at a reasonable cost. Absolute precision is unattainable, but it is also unnecessary.

Technical Analysis:

IFRS 17 permits an entity to use either of two methods to determine the discount rates to be used for the valuation of insurance contract liabilities (IFRS 17.B80–B81). These methods should theoretically both produce the same IFRS 17 compliant discount rate, however in practice there would be differences, but "…An entity is not required to reconcile the discount rate determined under its chosen approach with the discount rate that would have been determined under the other approach" (IFRS17.B84):

- A bottom-up approach whereby a liquid risk-free yield curve is adjusted "to reflect the differences between the liquidity characteristics of the financial instruments that underlie the rates observed in the market and the liquidity characteristics of the insurance contracts."
- A top-down approach whereby the yield to maturity of a reference portfolio of assets is adjusted "to eliminate any factors that are not relevant to insurance contracts." Under this approach, the liquidity characteristics of the reference portfolio would reasonably reflect the liquidity characteristics of the cash flows, but the entity "is not required to adjust the yield curve for differences in characteristics of the insurance contracts and the reference portfolio.

The Canadian Institute of Actuaries (CIA), PCFRC has issued a paper outlining a methodology for deriving the discount rate which is based on the theoretical equivalence of the above approaches.[1] This approach is a bottom-up approach whereby the liquidity premium is derived from a reference portfolio

IFRS 17 Discount Rate = Risk-Free Rate + Reference Portfolio Liquidity Premium

Where:

- Risk-Free Rate is the risk-free rate as at the valuation date, based on the bottom-up approach.
- Reference Portfolio Liquidity Premium is the liquidity premium, derived at the reference portfolio date, a date that may not be the same as the valuation date, and based on the top-down approach.

This approach has practical benefits in terms of timeliness of the data and data availability. Calculation of the reference portfolio liquidity premium is described further in the paper *IFRS 17 Discount Rates and Cash Flow Considerations for Property and Casualty Insurance Contracts*[1].

The selected approach to determine the discount curve would consider:

a) The data used to derive the risk-free rates until the last observable term;
b) The liquidity premium to apply to estimated illiquid insurance cashflows until the last observable term;
c) The liquidity premium to apply to estimated liquid insurance cashflows until the last observable term; and
d) The reference curve beyond the last observable term.

In the observable period, for terms up to 30 years, the risk-free rates are derived from the Government of Canada (GoC) debt securities.

In the CIA PCFRC, Revised Draft Educational IFRS 17 Discount Rates and Cash Flow Considerations for Property and Casualty Insurance Contracts[1], it is stated:

> *The last observable point is set at the 30-year term based on GoC debt securities and the findings described in Chapter 1 of [Committee on Life Insurance Financial Reporting] CLIFR's draft educational note: IFRS 17 Discount Rates for Life and Health Insurance Contracts. The actuary would not deviate from the 30-year observable period for insurance contracts sold in Canada and in Canadian currency.*
>
> *The reference curve liquidity premiums for liquid insurance contracts (e.g., amounts on deposit, or LRC for most P&C products) are set using provincial bonds as a reference portfolio and a credit risk adjustment. For each term up to 30 years, the liquidity premium is defined as the interest rate spread of the portfolio, adjusted for credit risk, over the risk-free rate derived from the GoC debt securities. This is approximately equivalent to a liquidity premium equal to 90%[3] of the provincial bonds spread.*
>
> *The reference curve liquidity premiums for illiquid insurance contract liabilities (e.g. Term 100, or LIC for most P&C products) are set using Canadian investment grade corporate bonds (those with credit ratings of no less than BBB) as a reference portfolio, adjusted with a constant to reflect the fact that these insurance contracts are less liquid than corporate bonds, and a credit risk adjustment. For each term up to 30 years, the liquidity premium is defined as 0.50%[3] + 75%[3] of the Canadian investment grade bonds spread over the risk-free rate derived from the GoC debt securities.*
>
> *The resulting reference curves in the observable period are therefore:*
> *a. Liquid curve: Risk-free rate + 90%[3] of provincial bonds spread*
> *b. Illiquid curve: Risk-free rate + 0.50%[3] + 75%[3] of Canadian investment grade bonds spread*
>
> *[…]*
> *Guidance on the reference curve in the unobservable period is provided in Section 2 within Chapter 2 of the CLIFR draft educational note: IFRS 17 Discount Rates for Life and Health Insurance Contracts.*

[3] *We understand that the calibration of these factors is subject to updates to reflect the emerging conditions and circumstances.*

In the CIA CLIFR, Draft Educational Note IFRS17 Discount Rates for Life and Health Insurance Contracts, it is stated:

> *In developing long-term estimates of interest rates, market participants may take into consideration multiple observable inputs (e.g., historical information, forward-looking expectations, economic environment and cycle, etc.). Multiple approaches to set the ultimate risk-free rate are discussed in this section and the actuary would consider the available information when developing the estimate. Numerical examples related to these techniques may be found in Appendix 2. Based on these examples, it is expected that an ultimate long-term risk-free rate of 3.5% to 5% would be reasonable in Canada.*
>
> *[…]*
>
> *Once the long-term rate level, the construct of the curve and the convergence period are set, the actuary would determine the method to interpolate from the last observable input to the long-term rate.*

The CIA has partnered with Fiera Capital Corporation to produce, on a monthly basis, the Fiera Capital's CIA IFRS 17 Market Curves and Reference Curves[4] in line with above-described approach. These curves include the risk-free curve, reference portfolio yields and liquidity premiums applicable to "liquid" and "illiquid" insurance contracts.

FARM:

Facility Association has elected to use the Fiera IFRS 17 Market Curves and Reference Curves for the following reasons[5]:

- The methodology and assumptions have been reviewed by industry professionals and the CIA. The understanding is that the methodology is in line with the IFRS 17 guideline and fits Facility Association's purpose.
- The monthly publication of Fiera IFRS 17 Market Curves and Reference Curves is subject to the review and approval by the CIA.
- Necessary data is readily available without additional investment.
- The monthly publication of Fiera IFRS 17 Market Curves and Reference Curves, and accompanying documentation eases the members' assessment regarding the appropriateness of the discount rates from the lens of their own accounting policies.

In compliance with CIA Standards of Practice 1440.01, FA will apply the procedures necessary to arrive to the conclusions as to the sufficiency and reliability of the data.

FARM will use the Fiera Capital IFRS 17 yield curves produced based on the agreement with CIA

[4] *Fiera Capital's CIA IFRS 17 Market Curves and Reference Curves. (June 2021). Fiera Capital. https://www.fieracapital.com/en/institutional-markets/cia-ifrs-17-curves*

RSP:

Same approach as defined for FARM

RSP will use the Fiera Capital IFRS 17 yield curves produced based on the agreement with CIA

Technical position:

Mechanism	Discount rate method
FARM	Bottom-up approach with a calibration based on CIA *IFRS 17 Discount Rates and Cash Flow Considerations for Property and Casualty Insurance Contracts*
RSP	Bottom-up approach with a calibration based on CIA *IFRS 17 Discount Rates and Cash Flow Considerations for Property and Casualty Insurance Contracts*

Question 5: How would FA record the impact of changes in discount rates?

Technical References and Guidance

IFRS 17 Standard

87 Insurance finance income or expenses comprises the change in the carrying amount of the group of insurance contracts arising from:
(a) the effect of the time value of money and changes in the time value of money; and
(b) the effect of financial risk and changes in financial risk; but
(c) excluding any such changes for groups of insurance contracts with direct participation features that would adjust the contractual service margin but do not do so when applying paragraphs 45(b)(ii), 45(b)(iii), 45(c)(ii) or 45(c)(iii). These are included in insurance service expenses.

87A An entity shall apply:
(a) paragraph B117A to insurance finance income or expenses arising from the application of paragraph B115 (risk mitigation); and
(b) paragraphs 88 and 89 to all other insurance finance income or expenses.

88 In applying paragraph 87A(b), unless paragraph 89 applies, an entity shall make an accounting policy choice between:
(a) including insurance finance income or expenses for the period in profit or loss; or
(b) disaggregating insurance finance income or expenses for the period to include in profit or loss an amount determined by a systematic allocation of the expected total insurance finance income or expenses over the duration of the group of contracts, applying paragraphs B130–B133.

89 In applying paragraph 87A(b), for insurance contracts with direct participation features, for which the entity holds the underlying items, an entity shall make an accounting policy choice between:
(a) including insurance finance income or expenses for the period in profit or loss; or
(b) disaggregating insurance finance income or expenses for the period to include in profit or loss an amount that eliminates accounting mismatches with income or expenses included in profit or loss on the underlying items held, applying paragraphs B134–B136.

90 If an entity chooses the accounting policy set out in paragraph 88(b) or in paragraph 89(b), it shall include in other comprehensive income the difference between the insurance finance income or expenses measured on the basis set out in those paragraphs and the total insurance finance income or expenses for the period.

Technical analysis:

The effect of, and changes in, the time value of money arising from the passage of time and the effect of financial risk are presented as insurance finance income/expense within the statement of financial performance. Considering the products within the scope of this memorandum, insurance finance income/expense comprise of changes in the carrying amount of groups of insurance contracts due to two factors:

(1) Accretion of interest (unwinding of the applied discount rate)
(2) Changes in discount rate

An entity has an accounting policy choice either to present the amount of insurance finance income/expense for the period in the P&L, or to split it into one part that is included in the P&L and one part that is included in OCI

determined by a systematic allocation of the total insurance finance income/expense over the duration of the group of contracts (IFRS17.88 & IFRS17.89).

IFRS 17 specifies that such systematic approach must:

- Be based on the characteristics of the contracts (without reference to factors that do not affect the cash flows expected to arise under the contracts)
- Result in the amounts recognized in OCI over the duration of the groups of contracts totaling to zero. The cumulative amount recognized in OCI at any date is the difference between the carrying amount of the group of contracts and the amount that group would be measured at when applying the systematic allocation.

Once chosen, the accounting policy will need to be applied consistently at the level of the portfolio of insurance contracts. These presentation requirements do not change the total amount of insurance income/expense under IFRS 17, but specify how to allocate this total amount to the different parts of the statements of financial performance when this policy choice is applied.

FARM:

In making the accounting policy choice, the main factors considered are:
1) Impact on the current processes and reporting systems; and
2) Interrelation with classification of financial assets under IFRS 9

In terms of the impact on FA's processes and reporting system, adopting the disaggregation approach will increase the complexity of the current processes as the impact of the changes in the discount rates would have to be separately tracked and recorded.
In addition, the main advantage of adopting the disaggregation policy choice is to help eliminate accounting mismatches – management notes that those mismatches cannot be fully eliminated even if the disaggregation option is chosen.

Based on the above, management has decided to not disaggregate and have the impact of discounting go through P&L.

No disaggregation – the impact of discounting will all go through the P&L

RSP

For the same reasons as listed above for FARM, management has decided to not disaggregate and have the impact of discounting go through P&L.

No disaggregation – the impact of discounting will all go through the P&L

Technical position:

Mechanism	Discount rate method
FARM	Insurance income/expense will all be included in the P&L
RSP	Insurance income/expense will all be included in the P&L