

## STAFF PAPER

September 2018

Project	Transition Resource Group for IFRS 17 <i>Insurance Contracts</i>		
Paper topic	Determining discount rates using a top-down approach		
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This paper has been prepared for discussion at a public meeting of the Transition Resource Group for IFRS 17 *Insurance Contracts* and does not represent the views of any individual member of the International Accounting Standards Board or staff. Comments on the application of IFRS<sup>®</sup> Standards do not purport to set out acceptable or unacceptable application of IFRS Standards.

## Introduction

1. We have received two submissions about how an entity applies a top-down approach to determine the discount rates for insurance contracts with cash flows that do not vary based on the returns on underlying items. The submissions question whether:
  - (a) an entity could:
    - (i) use the assets it holds as a reference portfolio of assets; and
    - (ii) ignore the liquidity characteristics of insurance contracts.
  - (b) changes in the assets the entity holds result in changes in the discount rates used to measure insurance contracts under specific circumstances.
2. The objective of this paper is to provide background and an accounting analysis to support discussion at the Transition Resource Group for IFRS 17 *Insurance Contracts* (TRG).

## Structure of the paper

3. This paper includes the following:
  - (a) background information;
  - (b) implementation question; and
  - (c) review of accounting requirements.

## Background information

4. Paragraph 36 of IFRS 17 states:

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.

5. Paragraph B78 of IFRS 17 states:

Discount rates shall include only relevant factors, ie 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.

6. Paragraph B79 of IFRS 17 states:

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.

7. Paragraph B80 of IFRS 17 states:

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).

8. Paragraph B81 of IFRS 17 states:

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.

9. Paragraph B82 of IFRS 17 states:

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.

10. Paragraph B83 of IFRS 17 states:

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.

11. Paragraph B84 of IFRS 17 states:

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.

12. Paragraph B85 of IFRS 17 states:

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.

13. Paragraph BC196 of the Basis for Conclusions on IFRS 17 explains:

[...] in response to feedback suggesting that it may be difficult to determine a liquidity premium in isolation, the Board observed that in estimating liquidity adjustments, an entity could apply either of the following:

- (a) a 'bottom-up' approach based on highly liquid, high-quality bonds, adjusted to include a premium for the illiquidity.
- (b) a 'top-down' approach based on the expected returns of a reference portfolio, adjusted to eliminate factors that are not

relevant to the liability, for example market and credit risk. The Board expects a reference portfolio will typically have liquidity characteristics closer to the liquidity characteristics of the group of insurance contracts than highly liquid, high-quality bonds. Because of the difficulty in assessing liquidity premiums, the Board decided that in applying a top-down approach an entity need not make an adjustment for any remaining differences in liquidity characteristics between the reference portfolio and the insurance contracts.

### Implementation question

14. The submissions question whether, when using a top-down approach to determine the discount rates for cash flows that do not vary based on the returns on underlying items—ie when applying paragraph B81 of IFRS 17—an entity:
- (a) could use the assets it holds as a reference portfolio of assets;
  - (b) could ignore the liquidity characteristics of the group of insurance contracts being measured; and
  - (c) should reflect in the discount rates any changes occurring during the reporting period in the assets it holds when the entity:
    - (i) uses those assets as a reference portfolio of assets; and
    - (ii) does not to adjust the yield curve for differences in liquidity between the group of insurance contracts being measured and the reference portfolio of assets.
15. Regarding the question in paragraph 14(c) of this paper, one submission notes that a change in the assets held as a reference portfolio may occur when more illiquid assets become available in the market. When more illiquid assets become available entities may sell more liquid assets (yield reflects a lower return) and buy assets that are less liquid (yields reflecting a higher return). This would

increase the yield curve derived from the reference portfolio of assets used for determining the discount rates for the insurance contracts, without there being a change in the liquidity characteristics of the insurance contracts. This submission provides two alternative views:

- (a) View A—Changes in the entity’s assets used as a reference portfolio should not affect the discount rates used to measure insurance contracts. A reference portfolio is a benchmark composed of a consistent mix of well-defined asset types and classes, rather than the assets held by the entity. The characteristics of the cash flows of the insurance contracts do not vary following changes in the entity’s assets.
- (b) View B—Changes in the entity’s assets used as a reference portfolio may impact the discount rates used to measure insurance contracts. Paragraph B81 of IFRS 17 states that an entity is not required to adjust the yield curve for differences in liquidity characteristics of the insurance contracts and the reference portfolio. Therefore, any changes in the liquidity characteristics of the reference portfolio impacting the yield curve would flow through the discount rates derived from the reference portfolio.

## **Review of accounting requirements**

### ***Reference portfolio of assets***

- 16. Paragraph B81 of IFRS 17 permits an entity to determine the appropriate discount rates for a group of 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).
- 17. As noted in paragraph B85 of IFRS 17, IFRS 17 does not specify restrictions on the reference portfolio of assets used in applying paragraph B81 of IFRS 17.

Also, IFRS 17 does not define ‘a reference portfolio of assets’. Consequently, a portfolio of assets that an entity holds can be used as a reference portfolio of assets to determine the discount rates as stated in paragraph B81 of IFRS 17, as long as the discount rates achieve the objectives set out in paragraph 36 of IFRS 17 of:

- (a) reflecting the characteristics of the insurance contracts. This means that adjustments are necessary to eliminate any characteristics of the assets that are not present in the insurance contracts (subject to the discussion on liquidity set out in paragraph 20 of this paper). For example, if the top-down approach starts with the yield curve based on contractual cash flows of debt instruments, the entity needs to adjust for the expected credit losses on those instruments in determining the appropriate discount rates for the insurance contracts.
- (b) being consistent with observable current market prices. This means, for example, that if the top-down approach starts with the yield curve based on assets held by the entity, this yield curve needs to be derived from the current fair value of the assets held, even if the entity does not measure those assets at fair value for financial reporting purposes.

### ***Liquidity of insurance contracts***

- 18. Paragraph BC195 of the Basis for Conclusions on IFRS 17 explains the Board’s conclusion that it is not appropriate in a principle-based approach to ignore the liquidity characteristics of the item being measured. Several paragraphs of IFRS 17 require that the liquidity characteristics of insurance contracts are considered when determining the discount rates applied to the estimates of cash flows that do not vary based on the returns on underlying items.
- 19. As an overall principle, paragraph 36 of IFRS 17 requires that those discount rates reflect, among other factors, the liquidity characteristics of the insurance

contracts. Paragraphs B78–B79 of IFRS 17 further specify that those discount rates shall include only factors relevant to insurance contracts—such as liquidity—and shall reflect 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.

20. However, when using the top-down approach described in paragraph 16 of this paper, as a simplification, paragraph B81 of IFRS 17 permits an entity not to adjust the yield curve derived from a reference portfolio of assets for differences in liquidity characteristics of the insurance contracts and the reference portfolio. The difficulty in determining a liquidity premium in isolation is noted in paragraph BC196(b) of the Basis for Conclusions on IFRS 17. Paragraph BC196(b) of the Basis for Conclusions on IFRS 17 also notes that the Board expected a reference portfolio of assets typically to have liquidity characteristics closer to the liquidity characteristics of a group of insurance contracts than would be the case for highly liquid, high-quality bonds. In other words, the reference portfolio envisaged by the Board when providing the simplification would have required little adjustment for liquidity differences if such adjustment was made.

### ***Changes in the reference portfolio of assets***

21. In applying paragraph 36 of IFRS 17 to determine the appropriate discount rates for cash flows that do not vary based on the returns on underlying items, an entity shall ensure that at each reporting date those discount rates reflect the characteristics of the insurance contracts, even when the entity chooses to use a portfolio of assets that it holds to determine the discount rates.
22. As noted in paragraph 17(a) of this paper, the entity needs to eliminate any differences resulting from characteristics of that portfolio of assets that are not present in the insurance contracts, such as expected credit losses. In principle, the entity should also eliminate any differences in liquidity.

23. Both expected credit losses and liquidity of the assets in a reference portfolio may fluctuate over time because of:
- (a) market movements; and/or
  - (b) changes in the characteristics of the assets in the reference portfolio or in the composition of the reference portfolio.
24. Those fluctuations affect the yield of the reference portfolio of assets. The staff view is that to achieve the objectives in paragraph 36 of IFRS 17 an entity needs to make adjustments to the yield curve of the reference portfolio of assets at each reporting date to eliminate any effect on discount rates of:
- (a) credit risk. This is because credit risk is not a characteristic of the insurance contracts. Credit risk fluctuations, therefore, should not affect discount rates used to measure insurance contracts.
  - (b) differences in liquidity characteristics of the insurance contracts and the reference portfolio. If an entity eliminates these differences, liquidity fluctuations in the yield curve of the reference portfolio will affect the discount rates for the insurance contracts to the extent of changes in the market price for liquidity and/or changes in the liquidity characteristics of the insurance contracts. Changes in the yield curve of the reference portfolio caused by changes in the composition of the reference portfolio or the liquidity characteristics of the assets in the reference portfolio would not affect the discount rates for insurance contracts. However, the entity may use the simplification discussed in paragraph 20 of this paper. If the entity uses that simplification, fluctuations in the liquidity of the reference portfolio are mirrored in the changes in the discount rates used to measure the group of insurance contracts. Paragraphs 87–90 of IFRS 17 permit the entity to present the effect of changes in discount rates, including any liquidity fluctuations, either in profit or loss or in other comprehensive income if the entity has elected

to disaggregate insurance finance income or expenses between profit or loss and other comprehensive income.

25. IFRS 17 requires an entity to disclose qualitative and quantitative information about the significant judgements, and changes in those judgements, made when applying IFRS 17. Paragraphs 117 and 120 of IFRS 17 require an entity to disclose:
- (a) the methods used to measure insurance contracts and the processes for estimating the inputs to those methods, including the approach used to determine the discount rates;
  - (b) any changes in the methods and processes for estimating inputs used to measure insurance contracts, the reason for the change, and the type of contracts affected; and
  - (c) the yield curve or range of yield curves used to discount cash flows that do not vary based on the returns on underlying items.
26. Paragraph BC198 of the Basis for Conclusions on IFRS 17 explains that the different approaches IFRS 17 allows for determining the discount rate could give rise to different rates. Accordingly, the Board decided that disclosure of the yield curves used to discount cash flows that do not vary based on the returns on underlying items is required to allow users of financial statements to understand how those yield curves might differ from entity to entity.
27. An entity is required by paragraph 94 of IFRS 17 to disclose any additional information to meet the objective set out in paragraph 93 of IFRS 17. That objective is to disclose information in the notes that, together with the information provided in the primary financial statements, gives a basis for users of financial statements to assess the effect that insurance contracts have on an entity's financial position, financial performance and cash flows.
28. Identifying a reference portfolio, adjusting the yield curve to determine the discount rates and using the simplification discussed in paragraph 20 of this paper

(whether the reference portfolio is held by the entity or not) are all methods and processes for estimating the inputs to those methods used to measure insurance contracts. Therefore, these methods and processes for estimating the inputs to those methods, and any changes in them, should be disclosed applying paragraph 117 of IFRS 17.

29. With reference to the question in paragraph 14(c) of this paper, and considering the disclosure objective in paragraph 93 of IFRS 17 and the specific disclosure requirements of paragraph 117 of IFRS 17, the staff think that an entity is required to provide information about the effect of a change in the composition of the assets in the reference portfolio on discount rates used to measure insurance contracts, if material.

## TRG discussion

**Question to TRG members**

What are your views on the implementation question presented above?