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Project **Insurance Contracts**

Topic **Discounting**

Purpose

1. In its February 2009 meeting, the IASB tentatively decided that, to provide decision-useful information, the measurement of insurance liabilities conceptually should, among other things, reflect time value of money; ie they should be discounted. In its 21 July, 2009 meeting the FASB reached the same conclusion.
2. This paper discusses the objective of discount rates for insurance liabilities and gives a high-level outline of guidance for determining discount rates.

Summary of the staff recommendations

3. The discount rate for an insurance liability should conceptually adjust estimated future cash flows for the time value of money in a way that captures the characteristics of that liability rather than using a discount rate based on expected returns on actual assets backing those liabilities.
4. Some say that this description is sufficient to determine the discount rate and the standard should clarify some of the features of a discount rate based on the objective that the discount rate should reflect the characteristics of the liability.

Others argue that for comparability reasons the rate of high-quality fixed income debt instruments should be required.

5. The standard should not give detailed guidance on how to determine the specific discount rate in practice. Rather, a cross-reference to the guidance on fair value measurement should be provided.
6. The paper also addresses day one losses arising from the use of different discount rates for the pricing and the accounting for insurance contracts.

Structure of the paper

7. The rest of this paper is divided into the following sections:
 - (a) Previous discussions on measurement (paragraph 9)
 - (b) Objective of the discount rate (paragraphs 10-13)
 - (c) Features of the discount rate (paragraphs 14-21)
 - (d) A practical alternative- prescribing an observable market rate (paragraphs 22-26)
 - (e) Guidance for determining the discount rate (paragraph 27)
 - (f) Day one losses (paragraphs 28-32)
 - (g) Appendix: The discount rate for pension liabilities (paragraphs A1-A4)
8. This paper does not address:
 - (a) whether, or how, the measurement of insurance liabilities should reflect non-performance risk. The staff believes a discussion of this issue is premature given the IASB's discussion paper *Credit Risk in Liability Measurement*, for which comments were due on 1 September.
 - (b) risk margins. We will consider separately in our work on risk margins whether an adjustment to the discount rate can be an appropriate means of including a risk margin in some or all cases. All references in this paper to a discount rate for insurance liabilities relate to a discount rate that only reflects the time value of money.

- (c) discount rates for insurance liabilities whose expected payments to policyholders are linked to asset performance (such as participating contracts or unit-linked (variable) contracts).
- (d) whether claims liabilities arising from non-life contracts could be measured by using undiscounted cash flows (with no margin). The IASB has tentatively decided not to permit such an approach. The FASB will discuss this issue in a future meeting.

Previous discussions on measurement

- 9. In previous discussions the boards discussed two elements that are relevant to the discount rate:
 - (a) The boards decided tentatively that the measurement approach should consider all available information. In this context, the IASB specified that the measurement should use estimates of financial market variables that are as consistent as possible with observable market prices. The FASB clarified that all available information includes, but is not limited to, industry data, historical data of an entity's costs, and market inputs when those inputs are relevant to the fulfilment of the contract¹. This implies that in determining the discount rate, the insurer should use an observable market rate (adjusted as necessary if that rate relates to an instrument whose characteristics differ from those of the insurance liability being measured).
 - (b) The measurement should reflect current circumstances. It follows that the discount rate should be updated each reporting period. This increases the relevance of the insurance liability because changes in market conditions would be included in the liability measurement.

¹ Staff's working premise is that differences (if any) between these two decisions should be dealt with at the stage of drafting the measurement guidance for the exposure draft.

Objective of the discount rate

10. The Discussion Paper *Preliminary Views on Insurance Contracts* (DP) suggested that the objective of the discount rate should be to adjust estimated future cash flows for the time value of money. It also explained that this adjustment should be done in a way that captures the characteristics of the liability and not the characteristics of the assets backing that liability.
11. Most respondents to the DP agreed that the discount rate for non-participating insurance liabilities should reflect the characteristics of the liability, independent of the characteristics of the assets backing the liability.
12. A few respondents argued that the characteristics of the insurance liability are best reflected by rates based on the expected returns on the actual assets held (asset-based rate), which are typically higher than a risk-free rate. They argued that this would be consistent with common pricing practice and that using, for example, a risk-free rate rather than the asset-based rate would lead to the reporting of large losses at inception for some contracts that are expected to be profitable. [We discuss this issue further in paragraphs 28-32] Some also argue that the use of (for example) a risk-free rate would result in ‘artificial volatility’ at subsequent measurement if there are changes in the spreads on assets backing the insurance liabilities and those changes are not offset by corresponding change in the rate used to discount the insurance liabilities. Some existing accounting approaches use an asset-based discount rate, for example the accounting model for long-duration contracts in the *Financial Services – Insurance Topic* (944) of the FASB Accounting Standards Codification, first introduced to US GAAP by FAS 60 *Accounting and Reporting by Insurance Enterprises*.
13. As noted above, the DP expressed the view that the discount rate should reflect the characteristics of the liability, not those of the assets backing the liability. That view was based on the reasoning that cash flows from assets backing an insurance liability are irrelevant for a decision-useful measurement of that liability (unless the cash flows from those assets affect the cash flows arising from that liability). The staff believes that reasoning is still valid.

Question 1 for the boards

For the reason given in paragraph 13, staff recommends setting as the objective a discount rate that reflects the characteristics of the liability. It should not capture characteristics of assets held to back those liabilities if the liabilities do not share those characteristics.

Do you agree?

Features of the discount rate

14. In the previous section we argued that the discount rate should reflect the characteristics of the liability, which include, (but are not necessarily limited to) timing, currency, and liquidity. [Arguably, non-performance risk is also one of those factors. However, as mentioned earlier, this paper does not deal with non-performance risk].
15. Similarly, the discount rate should not include any factors that influence the observed rate but are not relevant to the insurance liability. These factors include, for example, credit default premiums included in prices used to determine the observed rate.

Components of a discount rate

16. An observable market rate can be analysed conceptually into the following components:
 - (a) a risk-free rate
 - (b) expected losses from credit defaults
 - (c) a premium for bearing the uncertainty in the expected credit losses
 - (d) a liquidity premium for holding an instrument that is not readily transferable
 - (e) other elements, such as taxes, conversion costs, costs of market imperfections [we do not intend to discuss these items in (e) in detail].

17. The discount rate for the liability would always include the risk-free rate (element (a)).
18. The expected credit losses (element (b)) and the premium for the uncertainty inherent in those losses (element (c)) are relate to the specific observed instrument; if those elements are not characteristics of the insurance liability, the discount rate for the liability would not include them. [If non-performance risk were to be included in the discount rate, it would reflect the credit characteristics of the insurance liability; not the credit risk of assets backing the insurance liability].
19. Liquidity is a relevant characteristic of an insurance liability [paragraphs 30-32 explain this further]. The liquidity premium (element (d)) would therefore need to reflect the liquidity characteristics of the liability.
20. A rate that excludes (b) and (c), all credit default risk, is often referred to as a 'risk-free rate'. However, that rate could still include a component for liquidity that is reflected in (d) the liquidity premium. For those insurance liabilities for which cash flows can occur at any time without advance warning, the discount rate will probably be close, or perhaps identical to, the risk-free rate of highly liquid instruments, such as government bonds.
21. In paragraph 13, staff recommends that the Board should require an insurer to reflect the time value of money by discounting the expected cash flows via a discount rate that reflects the characteristics of the liability. Under this principle, the standard would clarify that a discount rate that adequately reflects the characteristics, amongst others,
 - (a) excludes credit default risk included in the observed market rate;
 - (b) matches the liability on currency, duration and liquidity.

A practical alternative - prescribing an observable market rate

22. In the previous sections we discussed an approach that gives the objective for the discount rate, to be supported by high-level guidance. In other words, a principles-based approach.

23. Some might argue that, even though the objective conceptually might be correct, such an approach would result in too much diversity in practice; a principle-based approach could increase complexity and undermine comparability. They would therefore prefer an approach that prescribes a particular observable market rate or a set of observable market rates. Options are, for example:
- (a) high-quality corporate bonds (applied in for example IAS 19 *Employee benefits*. Please see the appendix for a further outline.)
 - (b) high-quality fixed-income debt instruments (applied in for example the *Compensation – Retirement Benefits Topic* (715) of the FASB Accounting Standards Codification, first introduced to US GAAP by FAS 87 *Employers' Accounting for Pensions* and FAS 106 *Employers' Accounting for Postretirement Benefits Other Than Pensions*. Please see the appendix for a further outline.)
 - (c) a risk-free rate, for example based on government bonds (applied in for example in the *Financial Services – Insurance Topic* (944) of the FASB Accounting Standards Codification, first introduced to US GAAP by FAS 163 *Accounting for Financial Guarantee Insurance Contracts—an interpretation of FASB Statement No. 60*).
24. Some would argue that an approach based on a specific discount rate would be inconsistent with a principles based approach; any choice might be somewhat arbitrary and could result in a discount rate that does not fully reflect the nature of the liability. For example, the required return on a high quality corporate bond rate includes the premium for bearing the risk of unexpected defaults. That premium may not reflect the characteristics of the insurance liability being measured. Furthermore, comparability may still be an issue (for example, a risk-free rate can be derived in more than one way and the outcome will not necessarily be the same in practice).
25. Some staff members believe that, based on the arguments in paragraph 24, a principles-based approach should be applied. Issues of comparability could be mitigated by disclosures around the discount rate.

26. Other staff members believe that, as a result of the arguments in paragraph 23, a specific set of discount rates should be used. Those staff members prefer to use the rate of high-quality fixed-income debt instruments for reasons of comparability and consistency with the discount rate required for pension liabilities under US GAAP.

Question 2 for the boards

Do you agree that, to translate the general concept into practise, the boards needs to

- (a) stay with the principle that the discount rate should reflect the characteristics of the liability; or
- (b) require to use the rate of a high-quality fixed income debt instrument?

If not, which observable market rate would you select for the measurement of insurance liabilities and why?

Guidance for determining the discount rate

27. Estimating a discount rate for a debt instrument is essentially the same task as estimating the fair value of that instrument. Accordingly, the staff proposes to use a general cross-reference to the boards' guidance on fair value measurements as a means of providing guidance on how to estimate discount rates. (To avoid introducing irrelevant factors it would be necessary to specify that the instrument in question is one that carries no default risk and that has the same put or call features, if any, as the insurance liability being measured). For US GAAP, that guidance is in the *Fair Value Measurements and Disclosures Topic* (820) of the FASB Accounting Standards Codification, first introduced to US GAAP by FAS 157 *Fair Value Measurements*. For IFRSs, it is in IAS 39 *Financial Instruments: Recognition and Measurement*, which is expected to be replaced in 2010 by an IFRS resulting from the exposure draft *Fair Value Measurement*.

Question 3 for the boards

Do you agree that the boards should not provide specific guidance on how to estimate a discount rate for insurance liabilities, beyond providing a cross-reference to the guidance on fair value measurements?

Day one losses

28. As discussed earlier, some respondents to the DP believed that a discount rate for insurance liabilities would not lead to decision useful information if the rate does not consider the return on actual assets held to back those liabilities. Some insurance contracts are priced using an expected return on assets that exceeds the risk-free rate. Those respondents argued that if (for example) risk-free rates were to be used, significant accounting losses may arise at the inception for some types of insurance contracts and those losses are not economic losses but merely reflect an imperfection in the accounting model.
29. Those respondents believe that asset-based rates better reflect the economics behind an insurance contract than risk-free rates. An asset-based rate would in their view reflect the relationship between the expected liability payments and the expected cash flows from investments.
30. The staff believes that a loss that is not an economic loss could arise at inception in some cases if an illiquid (or non-puttable) liability is discounted using the discount rate for a highly-liquid instrument. Consider for example two bank deposits, both with a fixed term, but one without a demand feature and another with a demand feature. Often, the bank deposit without the demand feature would provide the depositor with a higher return to compensate the depositor for the inability to cash in the deposit. (In some cases, when the yield curve is inverted, the deposit without the demand feature might pay a lower rate). That higher return clearly is a characteristic of the bank deposit without a demand feature (like the lower return would be a characteristic of the bank deposit with a demand feature). Thus, the rate applicable to a deposit with a demand feature would not be an appropriate rate to discount the cash flows from a deposit without that feature.

31. Arguably, the same principle applies to insurance contracts. Consider, for example long-term annuity business. Annuity contracts in the payout phase generally do not permit the policyholder to withdraw cash, ie they cannot lead to early payments, and are therefore relatively illiquid. As a result, insurers issuing such contracts can invest in relatively illiquid assets with a higher return than that achievable with more liquid assets. As a result, those insurers are often willing to price such contracts in a way that provides a higher return to the policyholder through lower premium rates or higher credited rates than for contracts in which early surrender is possible; if such liabilities are measured using a discount rate that reflects returns on highly liquid government bonds, an accounting loss may arise at inception.
32. In the staff's view, a highly liquid asset (eg a government bond traded in an active market) contains a feature that is not present in a liability that is not highly liquid. Accordingly, in determining the discount rate for that liability, it would be necessary, in principle, to adjust the expected return on such assets. The staff understands that there is debate among practitioners about the magnitude of such adjustments and about techniques for estimating them. (The staff notes that it would not be appropriate to increase the discount rate for a liability by including the premium that investors require for bearing risks associated with assets they hold.) The staff also understands that the use of government bond rates as discount rates can lead to significant losses at inception for some types of contract, such as annuities. The staff plans to seek further input on this topic through field tests.

Question 4 for the boards

Do you have questions about this issue of day one losses?

Appendix: The discount rate for pension liabilities

A1. Pension liabilities and insurance liabilities, particularly some long-duration life contracts, arguably have common characteristics, although perhaps not identical in all aspects. Some therefore might argue that the boards should consider using the same or a very similar discount rate for both types of liabilities. At the least if the boards did not end up in using the same rate, any differences should be explained.

IFRS

A2. In August 2009, the IASB published its Exposure Draft *Discount Rate for Employee Benefits*. This exposure draft contains the IASB's proposals to eliminate the use of different rates by deleting from IAS 19 the requirement to use market yields on government bonds. The discount rate for employee benefits would be based on market yields on high-quality corporate bonds in all cases. However, the IASB clarified that it intends to review the accounting for, and in particular the measurement of, employee benefits more broadly in due course. The proposals in the exposure draft on the discount rate for employee benefits are not intended to pre-empt that review. Therefore the proposals in that exposure draft are not necessarily a relevant precedent for the future insurance standard.

A3. Moreover, the boards' discussion on the discount rate in their project on insurance contracts might set a precedent for the IASB's broader deliberations on employee benefits. The IASB has not yet decided how it will approach any review of measurement of employee benefits. We note that the approach for the discount rate may depend on the approach taken on other aspects of the measurement model and vice versa.

US GAAP

A4. The *Compensation – Retirement Benefits Topic (715)* of the FASB Accounting Standards Codification (715-30-35-43), first introduced to US GAAP by FAS 87, paragraph 44, *Employers' Accounting for Pensions* requires that the assumed discount rate for pension benefits should reflect the rates at which the

pension benefits could be effectively settled and explains it is appropriate to look to available information about rates implicit in current prices of annuity contracts that could be used to effect settlement of the obligation. The *Compensation – Retirement Benefits Topic (715)* of the FASB Accounting Standards Codification (715-30-35-44), first introduced to US GAAP by FAS 87, paragraph 44A, *Employers' Accounting for Pensions* states that the objective is to measure the single amount that, if invested at the measurement date in a portfolio of high-quality debt instruments, would provide the necessary future cash flows to pay the pension benefits when due. Accordingly, an entity could use rates of return on high-quality fixed-income investments in determining assumed discount rates.