
Staff Paper

Project	Insurance contracts
Topic	Implications of using OCI for changes in the insurance contract liability arising from changes in the discount rate

Introduction

1. This paper discusses the implications of the proposal in agenda paper 6B that an insurer should present in OCI the difference between the current discount rate and the locked-in rate. It considers:
 - (a) How to apply a locked in approach to insurance contracts with floating crediting rates.
 - (b) Whether an onerous contract test is required.
 - (c) How to show the effect of duration mismatches through disclosures.
2. This paper does not ask for any decisions. We will discuss a similar paper with the Insurance Working Group on 16 May and intend to ask the Board for decisions in the meeting later that week.

Applying a locked in approach to insurance contracts with floating crediting rates

3. For some insurance contracts, some or all of the policyholder benefits vary as interest rates vary. This raises two issues:
 - (a) How would an insurer apply the locked in approach for such contracts?
 - (b) How should an insurer account for any guarantees of minimum crediting rates associated with such contracts?

This paper has been prepared by the technical staff of the IFRS Foundation for discussion at a public meeting of the IASB. The views expressed in this paper are those of the staff preparing the paper. They do not purport to represent the views of any individual members of the IASB.

Comments made in relation to the application of IFRSs do not purport to be acceptable or unacceptable application of IFRSs.

The tentative decisions made by the IASB at public meetings are reported in IASB *Update*. Official pronouncements of the IASB are published only after each board has completed its full due process, including appropriate public consultation and formal voting procedures.

Determining the locked in approach for insurance contracts with floating crediting rates

4. In the staff's view, if an insurer elects to use OCI to present the effect of interest rate changes on the insurance contracts liability, the interest expense recognised in profit or loss should be determined using the amortised cost methodology described in IFRS 9 *Financial Instruments* and IAS 39 *Financial Instruments: Recognition and Measurement*.
5. Paragraph AG7¹ of IAS 39 describes how to apply the amortised cost (effective interest rate) methodology to floating rate financial assets and floating rate financial liabilities: it states that periodic re-estimation of cash flows to reflect movements in market interest alters the effective interest rate for these instruments, with the result that re-estimating the future interest rate payments normally has no significant effect on the carrying amount.
6. Applying similar logic, if an insurer elects to use OCI to present the effect of interest rate changes on an insurance contract liability, the interest accreted on the liability should be the current crediting rate, applied to the account balance on which that interest is credited. Therefore, in the staff's view, there would be no difference between applying a locked in approach and a current market consistent approach for insurance contracts with floating crediting rates. Therefore, an insurer is not likely to elect to present the effect of discount rate changes on these contracts in OCI.

Guarantees

7. Some participating insurance contracts and other contracts with floating crediting rates provide a guarantee by which an insurer undertakes to credit a policyholder's contract with the higher of two rates. In other words, these contracts contain an embedded guarantee of a minimum crediting rate. Such guarantees limit the policyholder's exposure to interest rate declines, while preserving the policyholder's ability to gain from interest rate rises. (Thus, these guarantees behave economically in a manner similar to an embedded option.)

¹ Paragraph AG7 of IAS 39 states: "For floating rate financial assets and floating rate financial liabilities, periodic re-estimation of cash flows to reflect movements in market rates of interest alters the effective interest rate. If a floating rate financial asset or floating rate financial liability is recognised initially at an amount equal to the principal receivable or payable on maturity, re-estimating the future interest payments normally has no significant effect on the carrying amount of the asset or liability."

8. Paragraph BC44 of the Basis of Conclusion on the IASB's exposure draft states that the IASB believes that the measurement model proposed in the ED (building block approach) would produce relevant information for users of an insurer's financial statements because, amongst other things, it provides consistent treatment of both the time value and intrinsic value of guarantees embedded in insurance contracts.
9. The time value of such a 'higher of' guarantee is the value arising from the possibility that the guarantee may be in the money at the time when it has an effect (see paragraph BC77 of the ED). The intrinsic value of such an item reflects the extent to which the guarantee is in the money at the measurement date, and reflects the difference between the current level of the variable underlying the option or guarantee and the level specified in the underlying option or guarantee.
10. When an insurer uses the building block model to measure a contract, it considers the expected present value. In principle, the expected present value considers all scenarios, including all scenarios in which the option or guarantee comes into the money. Thus, the building block model captures the time value of embedded guarantees, and not merely their intrinsic value.
11. If an insurer elects to use OCI to present the effect of interest rate changes on the insurance contracts liability, how should it report changes in the time value and intrinsic value of embedded guarantees of minimum interest rates? Arguments for reporting their effect in profit or loss:
 - (a) One of the project axioms adopted by the boards is that an ideal accounting model should reflect both the intrinsic value and time value of options and guarantees embedded in insurance contracts. Arguably, reporting the effect of changes in the values in profit or loss is the most understandable and transparent way to report them.
 - (b) Reporting their effect in profit or loss is consistent with the treatment of all free-standing derivatives and many embedded derivatives.
12. Arguments for reporting their effect in OCI:
 - (a) It would be inconsistent to require insurers to report in profit or loss one source of volatility arising from changes in interest rates (embedded guarantees of minimum interest rates) if they are permitted to use OCI to report other sources of volatility arising from changes in discount rate.

- (b) IAS 39 does not require an entity to account for an embedded interest rate guarantee at fair value through profit or loss if it was out of the money at inception. It would be inconsistent with this exemption to require an insurer to recognise in profit or loss (as opposed to OCI) changes in the time value and intrinsic value of minimum interest rate guarantees embedded in insurance contracts if those guarantees were out of the money at inception.
13. The staff make three other observations about insurance contracts with floating crediting rates:
- (a) Depending on the conclusions the boards ultimately reach on unbundling, some contracts with floating crediting rates may need to be unbundled (eg unbundling might be required if such a contract provides an explicit account balance). This paper does not discuss unbundling further.
- (b) We expect that insurers would rarely issue contracts with minimum interest rate guarantees that are in the money at inception. Therefore, if the board does not require an insurer to account through profit or loss for minimum interest rate guarantees embedded in insurance contracts that are out of the money of inception, insurers would reflect the intrinsic value or time value of most minimum interest rate guarantees through other comprehensive income.
- (c) Interest rate changes are not likely to have a significant effect on the carrying amount of these contracts. Therefore, an insurer is not likely to elect to present the effect of discount rate changes on these contracts in OCI, unless the contracts form part of a broader portfolio for which changes in carrying amount are more significant.

Discussion question 1 – Guarantees

Should an insurer be permitted to present in OCI (rather than profit or loss) changes in the time value and intrinsic value of embedded interest rate guarantees that are out of the money at inception?

Onerous contracts

14. Under the amortised cost model, the discount rate is fixed on the day of inception, with no adjustment made for subsequent interest rate movements, positive or negative.
15. The staff believe a similar approach should be followed for liabilities for which the discount rate used in profit or loss is locked in at inception. No adjustments should be made for subsequent interest rate movements, either positive or negative.
16. This will ensure consistent treatment of interest rate movements for insurance contract liabilities and backing insurance contract assets. Furthermore, simplicity will be introduced from a presentation perspective.
17. Some suggest that an insurer should unlock the discount rate used to determine the interest expense in profit or loss if it appears unlikely that the assets backing the insurance contract will provide returns sufficient to 'support' the liability. For the following reasons, the staff does not support such an approach:
 - (a) the amortised cost regime for financial liabilities in IFRS 9 does not currently include an onerous contract test. Consequently, the introduction of such a test would create an inconsistency with IFRS 9, thus reducing comparability.
 - (b) introducing such a test would make it necessary to determine when the test would be triggered, the level of aggregation for the test and whether subsequent changes in interest rates would result in reversals of amounts accounted for in profit and loss.

Discussion question 2 – Onerous contract test

Do you think that an insurer should lock in the discount rate used to determine the interest expense in profit or loss even if it appears unlikely that the assets backing the insurance contract will provide returns sufficient to 'support' the liability?

Duration mismatches

18. One of the project axioms adopted by the boards is that an ideal measurement model would report all economic mismatches (including duration mismatches) that exist. If an insurer carries its assets at fair value through profit or loss and measures its insurance contract liabilities using the building block approach, duration mismatches will cause effects in profit or loss when interest rates change.
19. However, if an insurer carries assets at amortised cost and elects to use OCI to present the effect of changes in discount rates on its insurance contract liabilities, the effect of duration mismatches will not be visible. To make the duration mismatch more visible in such cases, the staff propose that when an insurer carries assets backing insurance contracts at amortised cost, the insurer should be required to disclose, in tabular format:
 - (a) the carrying amount of those insurance contract liabilities.
 - (b) both the carrying amount and fair value of the assets backing those insurance contract liabilities.
 - (c) the amounts included as a result of changes in interest rates, for both those insurance contract liabilities and the assets backing them, in (i) profit or loss and (ii) OCI.

Discussion question 3 – Disclosure of duration mismatch

Do you think that the disclosures would be useful?

Appendix A – extract from the Application Guidance

BC44 Furthermore, the Board believes that the particular model proposed in the draft IFRS would produce relevant information for users of an insurer's financial statements because it provides:

- (d) consistent treatment of both the time value and intrinsic value of all options and guarantees embedded in insurance contracts.

Embedded options and guarantees

BC76 Insurance contracts contain many embedded options and guarantees, for example:

- (a) guarantees of minimum investment returns, minimum interest rates or minimum crediting rates, minimum annuity rates or guarantees of maximum charges for mortality.
- (b) surrender options, conversion options or options to cease or suspend payment.
- (c) options for the policyholder to reduce or extend coverage, or buy additional coverage.

BC77 Inconsistent treatment of embedded options and guarantees was a major flaw in many traditional accounting models. The flaws included:

- (a) ignoring the time value of some or all embedded options and guarantees. The time value of such an item is the value arising from the possibility that the option or guarantee may be in the money at the time when it has an effect (eg when the option is exercisable).
- (b) capturing the intrinsic value of some or all embedded options or guarantees on a basis that reflects management's expectations or hopes but is inconsistent with current market prices. The intrinsic value of such an item reflects the extent to which the option or guarantee is in the money at the measurement date, and reflects the difference between the current level of the variable underlying the option or guarantee and the level specified in the underlying option or guarantee.
- (c) ignoring the intrinsic value of some or all embedded options or guarantees.

BC78 Over the last few years, many accounting approaches for insurance contracts have been adjusted to capture both the intrinsic value and time value of some embedded options or guarantees by requiring insurers to reflect some of these items, generally by accounting for these embedded guarantees or options as if they were free-standing derivatives (an approach often described as bifurcation or unbundling). However, bifurcation approaches often encounter the drawbacks mentioned in paragraph BC41.

BC79 The proposed measurement model for insurance contracts ensures that embedded derivatives are measured in substantially the same way, regardless of whether they are bifurcated, because it achieves the following:

- (a) consistency of financial variables (eg discount rates and equity market prices) with observable market prices. The measurement of some embedded derivatives, particularly embedded derivatives that would be bifurcated under existing requirements, relies heavily on market inputs (eg guaranteed return on an equity index). Consistency with observable market prices is also consistent with the notion of a replicating portfolio (see paragraphs B45–B47).
- (b) capturing both the intrinsic value of options and their time value, by using expected values that capture the cash flows arising in each scenario.
- (c) inclusion of a risk adjustment. Market valuations of financial instruments reflect the degree of risk associated with the instrument. Including a risk adjustment is conceptually consistent with that fact.
- (d) recognising in profit or loss changes in the carrying amount of the derivatives.

- BC80 Other factors, for example non-market variables and non-performance risk, are unlikely to cause significant differences between the fair value of embedded derivatives and the result of applying the proposed measurement model for insurance contracts.
- BC81 In some cases, some of the cash flows arising from an insurance contract have a risk profile that resembles the risk profile of a free-standing derivative. Sometimes, the most practical way to capture those cash flows in the measurement is to use a replicating portfolio techniques (see paragraphs B45–B47 and BC97). The resulting measurement is unlikely to differ materially from a measurement at fair value.
- BC82 The Board concluded that, as part of a consistent approach to unbundling, an insurer should unbundle embedded derivatives that are not closely related to the insurance coverage, applying the existing bifurcation guidance in IAS 39 (see paragraph 12 and paragraphs BC210–BC225 on unbundling).