

## STAFF PAPER

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## REG IASB | FASB Meeting

<b>Project</b>	<b>Insurance Contracts</b>		
Paper topic	Options and guarantees embedded in Insurance Contracts		
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**What is this paper about?**

1. This paper discusses the treatment of options and guarantees embedded in insurance contracts that are not bifurcated as embedded derivatives.
2. This paper does not discuss the following topics:
  - (a) whether the ‘mirroring approach’ described in Agenda Paper 7E/77E should also apply for other than contractual obligations. This will be discussed at a future meeting.
  - (b) payments to current and future policyholders that result from existing contracts. We discuss this in agenda paper 7G/77G.
  - (c) how and whether obligations to current vs. future policyholders might be disaggregated for presentation purposes (e.g. with a mutual insurer). This will be discussed at a future meeting.
  - (d) the accounting for investment contracts with participation features (ie non-insurance contracts with participation features). This will be discussed at a future meeting.
  - (e) disclosure requirements for contracts with cash flows that depend on underlying items. This will be discussed at a future meeting.

### **Staff recommendation**

3. The staff recommends that the boards confirm that options and guarantees embedded in insurance contracts that are not separately accounted for as a derivative instrument under the financial instrument requirements should be measured using a current, market-consistent, expected value approach.

### **Why do we need to discuss this topic?**

4. A project axiom, endorsed by the boards in February 2011, stated that that the accounting model for insurance contracts should reflect both the intrinsic value and time value of options and guarantees embedded in insurance contracts. This makes transparent the economic effects of all options and guarantees.
5. The model being developed by the boards inherently achieved this project axiom either:
  - (a) by accounting separately for those embedded derivatives that are bifurcated and treated as financial instruments. At the 21 March 2011 joint board meeting the boards tentatively confirmed that an insurer would use existing guidance in IFRS/US GAAP to determine whether it should account for embedded derivatives separately.
  - (b) automatically, by considering in each scenario the outcome of those embedded options and guarantees that are not bifurcated, such as minimum interest rate guarantees, surrender options.
6. In May 2011 (IASB) and November 2011 (FASB) the boards decided that the measurement and presentation of a performance linked participation feature should be consistent with the measurement of the underlying item (the ‘mirroring approach’). Please refer to Agenda Paper 7E/77E for details on these tentative decisions. Although the wording of the FASB and IASB tentative conclusions differ, staff believes the measurement of the obligation from any performance linked participation features that are in the scope of the boards’ tentative decisions would reflect the measurement basis in the US

GAAP/IFRS statement of financial position of the underlying item ('mirroring').

7. While the staff thinks that this measurement of the participation feature is a faithful representation of the linkage to the underlying item, the value of the embedded options and guarantees is an important piece of information for users that might be lost without further consideration. In the next section we illustrate the issue.
8. At the 21 March 2011 joint board meeting the boards meeting the boards tentatively confirmed that an insurer should account for embedded derivatives separately if they are not closely related based on existing guidance. This means that in some cases, embedded option and guarantees are bifurcated and accounted for as embedded derivatives under the Financial Instruments standards. However, there are other options and guarantees embedded in the insurance contract that are not bifurcated, such as minimum interest rate guarantees during the accumulation phase of an annuity (i.e., because the net settlement criterion is not met), and guaranteed minimum death benefits (i.e., because, under US GAAP, the embedded derivative entitles the holder to be compensated only as a result of the death of the insured and, therefore, qualifies for a scope exception)<sup>1</sup>.

### **Minimum guarantees in participating contracts**

9. In many performance-linked participating contracts, the policyholder participates in the upside of the underlying items, but is protected from the downside because the insurer provides a guaranteed minimum amount of benefits. As market participant expectations that the guarantee will be triggered

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<sup>1</sup> The US GAAP and IFRS criteria for determining which insurance contract embedded derivatives are separately accounted for under the financial instruments standards differ. In practice, there are fewer embedded derivatives separately accounted for under IFRS than US GAAP because of the scope exception within IAS 39 paragraph AG 33 (h), which notes 'a derivative embedded in an insurance contract is closely related to the host insurance contract if the embedded derivative and host insurance contract are so interdependent that an entity cannot measure the embedded derivative separately (ie without considering the host contract)'.

increase, the fair value of the guarantee will increase accordingly<sup>2</sup>. Such a guarantee introduces an economic mismatch between the underlying item and the insurance contract liability.

10. To look at this in another way, suppose policyholders participate in the returns on a portfolio of bonds. The fair value of a bond reflects possible scenarios that involve default. However, if the insurer has guaranteed a minimum payment to the policyholder, it will have to pay even in the scenarios when there is a default on the bonds and it must measure its liability in a way that reflects that fact (as proposed in the ED/DP).
11. This means there will be an economic mismatch because the fair value of the bond (the underlying item) responds to all changes in expectations of default, whereas the measurement of the insurance contract liability does not respond to those changes to the extent that they are covered by the guaranteed minimum payment. If the underlying item is measured at fair value through profit and loss and the insurance contract is measured using the approach in the ED/DP, this economic mismatch would be appropriately reflected in the financial statements.
12. We see no reason to revisit the axiom that the accounting model should reflect both the intrinsic value and time value of options and guarantees embedded in insurance contracts for contracts with performance-linked cash flows, especially since embedded options and guarantees are a significant feature of such contracts. Therefore we believe that the economic effects of options and guarantees should be included in the measurement of contracts with performance-linked cash flows.
13. This means that, when assessing the value of the performance-linked participation feature, the insurer needs to consider the current market consistent

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<sup>2</sup> Some respondents have expressed their opinions that, before the guarantee actually kicks in, the movement in the value of the guarantee should be recorded in OCI. The staff will continue to consider this matter as we develop our recommendations for what changes in insurance contract liabilities should be recorded in net income vs. OCI.

value<sup>3</sup> of the guarantee as for any other insurance contract without a participation feature. Said differently, in those scenarios in which the minimum guarantee has effect, the cash flows used to measure the liability should be those from the minimum guarantee, not those from the underlying asset. The following example illustrates this point (which is sometimes referred to as the asymmetric risk sharing or the value (intrinsic value and time value) of the guarantee).

**Example**

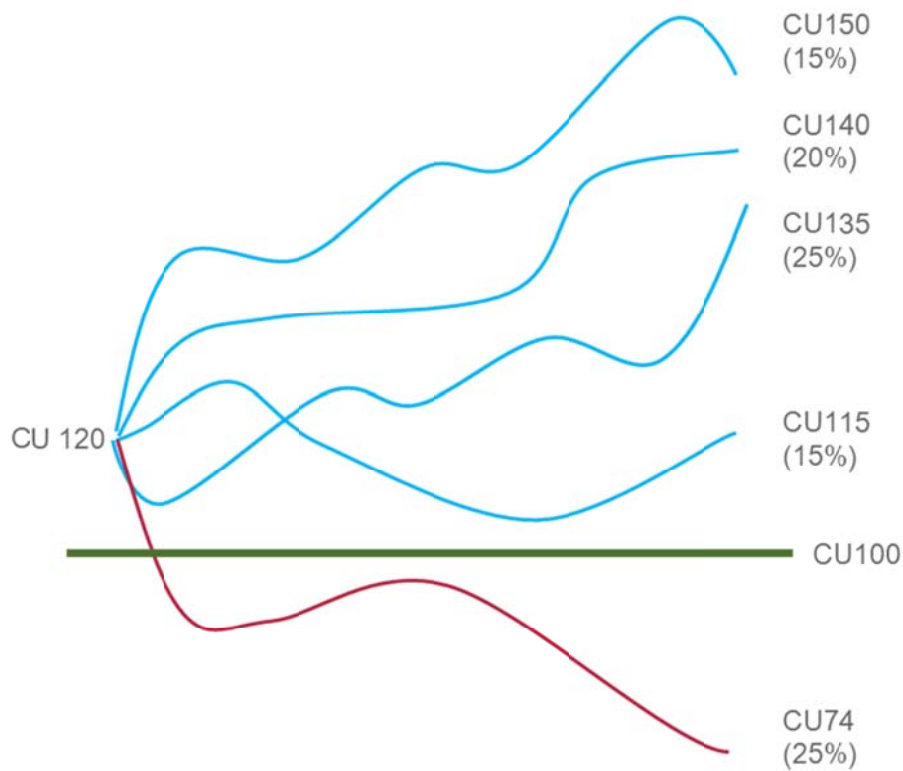
An asset has a fair value of CU120<sup>4</sup>. This may be thought of as the result of considering various possible outcomes, as illustrated in the following diagram. (CU120 = CU150\*15% + CU140\*20% + CU135\*25% + CU115\*15% + CU74\*25%).

One scenario is below the minimum guarantee of CU100. For that scenario, the building block approach for the liability would use the guaranteed cash flow (CU100) instead of the asset value of CU74.

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<sup>3</sup> Please see Appendix A for an excerpt of the Exposure Draft Insurance Contracts that explains why the model as proposed is viewed as market consistent.

<sup>4</sup> For simplicity reasons, the example ignores the effects of time value of money and the risk adjustment required by market participants. If these factors were included, the fair value of the asset would be less than CU120. Including those factors would not change the principles illustrated in this example.



In this example, the expected value of the cash flows for the liability using the building block approach would be as follows (before considering the time value of money and the risk adjustment)  $CU150 \cdot 15\% + CU140 \cdot 20\% + CU135 \cdot 25\% + CU115 \cdot 15\% + CU100 \cdot 25\% = CU126.5$ .

Said differently, the expected cash flows for the liability differ from the expected cash flows for the asset by CU6.5 ( $CU126.5 - CU120 = CU6.5$ ). This is, in effect, the expected value of a put option held by the policyholders. It enables them to put the asset to the insurer for a strike price of CU100. In the scenario where the asset provides returns of only CU74, the policyholders benefit from the exercise of that option. The expected value of that option is  $25\% \cdot [CU100 - CU74]$ .

14. Using the building block approach, insurers would explicitly measure the fair value (ie both the time value and the intrinsic value) of the guarantee by in essence reflecting the scenarios as described in the example. However, if the measurement of the obligation for performance-linked participating features

were to be on a basis other than something substantially similar to fair value<sup>5</sup> (e.g., to reflect the measurement basis of the underlying items that the participating features are dependent upon), we need to specify explicitly that the options and guarantees need to be included in the measurement of the liability on a market consistent basis. The IASB confirmed this in May 2011, when it decided that an insurer should reflect, using a current measurement basis, any asymmetric risk-sharing between the insurer and the policyholder in the contractually linked items arising from a minimum guarantee.

15. During the November 30, 2011 FASB meeting, the FASB discussed a performance-linked participating feature as the specific feature that creates a link between the performance of the underlying item and the resulting benefits to the policyholder. The discussion was intentionally limited to this participating feature only and it was noted that the additional contractual rights and obligations, including embedded options and guarantees, were expected to be required to be measured as part of the estimated present value of remaining future cash flows of the insurance contract or accounted for as embedded derivatives.
16. The staff highlights that during the May 2011 joint board meeting, the IASB already tentatively concluded, that when applying the ‘mirroring approach’, the options and guarantees embedded in the contract should continue to be reflected at the using a current measurement basis.

**Question: options and guarantees**

Do you agree that options and guarantees embedded in insurance contracts that are not separately accounted for as a derivative instrument under the financial instrument requirements should be measured using a current, market-consistent, expected value approach?

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<sup>5</sup> See Appendix A: B47 for details on the substantial similarity between fair value and the Insurance Contracts model

## Appendix A: Excerpt from the IASB Exposure Draft Insurance Contracts

### *Market variables*

- B43 Estimates of market variables shall be consistent with observable market prices at the end of the reporting period. An insurer shall not substitute its own estimates for observed market prices.
- B44 Market prices blend a range of views about possible future outcomes and also reflect the risk preferences of market participants. Therefore, they are not a single point forecast of the future outcome. If the actual outcome differs from the previous market price, this does not mean that the market price was 'wrong'.
- B45 An important application of market variables is the notion of a replicating asset, or a replicating portfolio of assets. A replicating asset is one whose cash flows exactly match those contractual cash flows in amount, timing and uncertainty. In some cases, a replicating asset may exist for some of the cash flows arising from an insurance contract. **The fair value of that asset reflects the expected present value of the cash flows from the asset, and it also reflects the risk associated with those cash flows.** If a replicating portfolio of assets exists for some or all of the cash flows arising from an insurance contract liability, the insurer can for those contractual cash flows simply include the fair value of those assets in the present value of the fulfilment cash flows, instead of explicitly estimating the expected present value of those particular cash flows and the associated risk adjustment. For cash flows not measured by a replicating portfolio of assets, an insurer estimates explicitly the expected present value of those particular cash flows and the associated risk adjustment.
- B46 This [draft] IFRS does not require an insurer to use a replicating portfolio technique. However, if a replicating asset exists and an insurer uses a different technique, the insurer **shall satisfy itself that a replicating portfolio technique would be unlikely to lead to a materially different answer.** One way to assess whether that is the case is to verify that applying the other technique to the cash flows generated by the replicating portfolio produces a measurement that is not materially different from the fair value of the replicating portfolio.
- B47 As an example of a replicating portfolio technique, suppose an insurance contract contains a feature that generates cash flows equal to the cash flows from a put option on a basket of traded assets. The replicating portfolio for those cash flows would be a put option with the same features. **The insurer would observe or estimate the fair value of that option and include that amount in the measurement of the entire insurance contract. However, the insurer could use a technique other than a replicating portfolio if that technique, in principle, is expected to achieve the same measurement of the contract as a whole.** For example, other techniques may be more robust or easier to implement if there are significant interdependencies between the embedded option and other features of the contract. Judgement is required to determine which approach best meets the objective in practice in particular circumstances.

(Emphasis added in bold)