Staff Paper

Project **Insurance Contracts**

Topic **How to unlock the residual margin**

What is this paper about?

1. This paper discusses the changes that would adjust the residual margin, if the boards decide to unlock the residual margin in agenda paper 3B/70B.
2. This paper does not discuss:
    (a) Whether the residual margin should be unlocked (see agenda paper 3B/70B).
    (b) Allocation of the residual margin (see agenda paper 3D/70D).
    (c) Accretion of interest on the margin (to be discussed at a future meeting).
    (d) The single margin approach that the FASB decided on at the May meeting.

Summary of staff recommendations

3. The staff recommends that an insurer should:
    (a) adjust the residual margin for favourable and unfavourable changes in the estimates used to measure the insurance liability, other than for:
        (i) changes in the discount rate if adjusting the residual margin for those changes would create an accounting mismatch (because the assets backing the insurance contract are measured at fair value through profit or

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loss). Instead, an insurer would be permitted, but not required, to recognise the effect of those changes in discount rate in profit or loss in the period of the change (paragraphs 19-24).

(ii) changes in the risk adjustment, which would be recognised in profit or loss in the period of the change (paragraphs 25-27).

(b) make any adjustments to the residual margin prospectively (paragraphs 28-33).

Staff analysis

4. In agenda paper 3B, the staff recommended that the residual margin should be adjusted for changes in estimates because:

(a) The measurement of the insurance contract liability on day one includes, through the residual margin, a measure of the expected profitability (excluding any compensation for bearing the risk, because this is captured in the risk adjustment) of the insurance contract. As estimates change during the life of the contract, the expected profitability of that contract changes. Locking in the residual margin at inception does not show the changes in expected profitability and is inconsistent with day one measurement.

(b) Locking in the residual margin could lead to a situation in which an insurer recognises losses in a period even though margin remains to be released in future periods.

(c) It is inconsistent that day one gains are prohibited on the basis that the estimates may be unreliable, but required on day two on the basis of similar estimates. This inconsistency is exacerbated because of the subjectivity inherent in determining the unobservable assumptions and estimates needed to measure an insurance contract.

5. In this paper, we consider:

   (a) Whether the residual margin should be adjusted for both favourable and unfavourable changes (paragraphs 6-10).

   (b) What changes should adjust the residual margin (paragraphs 12-21).

   (c) Whether those changes should adjust the margin prospectively or retrospectively (paragraphs 28-33).

'Consume' or 'float'

6. There are two basic approaches to unlocking the residual margin:

   (a) to 'consume' the residual margin, ie to adjust the margin for unfavourable changes in the estimate of the insurance contract liability, but not for favourable changes (which would be recognised immediately in profit or loss).

   (b) to 'float' the residual margin, ie to adjust the residual margin for both favourable and unfavourable changes in the estimate of the insurance contract liability.

7. Both consuming the margin and floating the margin would reduce the counterintuitive effects described in paragraphs 4(b). In addition floating the margin would address the concern described in paragraph 4(a) and 4(c). Some suggest that floating the margin 'approximately' remeasures the margin. (In agenda paper 1A/FASB Memorandum 62A for the joint board meeting on 28th March 2011, the staff showed that it would not be possible to remeasure the margin.)

8. In addition, the staff thinks that, when the residual margin is consumed, the presentation of the contract's performance would be skewed because profit and loss would reflect only favourable changes. Therefore, the staff recommends that the residual margin should be floated, ie that both favourable and unfavourable changes in the estimates used to measure the insurance liability should be recognised by adjusting the residual margin.

9. If the residual margin is floated, one question that arises is whether to limit in some way the favourable changes in estimates that can increase the residual margin. Possible variants are:

   (a) The residual margin would be limited so that it cannot be larger than the amount determined at inception. Any favourable changes that would bring the residual margin to an amount higher than at inception would be immediately recognised in profit or loss.

   (b) The residual margin would be limited so that it cannot be larger than the amount determined at inception, adjusted for any part of that amount allocated to current or prior periods. (The allocation pattern of the residual margin is discussed in paper 3D.) This approach would be similar to the cap used for transfers of revaluation surplus in IAS 16.41, which refers to depreciated cost rather than cost.

   (c) Increases in the residual margin would not be limited (although there is an inherent limit because the residual margin could never be higher than the expected present value of future cash inflows less cash outflows).

10. One of the reasons to unlock the residual margin is because doing so gives a measure of the expected profitability of the insurance contract. In the staff's view, it would be more consistent with this rationale not to limit the amount of the residual margin. In other words, the staff believes that if estimates change in a way that the contract is expected to be more profitable than previously envisaged, that increase in expected profitability should be reflected in the unlocked residual margin.

11. Similarly, if the Board adopts the approach of unlocking the residual margin, changes in estimates may completely absorb the residual margin in some circumstances. Any further unfavourable changes would be an immediate expense. However, if those unfavourable changes subsequently reverse, the staff believes that it would be consistent with the rationale for unlocking to recognise the reversal as a gain to the extent that it does not exceed the previously recognised expense: any further reversal would reconstitute the residual margin.

Question 1: Consume or float
Does the Board agree that: (a) insurers should recognise favourable and unfavourable changes in the estimates used to measure the insurance liability by adjusting the residual margin? (b) increases in the residual margin should not be limited?

What changes should adjust the margin?

12. In agenda paper 3B we recommend that the residual margin should be adjusted for changes in estimates.

13. Adjusting the residual margin for changes in estimates means that those changes do not affect profit or loss in the period the changes are made. Instead, the effects of those changes are included in the residual margin and allocated to profit and loss. Agenda paper 3D discusses the allocation of the residual margin.

14. In this section, we consider whether there are changes that should *not* adjust the residual margin. We consider the following:

    (a) Changes in estimates of cash flows (paragraphs 15-18)

    (b) Changes in estimates of discount rate (paragraphs 19-24)

    (c) Changes in risk adjustment (paragraphs 25-27).

Changes in estimates of cash flows

15. Estimates of cash flows depend on different factors, including mortality and morbidity rates, expectations about the frequency and severity of claims and, for participating contracts, the investment returns expected by the insurer. The ED distinguishes between estimates that depend on market variables (that can be observed in, or derived directly from, markets) and non-market variables.

16. In the staff's view, changes in cash flows arising from changes in estimates of both market and non-market variables should adjust the residual margin. Both types of variable affect the expected profitability of the insurance contract, and

therefore unlocking for changes in estimate of both types of variable would counteract the effects described in paragraph 4(a) and 4(b).

17. Furthermore, unlocking the residual margin for changes in estimates of non-market variables in particular would also counteract the effect described in paragraph 4(c), ie that day one gains are prohibited on the basis that the estimates may be unreliable, but required on day two on the basis of similar estimates. Non-market variables include mortality and morbidity rates, and expectations about the frequency and severity of claims. Such variables often have a long-term perspective and generally do not fluctuate significantly over a short time period unless there is a significant change in the environment of the insured risk. The subjectivity inherent in determining such unobservable, non-market variables exacerbates the effect described in paragraph 4(c).

18. Those considerations apply less to market variables, such as interest rates. However, in some cases market variables and non-market variables may be correlated. For example, lapse rates are sometimes correlated with interest rates, or claims levels for house or car insurance may be correlated with economic cycles and hence with interest rates and expense amounts. It may not be straightforward to identify separately the effects of market and non-market variables. Therefore the staff recommends that all changes in estimates of cash flows should be treated in the same way.

Question 2: Cash flows
Does the Board agree that insurers should recognise the effects of all changes in estimates of cash flows as an adjustment to the residual margin?

Changes in discount rates

19. When the assets backing insurance contracts are measured at fair value through profit or loss, adjusting the residual margin to reflect changes in the discount rate used to measure insurance contract liabilities would create an accounting mismatch. This is because discount rate changes would change the carrying amount of the assets, but such changes would not change the overall measurement of the insurance contract liability, unless the entire residual margin for that liability is exhausted.

20. One of the boards' objectives, as set out in the axioms and assumptions discussed by the boards on 18 February 2011, is to minimise accounting mismatches. Therefore, the staff believes that the residual margin should not be unlocked for changes in discount rate when doing so would create an accounting mismatch. Consequently, those changes in discount rate would be recognised in profit or loss in the period of the change.

21. In some cases, it would be straightforward to identify the assets backing the insurance contracts, and therefore to identify the relevant insurance contracts. However, there may not always be a clear link between contracts and backing assets. At its meeting on 12 May[1], the IASB discussed the difficulties in defining robustly and meaningfully assets backing insurance contracts. Furthermore, the staff notes that insurers would generally not seek to introduce an accounting mismatch if one can be avoided, and there is precedent in IFRSs to permit an option for entities to eliminate or reduce accounting mismatches.

22. Permitting, rather than requiring, an insurer to lock in the residual margin to the extent this enables the insurer to eliminate or reduce an accounting mismatch would also have the benefit that an insurer would not be required to identify the assets and liabilities that give rise to those accounting mismatches, if it thought that the costs and complexity of doing so would outweigh the benefits.

23. Accordingly, the staff proposes that the Board does not define in detail the circumstances in which changes in discount rate should not unlock the margin, but permit insurers to recognise changes in discount rate in profit or loss if doing so eliminates or significantly reduces a measurement inconsistency that would otherwise arise from recognising the gains and losses on assets and insurance contract liabilities on a different basis.

24. The staff notes that unlocking the residual margin for changes in the discount rate would create no accounting mismatch when the assets backing insurance contracts are measured on an amortised cost basis. (However, an accounting mismatch would arise if those assets are measured at amortised cost and the

[1] Agenda paper 6A for the 12 May meeting

residual margin has been exhausted so that any additional change in discount rates affects profit or loss.)

Question 3: Discount rate
Does the Board agree that insurers should be permitted, but not required, to recognise changes in discount rate in profit or loss when adjusting the residual margin for those changes would create an accounting mismatch (because the assets backing the insurance contract are measured at fair value through profit or loss)?

Changes in risk adjustment

25. The risk adjustment represents a current value of the estimated risk in a contract. Conceptually, changes in the risk adjustment from one reporting date to the next can arise from:

    (a) the expected release from risk for that period (as the coverage period elapses the exposure to risk declines, and as time passes the insurer gains more knowledge of risk); or

    (b) an unexpected change during the period in the risk adjustment, whether because the amount of risk has increased temporarily, the amount of risk has decreased more than expected, or because the price of risk has changed.

26. In the staff's view, bearing risk is a key service provided by an insurer in an insurance contract. As the insurer satisfies its performance obligation by providing insurance coverage (bearing risk), the amount of risk declines (ie the insurer is released from risk) and the amount of the risk adjustment decreases accordingly. Because the expected release of risk for the period is triggered by the provision of the service of bearing risk in that period, the resulting decrease in the risk adjustment should be recognised in profit or loss in the period.

27. Furthermore, in the discussions leading to the IASB's conclusion that an explicit risk adjustment should be included in the measurement of an insurance contract, the IASB put much emphasis on a current measure of risk, which reflects any unexpected changes during the period in the amount of risk. This current measure of risk is crucial for the business of an insurer and reflects the main driver of insurance contracts, which generally is insurance risk. In this

respect, it would seem counterintuitive to make this current estimate less transparent by absorbing some – or all – changes against the residual margin.

Question 4: Risk adjustment
Does the Board agree that insurers should recognise all changes in the risk adjustment in profit or loss?

Adjust prospectively or retrospectively?

28. The following paragraphs discuss whether the residual margin should be adjusted:

    (a) Retrospectively, which means that the margin would be adjusted as if the fact leading to the change had been known at inception and if its effect had spread accordingly over the whole life of the contract, or

    (b) Prospectively over the remaining life of the contract.

29. Conceptually, the staff thinks that the margin should be adjusted retrospectively. This would make the performance of the contract comparable to other contracts for which changes in estimate were determined earlier. However, the retrospective adjustment and the cumulative effect may be impracticable to apply because it would require insurers to track how changes in estimate would have affected the residual margin back to inception. The costs of doing so could be significant because some insurance contracts could cover extended periods, eg 30 years or more. The benefits may not be significant because the measure of profitability represented by the unlocked residual margin would not be the same as a "true" remeasurement of the residual margin.

30. Accordingly, the staff proposes that adjustments to the residual margin are done prospectively. The appendix illustrates prospective adjustment of the residual margin.

Question 5: Prospective or retrospective
Does the Board agree that insurers should adjust the residual margin prospectively?

Presentation

31. The staff notes that there remains a question about how the unlocking of the residual margin should be presented:

    (a) As an offset to the change in the other building blocks with no effect in the statement of comprehensive income. This view would be consistent with the view that the building block approach measures a single, combined liability. If this presentation is adopted, the change in estimate and the offsetting unlocking of the residual margin would be visible only in the rollforwards proposed by the IASB's exposure draft.

    (b) Gross in the statement of comprehensive income, ie with the changes in estimate recognised in profit or loss and an equal and opposite change in residual margin also recognised in profit or loss.

32. We will consider this issue when the boards have discussed presentation more generally.

Appendix : Example of prospective adjustment

33. The following example illustrates prospective adjustment of the residual margin:

At inception

(a) At inception the residual margin is calculated as follows:

Expected PV of premium cash flows	100,000
Expected PV of claim cash flows	(50,000)
Expected PV of expenses	(30,000)
Residual margin at inception	(20,000)
Liability at inception	0

In the next reporting period

(b) Assume that the planned release of the residual margin during the period (according to the chosen profit driver) is CU2,000.

(c) Assume that during the next reporting period the insurer receives premiums of CU15,000, of which CU10,000 is the expected premium in the period, and CU500 are unexpected in the original calculation. At the same time, the insurer revises its estimate of the present value of expected premiums to CU92,000. Thus:

(i) The unexpected premiums of CU500 are recognised as a gain in profit of loss.

(ii) The change in estimate of the cash flows is CU2,000 (= total expected premiums at inception of CU100,000 minus the premiums expected in the period of CU10,000 minus the revised estimate of expected premiums of CU92,000).

(d) Assume also that during that next reporting period the insurer pays expenses of CU4,000, having expected to pay expenses of CU5,000. The insurer also revises its estimate of the present value of future expenses to CU23,000. Thus:

(i) The expenses paid reflect the expected reduction in remaining expenses of CU5,000 and an unexpected gain of CU1,000 resulting from lower expenses than expected. The gain of CU1,000 is recognised in profit or loss.

(ii) There is a reduction in estimates of CU2,000.

34. If the residual margin is adjusted prospectively, both the change in the estimates of the expected PV of future premiums and the expected PV of future expenses lead to an unlocking of the residual margin in the period of the change in estimates. Thus, the liability at the end of the period would be determined as follows:

	Inception	*expected cash*	*unexpected cash*	*release margin*	*subtotal*	*change estimates*	*unlock*	*End of period*
PV future premiums	100,000	-10,000			90,000	2,000		92,000
PV future claims	-50,000				-50,000			-50,000
PV future expenses	-30,000	5,000			-25,000	2,000		-23,000
Residual margin	-20,000			2,000	-18,000		-4,000	-22,000
(Liability)	**0**	**-5,000**		**2,000**	**-3,000**	**4,000**	**-4,000**	**-3,000**

35. These changes would be reflected in the statements of financial position and comprehensive income as follows :

Statement of financial position

	Inception	*expected cash*	*unexpected cash*	*release margin*	*subtotal*	*change estimates*	*unlock*	*End of period*
Cash	0	5,000	1,500		6,500			6,500
Liabilities	0	-5,000		2,000	-3,000	4,000	-4,000	-3,000
Equity	**0**	**0**	**1,500**	**2,000**	**3,500**	**4,000**	**-4,000**	**3,500**

Statement of comprehensive income

	Inception	*expected cash*	*unexpected cash*	*release margin*	*subtotal*	*change estimates*	*unlock*	*End of period*
Release of margin				2,000	2,000			2,000
Experience adjustments			1,500		1,500			1,500
Change in estimates					0	4,000		4,000
Unlocking of margin					0		-4,000	-4,000
Profit	**0**	**0**	**1,500**	**2,000**	**3,500**	**4,000**	**-4,000**	**3,500**

36. If the residual margin were to be adjusted retrospectively, the residual margin determined at inception would need to be re-determined, as would the allocation of the residual margin in the period between inception and the current reporting period. The above tables do not illustrate such a retrospective adjustment.