Staff Paper

Project **Insurance Contracts**

Topic **Allocation of the residual margin**

What is this paper about?

1. This paper discusses how the residual margin should be allocated over the life of an insurance contract.

2. This paper does not discuss:

   (a) Whether the residual margin should be unlocked (see agenda paper 3B/70B).

   (b) How to unlock the residual margin, if the boards decide it should be unlocked (see agenda paper 3C/70C).

   (c) Accretion of interest on the margin (to be discussed at a future meeting).

   (d) The single margin approach that the FASB tentatively decided on at the May meeting.

Summary of staff recommendations

3. The staff recommends that:

   (a) The residual margin should not be negative.

   (b) Insurers should allocate the residual margin:

      (i) over the coverage period and

      (ii) on a systemic basis that is consistent with the pattern of transfer of services provided under the contract.

   (c) Insurers should not be required to determine the residual margin at the level of the individual contract. Instead, they should be permitted to determine the residual margin, both initially and subsequently, on a level that aggregates insurance contracts with similar expected profitability and pattern of transfer of services.[1]

Staff analysis

Residual margin should not be negative

4. The exposure draft proposes that the residual margin cannot be negative either at initial recognition or subsequently. Paragraph BC122 of the Basis for Conclusions to the ED explains that "The residual margin is an allocation of part of the premium provided by the policyholder. Because it is an allocation, it cannot be negative, either at inception or subsequently." It follows that if the expected present value of the cash outflows plus risk adjustment exceeds the expected present value of the cash inflows, the insurer would recognise that difference immediately in profit or loss as an expense.

5. Not one commentator disagreed with recognising immediately a loss at inception. A few respondents (particularly supporters of a composite margin), however, disagree that any loss should be assessed using the explicit risk margin approach, because the risk adjustment could result in a loss being recorded at inception of a contract that is expected to be profitable from an expected cash

[1] The staff plans to consider the definition of a portfolio at a future meeting.

flow perspective. There is also a general agreement that the residual or composite margin should not become negative subsequently.

6. The commentators' and the staff's view is that it is appropriate to recognise in profit or loss a loss at inception if the amount paid by the policyholder is insufficient to cover the expected present value of the policyholder benefits and claims (as well as claim adjustment expenses, maintenance expenses and acquisition costs). The staff believes that the premium also needs to cover the compensation to the insurer for bearing the risk. The staff also thinks that the residual margin should not be negative on day one or after day one for consistency with the proposed treatment on day one.

7. Accordingly, the staff thinks there is no reason for the board to revise its conclusions as proposed in the ED and recommends the board confirm the decisions reached for the ED that the residual margin should not be negative on day one or after initial recognition.

Allocation of the residual margin

Period of allocation

8. The Exposure Draft *Insurance Contracts* proposed that an insurer would allocate the residual margin over the coverage period of the insurance contract. As noted in paragraph BC128 of the Basis for Conclusions:

> "The Board believes that the factors implicitly included in the margin would no longer be relevant after the end of the coverage period."

9. Paragraphs BC125-BC129 of the Basis for Conclusions to the ED (reproduced in the appendix to agenda paper 3B) go on to state that the residual margin could be viewed as an aggregation of several factors.

10. In the comment letters, most respondents agreed that the residual margin should be allocated over the coverage period as they agreed the services of the insurer are provided within the coverage period. A few asked the Board either not to regulate the most appropriate allocation (and leave it to the insurer to judge which period is most appropriate for individual contract types) or to extend the

allocation period for the claim handlings period for contracts that require the insurer to render significant services also within the claim handling period.

11. The claims handling period is the period during which an insurer will be fully released from the risk of variability in the cash flows. Settling claims and claims processing services are part of the normal operating activities or internal process of an insurer (see a more detailed analysis in agenda paper 1D/66D of 4 May meeting). The staff thinks claim handling is a purely administrative service and is not representative of the transfer of services of insurance coverage, which is only provided during the coverage period.

12. As discussed in agenda paper 3B, the residual margin also includes the expected profit in the contract for services other than bearing insurance risk. The staff thinks that the profitability of the contract should be reported over the period of time when services are transferred. Insurance contracts might bundle several service components, such as asset management services and other auxiliary services, which are generally transferred over the coverage period of the insurance contract as well. If distinct services have a pattern of transfer different from the services related to the insurance coverage, those services would be unbundled according to the boards' tentative decision in its 4 May meeting[2]. The insurer would continue to recognise the performance obligations for those unbundled services after the coverage period to the extent that it had yet to satisfy the performance obligations. The staff acknowledges that other services would be interdependent and it would be arbitrary to split them. The staff therefore recommends to use the coverage period as the most appropriate allocation period for the residual margin.

13. Allocating the residual margin over the coverage period is also consistent with the ideas developed in the boards' project on revenue recognition where revenue would typically be recognised over the period during which services are performed. Revenue would therefore be recognised as the insurer satisfies a performance obligation by providing (predominantly) insurance coverage. That would then mean that revenue is recognised continuously over the coverage period. In line with that thinking, the staff recommends that insurers should

[2] The boards will consider in a future meeting whether the pattern of transfer criteria for unbundling should be retained.

allocate the residual margin over the coverage period as a practical expedient because the services of an insurance contract are typically transferred over the coverage period.

Allocation pattern

14. The ED proposed to lock in the residual margin at inception and release it systematically over the coverage period. According to paragraph 50 of the ED, the release pattern should best reflect the exposure from providing insurance coverage, which the ED stated would be:

    (a) on the basis of the passage of time, but

    (b) on the basis of the expected timing of incurred claims and benefits, if that pattern differs significantly from the passage of time.

15. The ED was based on two assumptions:

    (a) the residual margin of every contract shall be zero when its coverage period has ended, which implies that all the profit stemming from that contract is released by that time.

    (b) because the residual margin is released over the coverage period, it is necessary to adopt a low enough level of aggregation for residual margins that group together only those contracts within the portfolio that have similar coverage periods. For the sake of practicability, the boards decided not to use the individual contract level, but the cohort level (within a portfolio) as an approximation to the individual contract level.

16. In developing these proposals, the boards' objective was to find a release pattern that corresponds in a reasonable way at an acceptable cost to the release pattern of the components of the margin at inception, ie general overheads, unspecified uncertainties and profit. Because the margin is a blend of various factors that are not separately identifiable, any release pattern is inevitably arbitrary to some extent.

17. The feedback received from comment letters and outreach activities generally disagreed with the proposed allocation and the boards reasoning for choosing

this treatment, mainly on the following grounds, which contradict the proposed treatment in the ED:

(a) the passage of time is generally not the best reflection of the performance of the insurer under the contract.

(b) the expected timing of incurred claims and benefits is not always the best reflection of the performance of the contract. This holds particularly true for life insurance contracts that would not release much margin over most of the coverage period (while potentially accreting interest and growing bigger over time).

18. In the staff's view, the residual margin should be allocated on a systemic basis that is consistent with the pattern of transfer of services provided, because the staff thinks this would best reflect the satisfaction of the performance obligation of the contract. Quite often there will be more than one service incorporated in one contract: insurance coverage and auxiliary services, such as asset management services. The insurer should then determine one, or more than one driver, that best reflects the pattern of transfer of services provided. However, because the IASB depicts the risk of the contract through an explicit risk adjustment, the risk of the contract shall not be the driver of the release pattern of the residual margin.

19. The staff acknowledges that different contract types will provide different services in different patterns. To deal with this in a principle-based way, the staff proposes that the insurer should allocate the residual margin in a pattern consistent with the pattern of transfer of the services provided. This would mainly be the insurance coverage provided, but also auxiliary services, such as asset management services. Because the comment letters indicated that the Board's assumptions about the drivers of service provision are invalid, we propose that the Board specify only the principle and delete the requirement that the allocation be based on the passage of time or the timing of incurred claims and benefits.

20. Examples of appropriate profit drivers can be found in the Australian Margin on Services approach, for which examples of typical profit drivers selected by insurers are expected cash flows, such as :

(a) expected claims for pure insurance risk products,

(b) expected premiums for yearly renewable insurance, where premiums increase each year with age, and

(c) expected annuity payments for annuities.

21. In addition, for contracts that are predominantly investment contracts, such as unit-linked and some forms of participating contracts, a profit driver based on assets under management may be more appropriate since the principal service provided is investment management.

22. Those profit drivers would be determined at inception, the residual margin would be translated into a percentage of the chosen profit driver (eg expected cash flows). The residual margin released in each period would be that percentage times the actual cash flows for that period).

Unit of account

23. The feedback received from the comment letters and outreach asked the boards to come up with one consistent unit of account across all aspects of the measurement model. Typically, respondents and others suggested this should be the portfolio level. The boards' rationale to use a cohort level for the allocation of the residual margin was to ensure that the entire residual margin for a cohort should be allocated to that cohort, so it will be fully released when the coverage period for that cohort is finished. This follows from the view that:

(a) If the residual margin is allocated on an individual contract level, it is relatively easy to make sure that the residual margin is fully released when the coverage period ends.

(b) In a closed portfolio (such as a cohort, which includes only contracts within a portfolio that are grouped together by similar date of inception and similar coverage period) it is also relatively easy to release all the remaining residual margin when the last contract finishes its coverage period.

24. Respondents found it hard to imagine how to track the residual margin for one cohort and so that when one contract leaves that specific part of the residual margin is released.

25. Particularly Australian respondents found that the objective to fully release the residual margin by the end of the coverage period can be achieved by other means than an aggregation on a cohort level. They said that if the release pattern follows the services transferred under the contract, it is not necessary to allocate all the residual margins on a cohort level, and that even within an open portfolio it is possible to proxy a full release of the residual margin at the end of the coverage period of an individual contract when using a release pattern that follows the transfer of services. For example, if the profit driver is the expected premiums, the residual margin is released in line with the actual premium inflow and the release of the residual margin is completed by the time the insurer receives those premiums (which would typically occur before the end of the coverage period).

26. The difficulties with ensuring that the residual margin will be fully released are connected with the aggregation of the contracts. If we consider an open portfolio, the residual margins of each individual, in-force and new business, would be blended. In order to maintain an approximation to the individual contract, the contracts should only be aggregated at a level that ensures that:

    (a) The contracts show a similar pattern of transfer of the services provided under the contract. Otherwise, the profit driver(s) chosen for that group of contract cannot be the same for each individual contract and the allocation of the residual margin is arbitrary.

    (b) The contracts are not significantly differently profitable. Let's say the in-force business was written at a 20% residual margin and the current new business is written at a 2% residual margin, the overall residual margin would be an amount averaging the two residual margin percentages. This new percentage would represent neither the expected profitability of the in-force contracts nor the expected profitability of the new contracts. However, one could argue that the new contracts were written with having the previously written ones in mind, so that an average residual margin would make sense.

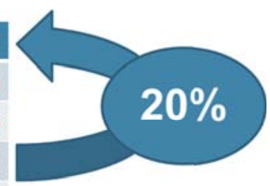
27. Based on that feedback received and in order to be somehow consistent with the tentative decision that expected cash flows are determined on a portfolio level,

the staff recommends to permit an insurer to group together similar contracts in way that ensures that the residual margin is (approximately) released by the end of the coverage period. The staff thinks that if the contracts are grouped together by similar patterns of transfer of services and expected profitability, the allocation can ensure that the residual margin of an individual contract is released by the end of its coverage period. If dissimilar contracts (with presumably completely different profit expectations) are pulled into one portfolio the overall residual margin would be blended. The staff believes that this issue should not be solved for the level of allocation of the residual margin, but would be better dealt within the portfolio definition. The considerations as explained in the previous paragraphs will be taken into account when the staff considers the issue of unit of account and the definition of a portfolio.

28. This is an example how such an allocation on a portfolio level could work:

(a) Determination of the profit driver at the beginning of the period:

PV expected premium CFs	100,000,000
PV expected claim CFs	(50,000,000)
PV expected expenses	(30,000,000)
Residual margin	(20,000,000)
Liability	0



(b) End of the period:
For this example we assume that the insurance contract played out exactly as expected by the insurer, with following results:

(i) Premiums were paid in: 10,000,000
(remaining expected premiums: 90,000,000)

(ii) Expenses were paid out: 5,000,000
(remaining expected expenses: 25,000,000)

(iii) The residual margin is released as 20% of 10,000,000 premiums received, which equals 2,000,000.
(remaining residual margin: 18,000,000)

PV expected premium CFs	90,000,000	
PV expected claim CFs	(50,000,000)	20%
PV expected expenses	(25,000,000)	
Residual margin after release for current period	(18,000,000)	
Liability	3,000,000	

(c) New business comes in:

When new business comes in, it might be written at a different residual margin. In the example the new business is written at a margin that equals 18.8% of the chosen profit driver (expected premium cash flows). The overall percentage of residual margin to expected premium cash flows of the portfolio therefore changes from 20% to 19.4%.

	In force		New business		portfolio
PV expected premium CFs	90,000,000		85,000,000		175,000,000
PV expected claim CFs	(50,000,000)		(49,000,000)		(99,000,000)
PV expected expenses	(25,000,000)	18.8 %	(22,500,000)	19.4 %	(47,500,000)
Residual margin	(18,000,000)		(16,000,000)		(34,000,000)
Liability	3,000,000		2,500,000		5,500,000

29. The example shows that the release of the residual margin will be affected by having an open portfolio, but, if similar contracts are grouped together, not in a significantly different way than before. If dissimilar contracts were pooled together, the release of the residual margin would be distorted. The reason would be that the overall profitability would be averaged over the lives over the profitable and less profitable contracts.

30. The staff recommends permitting insurers to aggregate contracts on a higher level than the individual contract as it seems to be more practical with less costs of implementing and tracking involved.

Questions: How to allocate the residual margin

Do you agree that:

(a) The residual margin should not be negative?

(b) Insurers should allocate the residual margin:

(i) over the coverage period; and

(ii) on a systemic basis that is consistent with the pattern of transfer of the services provided under the contract?

(c) Insurers should not be required to determine the residual margin at the level of the individual contract. Instead, they should be permitted to determine the residual margin, both initially and subsequently, on a level that aggregates insurance contracts with similar expected profitability and pattern of transfer of services?