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Project	Insurance Contracts
Topic	Risk adjustment versus composite margin

Purpose of this paper

1. This memorandum compares the benefits of (a) an approach that measures an insurance contract using a risk adjustment (plus a residual margin) and (b) an approach that uses a composite margin. Agenda Paper 2B (FASB Memorandum No. 45B) and Agenda Paper 2C (FASB Memorandum No. 45C) should be read with this memorandum.
2. The staff plans to ask the boards to select one of these approaches at this meeting. In addition, if the boards select an approach that uses a risk adjustment (plus a residual margin), the staff will ask, as a follow-up question, whether the exposure draft should (a) require entities to select a technique for measuring risk adjustments by reference to criteria specified by the boards or (b) limiting the range of permitted techniques.

Summary of Staff recommendations

3. Some staff support the use of a single composite margin. Other staff support the use of a risk adjustment (plus a residual margin). If the boards decide that the measurement of an insurance contract should include a separate risk adjustment, the staff recommend limiting the range of permitted techniques by specifying the available risk techniques as described in paragraph 17 of this memorandum.

This paper has been prepared by the technical staff of the FASB and the IASCF for discussion at a public meeting of the FASB or 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 FASB or the IASB.

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Structure of the Paper

4. The rest of this paper is divided into the following sections:
 - (a) Background (paragraphs 5 through 7)
 - (b) Risk adjustment plus a residual margin versus a single composite margin (paragraphs 8 through 12)
 - (c) Risk adjustment—Should the range of permitted techniques be limited? (paragraphs 13 through 21)

Background

5. At the joint meeting in March, the staff presented an analysis on the topic of risk adjustments in Agenda Paper 6D (FASB Memorandum No. 41D). That paper provided a high-level description of some techniques that could be used to determine a risk adjustment. The staff recommendation in that paper was not to require a particular technique for determining a risk adjustment because it is a developing area and one technique did not appear to be superior to the others. Some Board members were uncomfortable with the amount of judgment in selecting a risk methodology and the resulting lack of comparability. At the March meeting:
 - (a) The IASB decided tentatively that:
 - (i) The measurement of an insurance contract should include a separate risk adjustment.
 - (ii) The risk adjustment should be the amount the insurer would rationally pay to be relieved of the risk [the objective proposed for the risk adjustment used in the IASB's recent Exposure Draft, *Measurement of Liabilities in IAS 37*].
 - (b) The FASB decided tentatively that the measurement of an insurance contract should not include a separate risk adjustment. Instead, the measurement should include a single composite margin.
6. At the joint meeting in March, the boards also discussed how the insurer should subsequently release the residual margin to profit or loss (at inception the residual

margin equals the difference between (a) the expected premiums [IASB: expected premiums less incremental acquisition costs] and (b) the expected benefits and claims and expenses plus a risk adjustment). The boards tentatively decided that the insurer should release the residual margin over the coverage period in a systematic way that best reflects the exposure from providing insurance coverage, as follows:

- (a) on the basis of passage of time; but
- (b) if the insurer expects to incur benefits and pay claims in a pattern that differs significantly from passage of time, the residual margin should be released on the basis of the benefits and claims, as expected at inception.

7. At the April meeting, the boards discussed the two approaches (a separate risk adjustment plus a residual margin and a single composite margin). The purpose of the discussion was to develop these approaches further, not to choose between them. However, the boards made the following tentative decisions on some aspects of the residual margin and the composite margin (for comparison, earlier decisions about the residual margin have been included in the table):

Issue	Residual margin	Composite margin
How should the insurer recognize a negative day-one difference (loss)?	Recognize a negative day-one difference (loss) immediately in profit or loss.	Recognize a negative day-one difference (loss) immediately in profit or loss.
How would a negative day-one difference (loss) be determined?	At inception, when the expected present value of the outflows plus the risk adjustment exceeds the expected present value of the premiums.	At inception, when the expected present value of the outflows exceeds the expected present value of the premiums. No separate risk adjustment would be included.
Over what period should the margin be released?	Coverage period only.	Both coverage period and claims handling period.
Is the margin part of the insurance liability?	It should be displayed within the insurance liability (disclosed separately), rather than as a separate liability outside the insurance liability.	It should be displayed within the insurance liability (disclosed separately), rather than as a separate liability outside the insurance liability.

Issue	Residual margin	Composite margin
Should interest be accreted on the margin?	[IASB] Interest should be accreted.	[IASB] Interest should be accreted.
	[FASB] No interest should be accreted.	[FASB] No interest should be accreted.

Risk adjustment (plus a residual margin) versus a single composite margin

8. Agenda Paper 2B (FASB Memorandum No. 45B) provides draft language for an approach that uses a risk adjustment plus a residual margin. Agenda Paper 2C (FASB Memorandum No. 45C) provides information about an approach that uses a single composite margin. The following is an analysis of the benefits of each approach (in many instances, the benefit of one approach is the drawback of the other).

Risk adjustment

9. The benefits of using a risk adjustment (plus a residual margin) are as follows:
- (a) A risk adjustment provides a means for depicting the uncertainty in possible outcomes, especially about the risk inherent in the tail of an insurance contract. That is, two contracts with an expected outcome of CU100 are very different with respect to their uncertainty if one contract has possible outcomes of CU99 and CU101 versus the other contract having possible outcomes of CU0 or CU200.
 - (b) A risk adjustment provides insight into management's perception of the uncertainty. Depending on the technique selected, it may also provide users with an indication of management's appetite for risk.
 - (c) A risk adjustment measures explicitly how much risk is present in the liability. A risk adjustment is remeasured each period and, accordingly, would reflect changes in the uncertainty as those changes occur. In contrast, the composite margin approach assumes the composite margin is sufficient to depict the amount of risk. At the extreme, the composite margin could be zero, either at inception or subsequently.

- (d) The use of a risk adjustment is consistent with other current measurements such as fair value and the liability measurement in IAS 37. Including a risk adjustment in the measurement of an insurance contract is consistent with the fact that option pricing models also include risk adjustments.
- (e) The pattern of run-off for a residual or composite margin is inevitably an allocation. The Boards have decided, as practical proxies, that the residual margin should run-off over the coverage period (because the residual margin is not designed to capture risk) whereas the composite margin should run-off in proportion to risk (on the assumption that risk is the main factor explaining the amount of the composite margin at inception). Using a risk adjustment reduces the amount of margin that relies on an allocation, which arguably would be arbitrary to some extent.

Composite margin

- 10. The benefits of using a single composite margin are:
 - (a) A composite margin approach is more consistent with the allocated transaction price approach in the revenue recognition project because both a composite margin and a residual margin are an allocation of the customer consideration, whereas the risk adjustment is remeasured.
 - (b) A composite margin represents the potential profit on the contract, measured as the difference between the expected premiums [IASB: expected premiums less acquisition costs] and the expected benefits and claims and expenses. Risk associated with the uncertainty in the cash flows is included in the composite margin. Additional information about the dispersion of the expected outcomes could be provided through disclosure.
 - (c) A composite margin eliminates the need to use subjective methods for measuring the risk adjustments that may or may not be comparable to each other.

- (d) A composite margin does not include an explicit risk adjustment that some believe only adds conservatism in addition to the unbiased probability-weighted cash flows. From that perspective, the composite margin is unbiased.
- (e) A composite margin provides a simpler and, some would argue, more understandable approach to account for the difference between the expected cash inflows and cash outflows. The methods for amortization of the composite margin are likely to be easily calculated and are transparent to users of the financial statements.

Staff recommendation

- 11. The staff are split on this issue. Some staff support the use of a risk adjustment (plus a residual margin). Some staff support the use of a single composite margin.
- 12. Whichever approach the boards select, the basis for conclusions on the exposure draft will need to explain both approaches in detail and the exposure draft will need to ask a question on this issue.

Question for the boards

Which staff recommendation do the boards agree with for measuring an insurance contract:

- (a) include a risk adjustment (plus a residual margin); or
- (b) include a single composite margin?

Risk adjustment—Should the range of permitted techniques be limited?

- 13. Agenda Paper 2B (FASB Memorandum No. 45B) provides draft language for both an approach to determining a risk adjustment that requires an insurer to measure risk adjustments by reference to criteria specified by the boards and an approach that limits the range of permitted techniques, perhaps by specifying a single technique, or family of techniques.

14. The following is the rationale for an approach that requires the insurer to select a technique for measuring risk adjustments by reference to criteria specified by the boards:

- (a) the wide range of insurance contracts necessitates flexibility in selecting the best technique for determining a risk adjustment
- (b) no one technique appears to be superior for all insurance contracts and even the experts in this field cannot provide a consensus view on the appropriate techniques, mainly because they assert that the best technique depends on the particular circumstances
- (c) the rapid pace of development and the continued advances in techniques for estimating uncertainty necessitate the need for flexibility and would reduce the need for future maintenance on an insurance contracts standard
- (d) not requiring a particular technique or family of techniques is consistent with other measurements that include a risk adjustment (for example, fair value)

15. The following arguments support the other approach, which would achieve the objective for a risk adjustment (measuring the amount the insurer would rationally pay to be relieved of the risk) by limiting the range of permitted techniques, perhaps by specifying a single technique, or family of techniques:

- (a) this would promote a degree of comparability and consistency in the measurement of the risk adjustment across entities.
- (b) this would also allow for a consistent disclosure benchmark without undue cost and effort. Although it would be possible to re-express the output of a wide range of techniques into a common benchmark (for example, confidence level), in some cases this may be costly and burdensome because the insurer would have to apply two different techniques to generate that disclosure information if it decides that a different technique would result in a more appropriate measurement under the circumstances.
- (c) this also eliminates the need for users to understand numerous types of risk adjustment techniques.

16. In limiting the number of available techniques, the boards could consider the following factors:
- (a) Simplicity and understandability.
 - (b) Responsiveness to the characteristics of a risk adjustment (for the characteristics of risk adjustments see paragraph 7 of Agenda Paper 2B [FASB Memorandum No. 45B]).
 - (c) Would consistent disclosure be possible?
17. Considering those factors, the alternative approach would specify the available risk adjustment techniques as follows:
- (a) For some types of contracts, a confidence level technique (or Value at Risk) will be sufficient to meet the characteristics of the risk adjustment; for example, if the distribution is not significantly skewed or if time is not a significant factor for the risk. The advantages of the confidence level technique is its simplicity and understandability.
 - (b) In other cases, for example if the distribution is more skewed or if time is a significant factor for the risk, other techniques may better reflect the characteristics of a risk adjustment to such an extent that their application outweighs the simplicity of a confidence level technique. In that case, the insurer should apply either a Conditional Tail Expectation technique (or Tail Value at Risk) or a Cost of Capital technique. The insurer should use judgment in determining whether it uses the confidence level technique or one of those other two techniques to meet the characteristics of the risk adjustment. The insurer should be able to justify why the Conditional Tail Expectation and the Cost of Capital techniques are more relevant than a confidence level technique.
 - (c) The insurer discloses the confidence level at which it determined its risk adjustment. If the insurer uses a Conditional Tail Expectation approach or a Cost of Capital approach, it discloses the confidence level to which the risk adjustment determined under those methods corresponds (for example, that the risk adjustment of CUX determined at Conditional Tail Expectation (Y) corresponds to a confidence level of Z%). This information is provided in addition to specific disclosures

about the Conditional Tail Expectation technique or a Cost of Capital technique and gives a common benchmark for disclosure that is also easy to communicate to users.

- (d) Under any technique disclosure of the technical (actuarial and statistical) and management's rationale underlying the specific technique selected.

18. Both Conditional Tail Expectation and Cost of Capital, conceptually, use a distribution that also would have been used for a confidence level technique. Therefore, the information required by the proposal in the previous paragraph could be available without significant additional cost.
19. The proposed insurance contracts model requires that financial market variables should be consistent with observable market information. The insurer can achieve this, for example, by using a replicating portfolio. Any risk associated with those variables is included in the measurement of the replicating portfolio, not in the risk adjustment estimated by using the methods listed in paragraph 17.
20. This alternative approach focuses on specifying the available techniques for estimating a risk adjustment. It is not intended to specify a particular level of confidence. The staff believe that that would be beyond the purpose of an accounting standard on insurance contracts.

Staff recommendation

21. The staff recommend limiting the range of permitted techniques by specifying the available risk techniques as described in paragraph 17.

Question for the boards

If the boards decide that the measurement of an insurance contract should include a separate risk adjustment, how should the risk adjustment be implemented:

- (a) the staff recommendation to limit the range of permitted techniques by specifying the available risk techniques as described in paragraph 17; or
- (b) allowing preparers to select a technique for measuring risk adjustments by reference to criteria specified by the boards?