



Project	Insurance Contracts
Topic	Release of residual margins and recognition of revenue

Purpose

1. This paper discusses how a residual margin, determined at inception, should be released to profit or loss subsequently. In developing a basis for releasing the residual margin, staff focuses on the insurer's performance under the contract by delivering an asset to the policyholder (performance under the contract).
2. Because performance under the contract is also the determining factor in the boards' proposal in the revenue recognition project, this paper also discusses how an insurer should recognise revenue from an insurance contract.
3. This paper is written on the basis of the boards' tentative decision that the measurement of an insurance contract includes a separate risk adjustment. The boards will continue their discussion of the application of a risk adjustment during this meeting; paper 6D (FASB Memorandum 41D) discusses this. If the boards conclude that the measurement of insurance contracts should not include a separate risk adjustment, then risk would be an implicit component of a single composite margin and the staff analysis in this paper is likely to change.
4. This paper is supported by the examples in agenda paper 6G (FASB Memorandum 41G), which illustrate how the residual margin would be released on the basis of staff's proposals in this paper.

Summary of the staff's recommendations

5. In this paper, staff recommends that:
 - (a) the insurer should release the residual margin in a systematic way that best reflects the exposure from providing insurance coverage. For this purpose,

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the insurer uses the expected value of claims and benefits to be incurred over the coverage period.

- (b) this approach means that the residual margin is released over the coverage period.

Structure of the paper

- 6. The rest of this paper is divided into the following sections:
 - (a) Background (paragraphs 8-9)
 - (b) The residual margin (paragraphs 10-14)
 - (c) Basis for releasing the residual margin (paragraphs 15-17)
 - (d) Level of performance (paragraphs 18-20)
 - (e) Timing of performance (paragraphs 21-23)
 - (f) Application of release based on insurance coverage (paragraphs 24-31)
 - (g) Is insurance coverage the only relevant factor? (paragraphs 32-38)
- 7. This paper does not address how to determine or release risk adjustments, which is discussed in agenda paper 6D (FASB Memorandum 41D). Furthermore, this paper does not deal with implicit release of margins under a simplified measurement approach that the boards might wish to adopt for the coverage period of some short-duration contracts; this will be discussed at a future meeting.

Background

- 8. The boards have decided tentatively that the measurement of an insurance contract should not result in the recognition of an accounting profit at inception. As a result, if (a) the premiums exceed (b) the cash outflows plus the risk adjustment, that excess is a residual margin.^{1 2} The residual margin would be

¹ The comparisons in this paragraph refer to the expected present values of premiums and cash outflows. To simplify the wording, we have omitted the references to expected present value.

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included in the measurement at inception and then subsequently reported in income over an appropriate period. This means the proposed insurance model is a hybrid of:

- (a) a direct liability measurement, using current estimates of expected cash flows, time value of money and a risk adjustment; and
 - (b) an allocation element (the residual margin) that eliminates a day one gain and is subsequently released as income over an appropriate period. The staff believes that decisions in the revenue recognition project may help the boards determine how to deal with the residual margin (see paragraphs 15-17).
9. In their January 19 meeting, the boards decided tentatively that the exposure draft should provide specific guidance on the release of the residual margin. This paper proposes such guidance.

The residual margin

10. The residual margin is the product of a calibration that eliminates the day one difference between (a) the expected premiums and (b) the expected claims and expenses plus a risk adjustment.
11. This day one difference usually is a blend of elements, such as:
 - (a) Acquisition costs. The insurer will typically price the contract to recover its direct and indirect origination costs (acquisition costs) and to provide a reasonable return on the originating activity. Under the boards' current proposals, all acquisition costs are expensed at inception with no income reported at inception to cover those costs. Agenda paper 6H (FASB Memorandum 41H) discusses acquisition costs.

² The Boards have also decided tentatively that the residual margin cannot be negative. Thus, if (a) the premium is less than (b) the cash outflows plus margin, that difference results in a loss that would be recognised at inception.

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- (b) Differences between the retail market and wholesale market. The insurer's pricing with the policyholder is based on the retail market. However, the insurer also has access to a wholesale market, eg for reinsurance. Some of the insurer's inputs into the measurement of the insurance liability may be reflective of that wholesale market, which would result in the difference between pricing and measurement being included in the day one difference.
 - (c) The insurer's ability to sustain higher prices than other insurers, for example in a niche market.
 - (d) Insurance cycle - some insurance pricing displays a cycle of alternating 'hard' markets, when pricing is high, and 'soft' markets, when pricing is low.
12. Such factors could cause the residual margin to be significant. Field testing respondents generally noted that the residual margin would be significant in many cases and identified (a) acquisition costs as an important factor. But even after eliminating account acquisition costs, some field test respondents noted that the residual margin could still be significant compared to, for example, premiums less claims and expenses on day one.
13. Considering the boards' decisions in the project so far, we know that for subsequent reporting periods the residual margin:
- (a) will not be remeasured. Since the residual margin is a blend, any remeasurement after day one would lack substance and therefore the staff considers that it would not provide relevant information to users.
 - (b) will not be adjusted for changes in estimates. The boards decided in their January 19 meeting that the insurer should report changes in estimates in profit or loss.
 - (c) will accrete interest. The boards decided that the measurement of insurance contracts should incorporate time value of money. Since a residual margin may be of significant size and/or may be released over many periods, accreting interest to that margin will often have a material

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impact. We come back to which interest rate should be used when we discuss the topic of discount rates.

14. The subsequent release of residual margins is therefore an allocation of the amount determined at inception, adjusted for the time value of money.

Basis for releasing the residual margin

15. The boards asked staff to provide specific guidance for the release of the residual margin over time. In this context, the boards expressed concerns that any lack of rigour in the basis for release would impair comparability. Providing guidance clarifies the intent of the boards and should lead to a degree of comparability among reporting entities.
16. The aim is to develop an allocation approach for the residual. In that context it would be intuitive to look at the boards' proposals in the revenue recognition project. In that project, the boards propose to allocate the customer consideration over the life of a contract based on performance under the contract (which would depict the transfer of the goods and services (asset) to the customer). This approach is applied to the whole of the customer consideration for determining revenue. However, it could in our view also deal with allocating a specific **part** of the customer consideration to the income statement. In the case of the residual margin for insurance contracts, this is the part of the customer consideration that exceeds the amount required to fulfil the obligation (expected cash flows, time value of money and a risk adjustment) at inception.
17. It therefore looks natural to base the release of the residual margin on performance under the contract. How does an insurer perform under an insurance contract?

Level of performance

18. Under an insurance contract, the policyholder substitutes the average risk in the portfolio for its own individual risk. This enables the policyholder to make a valid claim against the insurer if an insured event happened. As a result, the insurer

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accepts from the policyholder a transfer of risks previously held by the policyholder. The insurance contract provides that, insurance coverage, continuously throughout the coverage period and the policyholder 'consumes' the benefit of that coverage as soon as it is received from the insurer. Thus, the insurer performs under an insurance contract by providing insurance coverage. We identified the following rationale for using insurance coverage:

- (a) it is a driver of performance under an insurance contract, often the predominant driver of performance.
 - (b) insurance coverage is a factor that is present in every contract that qualifies as an insurance contract (otherwise it would not have been an insurance contract), albeit in different degrees. Since it is present in every insurance contract, it can be used as the basis for release across all types of contracts.
19. Insurance coverage typically is provided on a continuous basis. Every month, day or even second of the coverage period the insurer stands ready to accept (valid) claims; that does not vary. The **existence** of coverage is therefore a linear notion. Although coverage is continuous, it need not be even, for example if the risk exposure is seasonal. In those cases, the **exposure** from insurance coverage is unevenly spread over the coverage period (non-linear). For this purpose, exposure is a function of the net amount at risk and the likelihood of an insured event to happen.
20. For example, for some types of catastrophe risk the level of exposure varies throughout the year, depending on climatological factors. If a year of hurricane coverage in Florida were to be split in to 365 individual day-tranches, a tranche of coverage in September would be more valuable to the policyholder than a tranche of coverage in March. This is because the policyholder on average expects higher losses during September. The largest the exposure during at a particular time, the more the insurer performed by providing coverage at that time. This shows that for depicting performance under the contract, it may not be enough not look at the mere existence of coverage; one also has to consider the exposure throughout the coverage period.

Timing of performance

21. The notion of insurance coverage focuses on when the insurer takes on the risk from the policyholder (providing protection continuously during the coverage period), not on when the insurer will be fully released from the risk of changes in the amount or timing of the ultimate cash flows arising from the provision of coverage (release from risk). The risk adjustment deals with the release from risk (see agenda paper 6D (FASB Memorandum 41D) for this meeting). For this purpose, we distinguish:
- (a) The coverage period: the period during which the contract is in force (the period during which protection is provided). For example, the coverage period for an annual contract is one year. In most cases, the coverage period provides an easily observable time period over which to release the residual margin because most insurance contracts stipulate the coverage period.
 - (b) The claims handling period: the period from when the first claim arises to when the last claim is paid (the claims handling period often includes most if not all of the coverage period). In some instances, the coverage period and the claims handling period are not significantly different (such as for traditional life insurance). In other instances, particularly for some non-life contracts, the coverage period may be 1 year but the claims handling period can be 10 or more years.
22. Because the risk adjustment deals with uncertainty about the amount and timing of future cash flows is, risk is in our view not a (pre)dominant factor for the residual margin. As a result, release from uncertainty associated with the ultimate cash flows is in our view not a relevant basis for the run-off of the residual margin. Consider the following example.
- (a) Policyholder A enters into a motor insurance contract with insurer X. The coverage period runs from 1 January to 31 December 20X1. On 1 July of that year, policyholder A causes an accident with motorist B. Motorist B's car suffers some damage, but motorist B is unhurt. Policyholder A is liable for the damage to motorist B's car. This damage is covered under

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policyholder A's motor contract and it makes a valid claim against insurer A accordingly. As a result, insurer X incurs a loss and recognises a claim liability. The amount of the claim is readily determinable and insurer A expects to settle within weeks.

- (b) On 1 August of that year, policyholder A causes an accident with motorist C. Motorist C's car is a total loss and motorist C is hospitalised. Policyholder A is liable for the damage to motorist C's car as well as the injuries that motorist C suffers. This damage is covered under policyholder A's motor contract and policyholder A makes a valid claim against insurer A accordingly. As a result, insurer X incurs a loss and recognises a claims liability. However, insurer X has significant uncertainty about the magnitude of the damage, particularly with respect to claims that follow from the bodily injuries caused to motorist C. Determining the ultimate damage and settling the claims may take years.

23. The nature and magnitude of both accidents differs significantly. In the proposed insurance measurement, the expected cash flows, time value of money and the risk adjustment deal with this. However, policyholder A received the same insurance coverage on 1 July and 1 August, as it did on the other 363 days of 20X1 on which it did not cause an accident. We did not identify a reason why the residual margin, a blend of things, attributable to 1 July, 1 August and the other 363 days without any accident should be different (aside from any difference that might be caused by coverage that is spread unevenly, see paragraphs 19-20).

Application of release based on insurance coverage

24. An obvious way to apply a notion of release based on exposure from insurance coverage is through claims and benefits that the insurer expects to incur during the coverage period. If exposure is spread evenly throughout the coverage period, claims and benefits are also expected to be incurred evenly throughout the coverage period (probably close to a passage of time basis). If the exposure is not spread evenly, the pattern of incurred claims and benefits is also expected to show non-linearity.

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25. Insurance claims and benefits, for the purpose of determining the exposure from insurance coverage, generally are expected:
- (a) claims for non-life contracts.
 - (b) death benefits for term life contracts.
 - (c) death benefits, excluding any deposit amounts already accumulated by policyholders for whole life, traditional endowment, and probably also participating contracts and account-driven contracts (to the extent those contracts are not unbundled); staff wants to investigate the latter two types of contracts in a bit more detail. In practice, the insurer might be able to use the death benefits or the whole insurance benefits if the residual margin were to be tracked at an aggregation level higher than the individual contract (see paragraph 30).
 - (d) annuity benefits for annuity contracts (payout phase). For lifetime annuities, the coverage period depends on the life of the policyholder. Each period the insured continues to live, a new claim is incurred.
26. At inception, the insurer projects the release of the residual margin based on:
- (a) the residual margin, determined as described in paragraph 10, that needs to be released over the coverage period (amount), and
 - (b) the expected value of the claims and benefits that are incurred over the coverage period (pattern). But as a simplification the insurer might be able to use passage of time if it has evidence that claims and benefits are spread fairly evenly over the coverage period (eg. historic information shows a reasonably level pattern of incurred claims and benefits).
27. A subsequent change in this projected release pattern could be caused by a significant shift in the pattern of incurred claims and benefits, as a result of an increase or decrease in the expected remaining claims and benefits.
28. The impact of such a change on the release of the residual margin can be dealt with in two ways. One way is to update the release pattern for the **whole** coverage period, including part of the coverage period that relates to past reporting periods. If this approach were to be applied, profit or loss for the current reporting period

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would include the change in the residual margin release that relates to past reporting periods (retrospective application). Alternatively, the updated release pattern could be applied to the remaining residual margin for the **remaining** reporting periods; no amounts relating to previous reporting periods would be recognised in current year's profit or loss (prospective application). Staff will investigate this issue further and come back to it at a future meeting.

29. In their January 18 meeting, the boards decided tentatively that all subsequent changes in estimates should be recognised in profit or loss. Therefore, the remaining residual margin at a particular reporting date is simply the unallocated part of the amount determined at inception.
30. Conceptually, the release of the residual margin is applied at contract level. However, applying the release at a contract level may cause significant tracking requirements. Therefore, it is likely to be more practical to determine and track the release at cohort level or perhaps even portfolio level. We will discuss the level of aggregation at a future meeting.
31. The examples in agenda paper 6G (FASB Memorandum 41G) illustrate the release of residual margin on the basis of staff's proposals in this paper.

Is insurance coverage the only relevant factor?

32. Insurance coverage is a (pre)dominant deliverable of an insurance contract. But sometimes the insurer provides other services under the insurance contract as well, such as asset management services, car repairs and litigation support. In some cases, the premium of the contract may include a profit element for such services.
33. Under the proposed insurance measurement, a margin for such services (if any) will be part of the residual margin and released as such. This approach would lead to the same result as using a separate, explicitly measured profit margin if all the following conditions are met:
 - (a) The driver used to release the residual margin is broadly consistent with the pattern of provision of the related services.

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- (b) There is no significant change in either the quantity of service required or the cost of providing the service.
 - (c) There is no significant change over the life of the contract in the margin required for providing the services.
34. We do not expect that (b) change in quantity or cost and (c) change in the required margin will be issues, given the types of the services mentioned in paragraph 27. However (a) change in the pattern of services requires more analysis.
35. In this paper, the staff propose using exposure from insurance coverage as the driver for release. For some service elements, the insurance coverage provides a pattern that can be seen as reasonably consistent with the provision of the services (for example car repairs). Other service elements might be delivered in a pattern that differs significantly from insurance coverage. For those services, a different basis could better reflect the pattern of other service elements. For example, for asset management services, an obvious driver to consider is the amount of funds under management. For regular premium contracts involving asset management services, the funds under management build up over time as premiums are received. However, staff believes that for the following reasons the boards should not pursue a specific driver for those other services:
- (a) since the residual margin is a blend, it arguably will be difficult to determine whether an alternative to insurance coverage would be more reflective of performance under the contract.
 - (b) applying a second basis in addition to insurance coverage increases ambiguity around the release of the residual margin.
36. Instead of pursuing a second basis in addition to insurance coverage, one could also look at a driver that combines two or more bases to reflect the mixed nature of the residual margin. However, the staff does not view a multi-attribute driver as a viable alternative because it would contradict the segmentation approach the boards apply in their revenue recognition project. If one believes multiple bases are necessary, this should be reflected by segmenting the margin; not by implementing a multi-attribute driver for one undivided margin. However, under

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the boards' current proposals, only a risk adjustment is identified separately; all other margin components are included in the residual margin.

37. We emphasise that the residual margin will not include the underlying cash outflows incurred in providing a service, it will include only the expected profit for providing that a service.

Staff recommendation

38. Staff recommends that:

- (a) the insurer should release the residual margin in a systematic way that best reflects the exposure from providing insurance coverage. For this purpose, the insurer uses the expected value of claims and benefits to be incurred over the coverage period.
- (b) this approach means that the residual margin is released over the coverage period.

Question for he boards

Do you agree with the staff recommendation?