# STAFF PAPER

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| Project | Insurance contracts | | |
|---|---|---|---|
| Paper topic | Allocation of insurance contract revenue—change in pattern of expected claims | | |
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## Overview of paper

1. The boards have previously tentatively decided that insurers should present insurance contract revenue in the statement of comprehensive income.

2. This paper considers how insurers applying the building block approach should allocate insurance contract revenue between periods if there is a change in the estimates of the *pattern* of expected claims[1]. It considers whether the allocation of insurance contract revenue should be:

   (a) *fixed at initial recognition*, ie remaining revenue should be allocated on the basis of the initial estimates of the pattern of expected claims; or

   (b) *updated if and when estimates change*, ie remaining revenue should be re-allocated prospectively to reflect the latest estimates of the pattern of expected claims.

[1] The term 'claims' is used in this paper to refer to all claims and benefits that are paid to, or on behalf of, a policyholder on the occurrence of an insured event, plus associated expenses.

3. The staff recommend the second of these approaches, ie that the remaining insurance contract revenue should be re-allocated prospectively to reflect the latest estimates of the pattern of expected claims.

## Background

### *Tentative decisions to date*

4. At their October 2011 meeting, the boards tentatively decided that insurers should present measures of activity (premiums and claims) in the statement of comprehensive income.

5. At their March 2012 meeting, the boards tentatively decided that the amounts presented as premiums and claims should be the amounts received or paid in respect of insurance coverage and other services. In other words, the amounts presented should *exclude* receipts and repayments of investment components, ie amounts that the insurer is obliged to pay to the policyholders or their beneficiaries regardless of whether an insured event occurs.

6. At their October 2012 meeting, the boards tentatively decided that insurers should allocate the premiums received for insurance coverage and other services between periods in proportion to the relative value of the coverage and other services that the insurer provides in each period.

7. Applying these tentative decisions, an insurer would present an activity measure that aims to allocate insurance contract revenue between periods in a manner that is comparable with the amounts presented as revenue by other entities that provide services to customers. This paper refers to the measure as 'insurance contract revenue'[2].

***Measurement of insurance contract revenue***

8. The staff papers for the October 2012 meeting explored a method by which insurers could measure insurance contract revenue for contracts accounted for using the building block approach.[3]

9. Applying the method explored in the staff papers, revenue is recognised when the insurer provides coverage or other services, ie when it expects to incur the costs of the claims and the related expenses and as the margin is released. The measurement of the revenue earned each period is based on the assumptions used in determining a component of the building block liability[4]. Also included in revenue is interest accretion on the premium from the time it was received until the related costs it funds are incurred.

10. The component of the building block liability used to determine revenue is the liability for remaining coverage (excluding the part of that liability that can be attributed to losses on initial recognition or changes in estimates of expected claims, to the extent that those changes have been recognised in profit or loss rather than offset against the residual margin).

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[2] Previous staff papers have referred to the measure as 'earned premiums'. However, several parties have criticised our use of that term. They think that it is an inaccurate term for a measure that excludes some premiums and includes some non-premium income (ie interest accretion). They also warn that using the term 'earned premiums' with the meaning described in this paper risks confusion, because the term is used with a different meaning within the insurance industry.

[3] IASB agenda papers 2A-2C / FASB memos 90A-90C

[4] To the extent that the margin is presented separately from the remainder of the building block liability, revenue is based on reductions to both the liability for remaining coverage component of the liability and the margin. The FASB expect to redeliberate the statement of financial position presentation in a future meeting.

11. The insurance contract revenue for each period is measured as the amount by which this component reduces in the period as a result of the insurer satisfying its obligations to provide coverage or other services. This reduction is measured using amounts that contribute to the roll-forward of the liability for remaining coverage[5]. It is the sum of:

    (a) the expected (probability-weighted) claims and associated expenses for that period of coverage;

    (b) the release of the risk adjustment in the period (IASB only);

    (c) the amortization of deferred acquisition costs[6,7]; and

    (d) the release of the single or residual margin in the period.

### *Changes in estimates of the amount of future claims*

12. The staff papers for an education session in June 2012 explored how insurance contract revenue should be measured if there have previously been changes in the estimates of the *amounts* of expected claims. The staff considered whether the expected claims used to measure insurance contract revenue for a period should be the original estimates for the period or the most up-to-date estimates (ie the

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5 The IASB has tentatively decided to require separate rollforward disclosures of the following components of the insuance contracts liability: (a) liabilities for remaining coverage, excluding any amounts attributable to losses on initial recognition or to subsequent changes in estimates recognised immediately in profit or loss; (b) liabilities for remaining coverage attributable to losses on initial recognition and subsequent changes in estimates recognised immediately in profit or loss; and (c) liabilities for incurred claims. The FASB will be deliberating proposed disclosures at a future meeting.

6 Acquisition costs included in the measurement of insurance contracts are recognized as expenses as part of the release of the margin (for the FASB) or on the same pattern as claims and associated expenses (for the IASB).

7 Based on tentative decisions of the FASB, the single margin is presented separately in the statement of financial position from the expected insurance contracts cash flows. Accordingly, under the FASB proposals the expected claims and associated expenses for that period of coverage will be included in the roll-forward of the "liability for remaining coverage" while the amortization of the deferred acquisition costs and the release of the single margin will be included in the rollforward of the margin. Regardless of the presentation of the margin, each of these items will contribute to the insurance contract revenue measurement,

original estimates as amended for any subsequent changes up to the start of the period). The staff believe that the expected claims used to measure insurance contract revenue should:

(a) exclude changes in estimates of the amount of the expected claims if those changes had been recognised immediately in profit or loss.

> For the FASB, the full value of all changes in estimate of expected claims are recognised immediately in profit or loss (i.e., as an expense and without a direct effect on revenue recognition). For the IASB, only unfavourable changes that exceed the remaining balance of the residual margin (ie only onerous contract losses) are recognised immediately in profit or loss.

(b) *include* changes in estimate of the amount of expected claims if those changes had been offset against the residual margin. There is no need to exclude these changes because the change in the amount of claims contributing to revenue is offset by an equal but opposite change in the amount of residual margin contributing to revenue.

> For the IASB, changes in estimates of expected claims are offset against the residual margin, except to the extent that unfavourable changes exceed the remaining balance of the residual margin, ie the contracts are onerous.

13. If changes in estimates of the amount of expected claims are not accounted for in accordance with paragraph 12, the total revenue presented over the duration of a contract might be different from the premiums received for insurance coverage and other unbundled services. (The two amounts should be the same, subject to any adjustments required for the time value of money and any amounts excluded for investment components.)

## The question considered in this paper

14. As explained above, previous papers explored how insurance contract revenue should be measured if there have been changes in the estimates of the *amount* of expected claims. But the papers did not explore how insurance contract revenue should be measured if there have been changes in the estimates of the *pattern* of expected claims. This paper considers that second question

15. The staff's analysis takes into account:

    (a) the proposed requirements of the forthcoming standard on revenue recognition (paragraphs 17-40); and

    (b) practical considerations (paragraphs 41-**Error! Reference source not found.**).

16. This paper addresses the treatment of changes in expected claims associated with a specified amount of coverage. It does not address changes in expected claims that are attributable to changes in estimates of premiums receivable (eg because of changes in expected lapse rates).

## Proposed requirements of forthcoming standard on revenue recognition

17. The boards are seeking a method of measuring insurance contract revenue that is broadly consistent with general revenue recognition principles. Therefore, although the forthcoming standard on revenue recognition will not apply to insurance contracts, the boards could consider the principles of that standard to help identify an appropriate approach for insurance contracts.

18. The staff have identified two possible approaches. The first would be to treat each period of coverage as a separate performance obligation and allocate revenue to each period on the basis of the *original estimates* of the expected claims and margin release for that period. The second possible approach would be to treat each period of coverage as progress towards complete satisfaction of a single performance obligation, and allocate remaining revenue by reference to the *most up-to-date estimates* of expected claims for the current and future periods. The two approaches, and the rationale for each, are explained in more detail below.

*Approach A: Treat each period of coverage as a separate performance obligation*

19. The first possible approach (Approach A) would be to treat each period of coverage in the contract as a separate performance obligation.

20. Applying the principles of the Exposure Draft *Revenue from Contracts with Customers* (the draft revenue standard), the insurer would allocate the transaction price (ie premiums for coverage and other services) between performance obligations on the basis of estimates of their stand-alone selling prices at the inception of the contract: the insurer would not reallocate the transaction price thereafter. The stand-alone selling price at inception for each period of coverage would reflect the *original* estimates of the expected claims and margins for that period. Therefore, revenue for each period would be fixed on initial recognition, being allocated to each period on the basis of initial estimates of the pattern of expected cash flows.

21. Some staff question the appropriateness for insurance contracts of not reallocating the revenue, even if one were to conclude insurance contracts are a series of separate performance obligations. These staff analogize to the proposed revenue recognition guidance for modifications. Notwithstanding that most changes in estimates of the costs of fulfilling insurance contracts are not driven by actual modifications (and thus not resulting in the accounting for a separate contract), these staff look to the guidance as an example of a circumstance where the transaction price is reallocated amongst performance obligations.

22. In many circumstances, changes in estimates of claims are accompanied by changes in estimates of the consideration received under the contract. For example, a common driver of a change in estimates of the pattern of benefits to be incurred for a portfolio is a change in the assumption of lapses. If lapses are expected to decrease, both additional benefit payments would be expected and additional premiums would be expected for the additional periods of coverage. Paragraph 22(a) of the draft revenue standard deals with modifications wherein the remaining services are distinct from the services transferred on or before the date of the contract modification, which would be the analogous circumstance if each period was deemed a distinct performance obligation. The related guidance results in a reallocation to the remaining separate performance obligations of the amount of consideration received from the customer but not yet recognized as revenue plus the amount of any remaining consideration that the customer has promised to pay (i.e., a prospective reallocation of the unearned revenue).

23. Other staff disagree with this analogy and observe that paragraphs 77 to 80 of the draft revenue standard, which explicitly address changes in transaction price and preclude any adjustments for changes in the standalone selling price of performance obligations from being factored into the allocation of the changes in transaction price, to be a better indicator of the principles behind allocating transaction price to separate performance obligations.

24. The appendix to this paper illustrates the way in which Approach A (allocating revenue on the basis of the original estimates of expected claims) would be applied. It illustrates both situations in which changes in estimate are recognised immediately in profit or loss (Example 1A) and situations in which changes in estimate are offset against the residual margin (Example 2A).

25. The outcome of the approach illustrated in the example is that the revenue is perfectly fixed on the basis of initial estimates of the future claims. However, such perfection could not be achieved in practice. This is because:

(a) for the IASB, the change in the *risk adjustment* in the liability for remaining coverage also contributes to the measure of insurance contract revenue. The net change in this risk adjustment combines two effects—the expiry of risk relating to the coverage provided in the period, and any change in estimate of the risk relating to future coverage. Because these two components are not separated applying the building block model, any change in the estimate of risk attributable to future coverage would lead to a reallocation of revenue from the originally estimated amounts. For life insurance contracts, such changes in estimates of risk might not be great. But they would mean that a pure version of approach A could not be achieved in practice.

(b) similarly, for the FASB, the changes in the single margin contribute to the insurance contract revenue and the FASB has tentatively concluded that the single margin should be released on a pattern that reflects the release of uncertainty during the period. The release pattern is reassessed each period. Any change would result in reallocation of insurance contract revenue.

*Approach B: Treat the contract as a single performance obligation*

26. The second possible approach (Approach B) would be to treat the coverage provided over the whole duration of the contract as a single performance obligation that is satisfied over time.

27. The draft revenue standard proposes to require entities to recognise revenue for such obligations over time, 'by measuring the progress towards complete satisfaction' of the performance obligation. It could be argued that the most recent estimates of the pattern of expected claims provide a more relevant measure of progress than the original estimates, ie that any allocation to future periods of revenue attributed to funding the costs of benefits and other services should contemplate the relative amounts of future benefits and services. Hence, revenue should be reallocated to reflect the most recent estimates of expected claims.

28. The staff think that if revenue were to be re-allocated for insurance contract revenue, it should be re-allocated prospectively. In other words, the remaining revenue at the date of the change in estimate should be re-allocated on the basis of the latest estimates of the expected future claims. The cumulative revenue earned to date should not be re-measured by means of a catch-up adjustment in the current period. Although a cumulative catch-up adjustment might be the method envisaged in the draft revenue standard[8], a prospective adjustment is more consistent with the building block model from which revenue would be determined for insurance contracts. For example, the IASB has decided that, when the residual margin is unlocked (ie when changes in estimates of cash flows relating to future coverage are offset against the residual margin), the revised estimate of the remaining residual margin is allocated to income prospectively. Similarly, if there is a change in the expected pattern of reduction of variability of the cash flows, the pattern of release of the FASB single margin is revised prospectively. A prospective reallocation of revenue would also be simpler to apply in practice, because the revised allocation would follow the revised pattern of reduction in the building block liability—no further adjustments would be needed.

[8] Paragraph 38 of the draft revenue standard proposed that 'As circumstances change, an entity shall update its measure of progress to depict the entity's performance completed to date. Such changes shall be accounted for as a change in accounting estimate in accordance with IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*.'

29. Additionally, some constituents have expressed concerns regarding the volatility of revenue and whether it would obfuscate information about progress during the period towards completion of insurers' performance obligations. Application of a catch-up adjustment to re-measure cumulative revenue earned to date would contribute to this volatility. Although the draft revenue standard uses a catch-up adjustment approach, the boards have reduced the volatility of changing estimates of revenue by constraining the cumulative amount of revenue when the promised amount of consideration is variable to an amount the entity is reasonably assured to be entitled to. In contrast, the building block model for insurance requires use of probability-weighted estimates and thus cash inflows are incorporated into the insurance contracts measurement prior to the insurer becoming reasonably assured of the consideration.

30. The appendix to this paper illustrates the way in which Approach B could be applied. It illustrates both situations in which changes in estimate are recognised immediately in profit or loss (Example 1B) and situations in which changes in estimate are offset against the residual margin (Example 2B).

*Whether each period should be treated as a separate performance obligation*

31. There might be different views on whether each period of coverage in an insurance contract should be treated as a separate performance obligation or as progress towards complete satisfaction of a single performance obligation.

32. The draft revenue standard published in November 2011 proposed to define a performance obligation as a promise to transfer a 'distinct' good or service. Paragraph 28(b) proposed that a good or service is distinct if the customer can benefit from that good or service either on its own. Each period of insurance coverage would satisfy this condition.

33. Further, paragraphs B20- B24 in the IASB exposure draft (IG20- IG24 in FASB exposure draft) specifically discussed contracts with rights to renew after the initial contract period. Those paragraphs identified the optional services as separate performance obligations. Paragraph B24/IG24 permitted a simplified method of allocating consideration to each of the renewal periods. (The simplified method would allow the entity to allocate the transaction price by reference to the original estimates of the expected renewals and costs.)

34. Example 25 *Maintenance services with a renewal option* (paragraph B80/IG80) illustrated the requirements proposed in paragraph B24/IG24. The facts of the example were similar to the terms of a life insurance contract, the renewal of which would result in the entity bearing some uncertainty of the amount and timing of insured events for a longer duration. The customer had an option to renew the contract by paying the next premium instalment, but also had the right to allow the contract to lapse. The expected premiums (taking into account expected lapses) were allocated on the basis of the initial estimates of expected costs for each period.

35. However, the proposals for identifying separate performance obligations have changed recently. In July 2012, the boards tentatively decided to narrow the definition of 'distinct' services by additionally requiring that:

> … the promised good or service is distinct within the context of the contract because the good or service is not highly dependent on, or highly interrelated with, other promised goods or services in the contract.

36. The boards further tentatively decided to provide indicators of situations in which a good or service is distinct within the context of the contract. One of those indicators is that:

    (d) The good or service is not part of a series of consecutively delivered goods or services promised in a contract that meet the following two conditions:

        1 the promises to transfer those goods or services to the customer are performance obligations that are satisfied over time (in accordance with paragraphs 35 of the 2011 ED); and

        2 the entity uses the same method for measuring progress to depict the transfer of those goods or services to the customer.

37. The purpose of this amendment would be to allow entities providing repetitive services in a single contract to treat the entire contract as a single performance obligation that is satisfied over time. The boards did not specifically consider contracts with renewal options when discussing the amendment. The revenue project staff do not think that there was an intention to change the requirements for contracts with renewal options: each optional period of service would remain a separate performance obligation. However, as the matter was not discussed, this conclusion is not certain.

38. However, even if the amendment to the definition of 'distinct' was not intended to apply to maintenance contracts with renewal options, it might be argued that it would apply to life insurance contracts. In contrast to typical service contracts and most property and casualty insurance contracts, many life insurance contracts' renewal options are dependent on the events of the earlier periods. For example, the second year of a life insurance policy often becomes effective only if the policyholder didn't die during the first year of the policy (i.e., some policies only allow for one insured event). Accordingly, applying the concepts from the revenue recognition proposals, the services provided in the subsequent periods might reasonably be considered highly dependent on the earlier period's services and thus do not constitute separate performance obligations.

39. Furthermore, some might argue that the concepts developed for maintenance contracts are applicable to contracts that consist of time based performance obligations. The staff understand that these concepts were not arrived at with activity based performance obligations in mind. The renewal or continuation of a contract, and continued obligation to perform an as of yet completed activity, could require reallocation of the transaction price based on a reassessment of the measure towards progress of the activity.

40. The consideration received for a portfolio of insurance contracts that is attributable to funding the cost of claims and expenses[9] (especially for any policies that only allow for a single insured event, such as life insurance) might be thought of as consideration for an activity based performance obligation. To the extent insured events are still expected and haven't occurred to date, recognition of insurance contract revenue attributed to the funding of claims as originally expected might not be a good depiction of measuring progress towards completion of satisfaction of these contractual performance obligations. Similarly, if on a portfolio basis insured events are expected to occur earlier (e.g., life expectancy lessens), deferring revenue originally anticipated for periods of coverage no longer expected to occur might not accurately reflect the earlier satisfaction of performance obligations.

## Practical considerations

41. For the IASB, there is one practical advantage of approach A, when applied in conjunction with an ‘unlocked’ residual margin, ie where changes in estimates of the amount of future claims are offset against the residual margin. As illustrated in Example 2A in the appendix, approach A requires insurers to release adjustments to an unlocked residual margin at the same time as the related claims

[9] With the exception of the premium attributed to the margin (and risk adjustment), the remainder of the premium was charged in order to fund the expected costs of insured events.

unwind. This requirement means that the insurer's results are the same whether it recognises a change in expected cash flows in advance or an experience adjustment when the change occurs. In contrast, an insurer applying approach B could get different results.

42. However, especially for the IASB, there is also a significant practical advantage for Approach B. In conjunction with an 'unlocked' residual margin, Approach B (updating estimates) would be simpler to apply than Approach A (using original estimates).

43. Examples 2A and 2B in the appendix to this paper illustrate that when the margin is 'unlocked', approach B (reallocating revenue to reflect changes in patterns of future claims) measures revenue using the latest estimates of expected claims for the current period. Just as there would be no need to exclude previous changes in the estimates of the *amounts* of the expected cash flows (see paragraph 12(b)), there would be no need to exclude any changes in the pattern. Therefore, there would be no need to keep track of the historical development of the most recent estimates to separate the initial estimates from later revisions.

44. Applying the IASB proposals, most changes in estimate will be offset against the residual margin (they will be recognised immediately in profit in loss only if and to the extent that contracts are onerous). So approach B could require less tracking than approach A for entities applying the IASB proposals. The need to track the historical development of the most recent estimates has been identified as one of the most significant operational challenges for measuring insurance contract revenue. Accordingly, applying approach B could make the measurement of insurance contract revenue simpler for insurers applying the IASB proposals.

## Staff recommendations

45. The staff think that for the types of contract to which the building block approach applies (typically life insurance-type contracts):

    (a) the specific nature of the insurance contracts is such that recognising revenue on the basis of progress towards complete satisfaction of the contract obligations would be a reasonable way of applying revenue recognition principles;

    (b) the most recent estimates of the pattern of expected claims provide a more relevant measure of progress than the original estimates. To the extent that insured events are still expected and haven't occurred to date, deferring recognition of the related revenue until the activity occurs, is a good depiction of measuring progress towards completion of satisfaction of these contractual performance obligations; and

    (c) prospective re-allocation of remaining revenue is consistent with other aspects of the building block model.

46. For these reasons, and also giving weight to the practical advantages outlined in paragraphs 42-44, the staff recommend Approach B, ie that if there is a change in the expected pattern of future claims, the remaining insurance contract revenue should be re-allocated prospectively to reflect the latest estimates of that pattern.

| **Question for the boards** |
|---|
| Do you agree that, if there is a change in the expected *pattern* of future claims, the remaining insurance contract revenue should be re-allocated prospectively to reflect the latest estimates of that pattern? |

## Appendix: Illustrative examples

A1. This appendix illustrates alternative approaches for allocating insurance contract revenue when there has been a change in estimates of the pattern of expected claims.

A2. In practice, changes in estimates of the *pattern* of expected claims will often be accompanied by a change in *amount*. The way in which the change in *pattern* is treated will depend on whether changes in *amount* are recognised immediately in profit or loss, or offset against the residual margin. Therefore, the examples illustrate situations in which both changes occur.

A3. Example 1 illustrates the alternative approaches when changes in amount are recognised immediately in profit or loss.

A4. Example 2 illustrates the alternative approaches when changes in amount are offset against the residual margin (ie when the residual margin is ‘unlocked’).

## Example 1: treatment of a change in *pattern* if changes in *amount* are recognised immediately in profit or loss

### *Example 1A—Approach A—insurance contract revenue not re-allocated*

A5. Applying Approach A (viewing each period of coverage as a separate performance obligation and not reallocating the revenue), insurance contract revenue would be allocated on the basis of the original estimates of the expected claims for the coverage provided (assuming no changes in the amount of consideration expected to be received). This outcome could be achieved by treating changes in the estimates of the *pattern* of expected claims in the same way as changes in the estimate of the *amount* of expected claims.

**Example 1A**

An insurer applying the FASB proposals issues a portfolio of contracts for 5 years' insurance coverage. The policyholders pay premiums of CU1,000 at the start of the contracts). The expected claims are CU120 per year (ie CU600 over the duration of the contracts).

> *Simplifying assumptions:* Claims are paid immediately. There is no investment component. Expenses and the effects of the time value of money are immaterial. Actual claims incurred equal the most recent estimates of expected claims.

***Initial estimates of insurance contract revenue***

The single margin on initial recognition of the contract is CU400 (CU1,000 less CU600). The insurer allocates CU80 (1/5th of CU400) of the margin to profit or loss each period.

Insurance contract revenue for each period is measured as the sum of the expected claims (CU120) and the margin release (CU80), ie a total of CU200 per period. [10]

**Table 1A(i): Initial estimates**

| Year | 1 CU | 2 CU | 3 CU | 4 CU | 5 CU | Total CU |
|---|---|---|---|---|---|---|
| Insurance contract revenue | 200 | 200 | 200 | 200 | 200 | 1,000 |
| Incurred claims | (120) | (120) | (120) | (120) | (120) | (600) |
| Underwriting result (Allocation of single margin) | 80 | 80 | 80 | 80 | 80 | 400 |

***Change in estimates at the end of year 2***

At the end of year 2, there is a change in the estimate of future mortality rates, which changes the estimates of the amount *and pattern* of future claims. Instead of estimating expected claims of CU120 in each of years 3-5, the entity now estimates the expected claims[11] to be:

- CU160 in year 3, ie CU40 higher than previously expected
- CU130 in year 4, ie CU10 higher
- CU100 in year 5, ie CU20 lower

CU390 CU30 higher

10 If the time value of money were material, there would be a difference between the insurance contract revenue and premiums received. The insurance contract revenue would equal the premiums *adjusted to their present value* at the time of the coverage to which they relate.

11 For simplicity this example assumes that the premiums are received at the start of the contract. Therefore a change in outflows due to more expected insured events is not accompanied by a change in the consideration expected to be received. In practice, an increase in mortality would often be accompanied by a reduction in future premium for the portfolio, due to a decrease in the number of policies in-force in subsequent periods.

The change in the pattern of expected claims is treated in the same way as the change in the amount, ie by excluding the changes from the expected claims used to measure revenue. The insurer measures insurance contract revenue on the basis of the *original* estimates of the expected claims plus release of the margin, ie at CU200 per year. It presents all changes in estimates (and their subsequent unwinding as claims are incurred) as separate line items in the statement of comprehensive income:

**Table 1A(ii): Change in estimate recognised immediately in profit or loss – statements of comprehensive income**

| Year | 1<br>CU | 2<br>CU | 3<br>CU | 4<br>CU | 5<br>CU | Total<br>CU |
|---|---|---|---|---|---|---|
| Insurance contract revenue | 200 | 200 | 200 | 200 | 200 | 1,000 |
| Incurred claims | (120) | (120) | (160) | (130) | (100) | (630) |
| Change in estimate | - | (30) | - | - | - | (30) |
| Unwind of change as claims are incurred | - | - | 40 | 10 | (20) | 30 |
| Underwriting result<br>(Allocation of single margin less change in estimate in year 2) | 80 | 50 | 80 | 80 | 80 | 370 |

### *Example 1B—Approach B—insurance contract revenue re-allocated*

A6. Applying Approach B (ie viewing each period of coverage as progress towards satisfaction of a larger performance obligation) insurance contract revenue would be re-allocated to follow changes in the *pattern* of the expected claims. This outcome would require the insurer to split the overall changes in estimate to separate changes in pattern from changes in amount.

### Example 1B

The fact pattern is the same as that in Example 1A. However, the insurer reallocates insurance contract revenue in years 3-5 to reflect the revised pattern of expected claims.

The expected claims used to measure revenue are based on the *original estimates* of the *amount* of the remaining claims of CU360 (CU120 x 3), but allocated between periods in the same proportions as *most recent* estimates of the *pattern* of expected claims, ie:

- CU148 (CU360 x CU160/CU390) in year 3
- CU120 (CU360 x CU130/CU390) in year 4
- CU 92 (CU360 x CU100/CU390) in year 5

**Table 1B(i): Reallocation of revenue for change in pattern of expected claims**

| Year | 3<br>CU | 4<br>CU | 5<br>CU | ∑3-5<br>CU |
|---|---|---|---|---|
| Expected claims used to measure revenue<br>(*originally estimated* amount for remainder of contract, allocated on basis of *latest estimates* of pattern) | 148 | 120 | 92 | 360 |
| Single margin contributing to revenue | 80 | 80 | 80 | 240 |
| Insurance contract revenue | 228 | 200 | 172 | 600 |

The differences between the latest estimates of expected claims and the amounts used to measure insurance contract revenue represent the change in the *amount* of expected claims:

**Table 1B(ii): Calculation of amount to recognise immediately in profit or loss**

| Year | 3<br>CU | 4<br>CU | 5<br>CU | ∑3-5<br>CU |
|---|---|---|---|---|
| Revised estimate of expected claims | 160 | 130 | 100 | 390 |
| Expected claims used to measure insurance contract revenue *(from Table 1B(i))* | (148) | (120) | (92) | (360) |
| Change in amount of expected claims (difference) | 12 | 10 | 8 | 30 |

The change in the amount of the expected claims is presented as a separate line item in the statement of comprehensive income:

**Table 1B(iii): Change in estimate recognised immediately in profit or loss – statements of comprehensive income**

| **Year** | **1**<br>**CU** | **2**<br>**CU** | **3**<br>**CU** | **4**<br>**CU** | **5**<br>**CU** | **Total**<br>**CU** |
|---|---|---|---|---|---|---|
| Insurance contract revenue (from Table 1B(i)) | 200 | 200 | 228 | 200 | 172 | 1,000 |
| Incurred claims | (120) | (120) | (160) | (130) | (100) | (630) |
| Change in estimates | - | (30) | - | - | - | (30) |
| Unwind of change in estimates as claims are incurred (from Table 1B(ii))[12] | - | - | 12 | 10 | 8 | 30 |
| Underwriting result (Allocation of single margin less change in estimate in year 2) | 80 | 50 | 80 | 80 | 80 | 370 |

12 These might be alternatively thought of as an unwind of changes in estimates of revenue and claims. For example, in year 3 the CU 12 represents CU 40 of additional claims expected for the year (and recognized in underwriting income in year 2 as part of the CU 30) offset by CU 28 of additional revenue, which could be thought of as similarly recognized as part of the CU 30 in year 2. This view treats the CU 30 change in estimates recognized in year 2 to consist of: CU 40, CU 10, and (CU 20) of differences in expected claims in years 1 through 3, respectively; and CU 28 and (CU 28) in revenue in years 1 and 3, respectively.

A7. If an insurer applying the FASB proposals changes its estimates of expected future claims, it might also re-assess the pattern in which it expects to be released from exposure to risk (as evidenced by a reduction in the variability of cash outflows). It might then change the pattern of release of the single margin. Any change in the pattern of release of the single margin would change the pattern of insurance contract revenue by an equal amount.

## Example 2: treatment of a change in *pattern* if changes in *amount* are offset against the residual margin

A8. Example 2 illustrates the treatment of changes in the pattern of expected claims for situations in which changes are offset against the residual margin (the residual margin is 'unlocked'). This section is relevant only for the IASB proposals.

A9. There are additional considerations when the residual margin is unlocked. Unlocking has the effect of adjusting the residual margin, ie the estimate of unearned profits. Therefore, if changes in expected claims affect future periods unevenly, we should consider how these changes affect the allocation of both insurance contract revenue and profits. The conclusions about the allocation of the adjusted profits will affect the release pattern for the residual margin. In turn, the release pattern for the residual margin will affect the method used to achieve the desired allocation of insurance contract revenue.

### *Example 2A—Approach A—insurance contract revenue not re-allocated*

A10. Applying Approach A (ie viewing each period of coverage as a separate performance obligation and not re-allocating revenue), insurance contract revenue should be allocated on the basis of the original estimates of the expected claims and margins. Further, any increase (or decrease) in expected claims for a particular period should be treated as a decrease (or increase) in the expected profitability of that period's coverage only.

A11. These outcomes could be achieved by releasing adjustments to the residual margin in the same period as the related changes in expected claims unwind, and measuring revenue by combining the amounts released with the latest estimates of expected claims.

**Example 2A**

The facts are the same as those in example 1. To recap: at the end of year 2, estimates of expected claims are changed to:

- CU160 in year 3, ie CU40 higher than previously expected
- CU130 in year 4, ie CU10 higher
- CU100 in year 5, ie CU20 lower

CU390 CU 30 higher

However, in this example, the insurer offsets the changes in estimate against the residual margin. As a result, the residual margin at the end of year 2 is reduced from CU240 (CU400 at inception less CU80 released in each of years 1 and 2) to CU210.

The insurer releases the adjustments to the residual margin in the same period as the changes in expected claims unwind:

**Table 2A(i): Revised release pattern for adjusted residual margin**

| Year | 3<br>CU | 4<br>CU | 5<br>CU | ∑3-5<br>CU |
|---|---|---|---|---|
| Release of original residual margin | 80 | 80 | 80 | 240 |
| Release of adjustments to residual margin | (40) | (10) | 20 | (30) |
| Total release of adjusted residual margin | 40 | 70 | 100 | 210 |

The insurance contract revenue for the period is measured using latest estimates of the expected claims and the revised release pattern for the residual margin.

**Table 2A(ii): Measurement of insurance contract revenue**

| **Year** | **3**<br>**CU** | **4**<br>**CU** | **5**<br>**CU** | **∑3-5**<br>**CU** |
|---|---|---|---|---|
| Expected claims used to measure insurance contract revenue<br>(*latest estimates*) | 160 | 130 | 100 | 390 |
| Residual margin contributing to revenue (from Table 2A(i)) | 40 | 70 | 100 | 210 |
| Insurance contract revenue | 200 | 200 | 200 | 600 |

The overall effect is that insurance contract revenue is an estimate of the amount that the insurer originally charged for that period's coverage, and any changes in the expected claims for a period affect the profits earned in that period. In periods where the claims are higher than originally expected, profits decrease. In periods where the claims are lower than originally expected, profits increase.

**Table 2A(iii): Change in estimate offset against residual margin – statements of comprehensive income**

| Year | 1<br>CU | 2<br>CU | 3<br>CU | 4<br>CU | 5<br>CU | Total<br>CU |
|---|---|---|---|---|---|---|
| Insurance contract revenue (From table 2A(ii)) | 200 | 200 | 200 | 200 | 200 | 1,000 |
| Incurred claims | (120) | (120) | (160) | (130) | (100) | (630) |
| Underwriting result (From table 2A(i)) | 80 | 80 | 40 | 70 | 100 | 370 |

### *Example 2B—Approach B—insurance contract revenue re-allocated*

A12. Applying approach B (ie treating each period of coverage as progress towards satisfaction of a larger performance obligation), revenue is re-allocated to follow changes in the *pattern* of the expected claims.

A13. It could be argued that the remaining residual margin should be re-allocated in the same way. The IASB has tentatively decided that the residual margin should be released over the coverage period on a systematic basis that is consistent with the pattern of transfer of services provided under the contract. Revenue is also recognised by reference to transfer of services. So a change in the allocation pattern for revenue implies a change in the pattern of transfer of services, which in turn implies a need to revise the release pattern for the residual margin.

A14. These outcomes could be achieved using latest estimates of the expected claims, and releasing the whole of the adjusted residual margin in a way that reflects the revised estimates of the pattern of future claims.

**Example 2B**

The facts are the same as those in example 2A. However, in this example, the insurer releases the revised residual margin of CU210 as a single amount, to spread the change in profitability over the remaining coverage period.

The residual margin is released in proportion to the revised estimates of the pattern of expected claims:

- CU 86 (CU210 x CU160/CU390) in year 3
- CU 70 (CU210 x CU130/CU390) in year 4
- CU 54 (CU210 x CU100/CU390) in year 5

  CU 210

The insurance contract revenue for the period is measured using latest estimates of the expected claims and the revised release pattern for the residual margin.

**Table 2B(i): Measurement of insurance contract revenue**

| Year | 3<br>CU | 4<br>CU | 5<br>CU | ∑3-5<br>CU |
|---|---|---|---|---|
| Expected claims (latest estimates) | 160 | 130 | 100 | 390 |
| Residual margin release | 86 | 70 | 54 | 210 |
| Insurance contract revenue | 246 | 200 | 154 | 600 |

The overall effect is that insurance contract revenue is an estimate of the progress towards completion of the contract as a whole. In periods where the claims are higher than originally expected, revenue and profits increase. In periods where the claims are lower than originally expected, revenue and profits decrease.

**Table 2B(ii): Change in estimate offset against residual margin – statements of comprehensive income**

| Year | 1<br>CU | 2<br>CU | 3<br>CU | 4<br>CU | 5<br>CU | Total<br>CU |
|---|---|---|---|---|---|---|
| Insurance contract revenue (From table 2B(i)) | 200 | 200 | 246 | 200 | 154 | 1,000 |
| Incurred claims | (120) | (120) | (160) | (130) | (100) | (630) |
| Underwriting result (From table 2B(i)) | 80 | 80 | 86 | 70 | 54 | 370 |