STAFF PAPER

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Insurance working group

Project	**Insurance contracts**		
Paper topic	Presenting 'earned premiums' in the Statement of Comprehensive income		
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Purpose of paper

1. At their October 2011 meeting, the IASB and FASB tentatively decided that an insurer applying the building block approach should present volume information in the statement of comprehensive income. However, they did not decide how insurers should measure the premiums.

2. At an education session in June 2012, the boards discussed a method of deriving measures of 'earned premiums' from the liability measurement. This paper explains the method discussed.

Structure of paper

3. This paper :

   (a) explains the objectives of an earned premium presentation (paragraphs 4-7);

   (b) describes the components of earned premiums (paragraphs 8-12);

   (c) describes a possible method of measuring earned premiums (paragraphs 13-43); and

   (d) presents a simple examples that illustrates this method (paragraphs 44-56).

The objective of an earned premium presentation

4. The objective of presenting earned premiums is to provide a volume measure that is similar to the measure of revenue that results from applying the requirements proposed in the exposure draft *Revenue from Contracts with Customers* ('the draft Revenue standard'). Earned premiums are measured at an amount that reflects the consideration (premiums) to which the entity is entitled for the performance obligations that it has satisfied in the period, ie for the goods or services (eg insurance coverage) that it has transferred to the customer (policyholder) in the period.

5. A method of measuring earned premiums that satisfies this objective is one that measures the premiums by reference to the initial estimates of the pattern of the services provided in each period, eg by reference to the *expected* claims and other benefits (fulfilment costs) in each period as estimated at the time of pricing the contract.

6. This method of measuring earned premiums reflects a view that the service that the insurer transfers to the customer is insurance coverage. The insurer priced the premiums at the start of the contract on the basis of the estimates of expected claims and benefits at that time. The amount of premiums recognised as earned in each period approximates the amount that the insurer would in theory have charged for each period of coverage had it issued separate contracts for each period on the issuance date of the actual contract. This amount would rationally be the present value of the expected cash flows for the period plus risk and residual margins.

7. Any difference between the actual claims incurred and the amount previously recognised in the statement of comprehensive income reflects an experience adjustment in the period the claim is incurred. It does not change the amount of revenue that the insurer has earned in each period.

The components of earned premium

8. In this section, we present a simplified overview of the components of earned premium. We assume that there are no expenses other than claims and that any investment component has been excluded from the premium to be presented in the statement of comprehensive income. We ignore the possibility of changes in estimates of the timing and amount of the future cash flows and we consider experience adjustments only in the context of cash outflows. We address the complications arising from changes in estimates and premium experience adjustments later in the paper (paragraphs 233-36).

9. An earned premium presentation recognises similar gains and losses to those recognised applying the summarised margin presentation proposed in the insurance contracts exposure draft. However, it combines them differently.

10. The summarised margin presents the gains and losses according to their source. The exposure draft proposed the following presentation:

Summarised margin presentation	Currency units
Release of risk adjustment (IASB only)	A
Release of residual or single margin	B
Underwriting margin	A+B
Experience adjustments (differences between expected cash flows C and actual cash flows D)	C-D
Interest accreted on insurance contract liability	-E
Profit or loss on insurance contracts	A+B+C-D-E

11. An earned premium presentation recognises similar gains and losses but separately aggregates inflows and outflows:

Earned premium presentation	Currency units
Earned premiums	A+B+C
Actual claims and expenses incurred	-D
Interest accreted on insurance contract liability	-E
Profit or loss on insurance contracts	A+B+C-D-E

12. Notes:

(a) the measure of earned premiums includes all amounts that the premiums charged (the inflows) are intended to cover according to the insurance contract measurement, ie expected cash flows (C), the margin required for bearing risk (A) (for the IASB) and a profit margin (B).

(b) for the purposes of a summarised margin presentation, the exposure draft defined experience adjustments as being the differences between actual cash flows and previous estimates of those cash flows. So claims experience adjustments would refer to claims *paid*. For the purposes of a premium allocation approach the amounts recognised as claims and expenses would be the amounts incurred, rather than paid. Hence the amounts labelled as C and D would not be exactly the same in the two presentations.

(c) expected claims (C) and actual claims (D) are measured at their present value at the date on which claims are incurred, ie when coverage is provided. These amounts include both the discounted amounts used to measure the initial contract liability and the interest accreted between then and the period in which the coverage is provided. If premiums are received in advance of coverage, the result is that over the life of the contract, the total measure of earned premiums is greater than the cash premiums received.

A method of measuring earned premiums

Measuring the change in the liability

13. There is a simple relationship between customer consideration amounts reported in the statement of financial position, statement of total comprehensive income and statement of cash flows. If the customer pays in advance (as is typical with an insurance contract) the relationship is:

Unearned consideration (liability) at start of period.	+	Consideration received (cash flow)	+	Interest accreted (expense)	-	Consideration earned (income)	=	Unearned consideration at end of period

14. Or, using insurance terminology:

Unearned premiums (insurance contract liability) at start of period	+	Premiums received (cash flow)	+	Interest accreted (expense)	-	Earned premiums (income)	=	Unearned premiums (insurance contract liability) at end of period

15. The draft Revenue standard prescribes a method of measuring the revenue (consideration) earned, ie the amount reported *in the statement of comprehensive income*. An entity applying that standard could then determine the liability at the end of the period as the balancing figure—equalling consideration received plus accretion of interest less revenue earned.

16. In contrast, the proposed standard for insurance contracts prescribes a method for measuring the insurance contract liability, ie the amount reported *in the statement of financial position*. Consequently, an insurer could measure the earned premium as a difference between premiums received plus accretion of interest less the liability at the end of the period.

Measurement of earned premiums	Currency units
Premiums received	F
Accretion of interest on liability	E
+/- decrease/increase in liability	-G
Earned premiums	F+E-G

Claims incurred but not paid

17. The period over which the proposed standard requires insurers to allocate earned premiums might depend on the boards' views regarding the nature of the services transferred by the insurer. Taking the view that the service is the provision of insurance coverage, the appropriate period would be the coverage period. (If the service was the payment of claims and benefits or the protection against uncertainty in cash flows, the appropriate period might include both the coverage period and the claims settlement period.)

18. Recognising premiums as being earned over the coverage period would be consistent with the requirements of the premium allocation approach.

19. To recognise premiums as being earned over the coverage period, an insurer would measure them by reference to the change in the liability for *remaining coverage*. Consequently, the first step in measuring earned premiums would be to divide the total insurance contract liability into two components:

    (a) the liability for remaining coverage; and

    (b) the liability for incurred claims.

20. These two components are equivalent to the two amounts measured separately by entities applying the premium allocation approach. (In addition, unlike for the premium allocation approach, the building block approach requires an insurer to update its estimate of the cost of future claims. Any related liability created before the occurrence of the insured event might be viewed as a sub-component of the liability for remaining coverage or as a separate component altogether.)

21. However, unlike the premium allocation approach, the building block approach does not require an insurer to measure its liability for remaining coverage separately from its liability for incurred claims. Consequently an earned premium presentation could require insurers to disaggregate amounts that the building block approach does not otherwise require them to disaggregate.

22. Insurers are likely to have the data they need to disaggregate the cash flows into two components—they track the claims that have been reported and maintain estimates of claims that have been incurred but not yet reported. However, measuring the two components (including, for the IASB, the risk adjustment) separately could add some complexity.

> **Operational consequence 1**
>
> To allocate earned premiums over the coverage period, an insurer applying the building block approach would need to separate the liability for remaining coverage from the liability for incurred claims

Changes in estimates of future outflows

23. In previous paragraphs, we have not considered the impact of a change in estimates on the measure of premiums earned.

24. Suppose at the end of one period, an insurer increases its estimates of cash flows for future claims. It recognises the increase as an expense in the period and an increase in the liability for remaining coverage[1]. Applying the formula in paragraph 16, this would result in reduction of the measure of earned premiums for the period.

25. However, as explained in paragraph 6, we are seeking to measure earned premiums in each period by reference to the expected cash flows for *that* period, ie the premium that the insurer would have charged for that period had it priced each period's coverage separately. An increase in future claims implies that future periods' cover will be less profitable, not that the current period's revenue has reduced.

[1] The increase would be recognised as an expense unless it is offset against the residual margin.

26. Accordingly, we need to refine our formula. We need to exclude from the measure of the changes in the liability any changes arising from changes in estimates of future claims that have been recognised in profit or loss.

27. We also need to exclude the effects of the *reversal* of these changes in estimates in later periods when the increased claims are incurred. In these later periods, the liability for remaining coverage will reduce by an amount that includes both the original estimates of expected cash flows and the subsequent adjustments. However, the premium charged for the period reflected only the original estimates, and the measure of earned premium should not be inflated by the additional claims.

28. Accordingly, the formula is refined as follows:

Measurement of earned premiums	Currency units
Premiums received	F
Accretion of interest on liability for remaining coverage	E
+/- decrease/increase in liability for remaining coverage	-G
-/+ decrease/increase in liability for remaining coverage caused by changes in estimates and reversals of changes in estimates	H
Earned premiums	F+E-G+H

29. To make the necessary adjustments for reversals in changes in estimates, the insurer will have to maintain records that separate the expected cash flows for each period into two components—the amount originally estimated and later adjustments. Tracking previously recognised gains or losses to the period in which the claim is incurred might require insurers to maintain some form of memo account.

30. Similar steps might be necessary to account for changes in estimates of risk.

Operational consequence 2

To identify reversals in changes in estimates, an insurer will need to separate the expected cash flows and risk adjustments for each future period into two components—the amounts originally estimated and subsequent adjustments—and track both amounts until they reverse in the future period.

31. These adjustments for changes in estimates and their reversal would be required only if the change is recognised in the statement of comprehensive income and thus affects the liability for remaining coverage. If the change is instead offset against the residual margin—ie, treated as a transfer between the components of the total liability rather than as a change in the liability and thus not recognised in the statement of comprehensive income—no adjustment is required. Consequently, fewer adjustments might be needed applying the IASB's tentative decision to 'unlock' the residual margin for changes in estimates of future cash flows, than would be required applying the FASB's tentative decision not to unlock the single margin. However, adjustments would be required for those changes that are not offset against the residual margin, such as increases in estimates of future cash flows that exceed the residual margin and are immediately recognised as losses in the statement of comprehensive income (ie if contracts become onerous).

Changes in estimates attributable to changes in premiums received

32. It might not be appropriate to exclude from the measure of earned premium all effects of changes in estimates.

33. Suppose for example, that lapse rates in a period are lower than expected. An insurer receives premiums totalling CU100 more than expected. As a result of these higher premiums, the insurer incurs and pays additional claims of CU40 in the current period and expects to incur and pay additional claims of CU60 in the following period.

34. At the end of the period, the insurer has an additional liability for expected cash outflows of CU60.

35. The insurer has received more premiums than expected. We might think that 40 of this premium should be recognised as earned in the current period, and 60 in the next period. However, our formula does not produce this result:

Measurement of earned premiums	Currency units
Premiums received	+100
Accretion of interest on liability (ignored for simplicity)	-
- increase in liability for remaining coverage:	-60
+ increase in liability for remaining coverage caused by changes in estimates.	+60
Earned premiums	+100

36. A possible solution might be to treat higher-than-expected premiums in the same way as new contracts—essentially the additional premium reflects consideration received for additional coverage. The additional liability for expected cash outflows could be added to the amounts recorded for *original estimates* of future expected cash flows, rather than the amounts recorded for changes in estimates of future expected cash flows. The premiums would then be recognised as earned as the liability reduces.

Operational consequence 3

An insurer might need to treat changes in estimates differently depending on their source. Some changes might need to be treated as if they were original estimates and others as subsequent adjustments.

Changes in discount rates

37. Adjustments to the basic formula are also required if a change in discount rate affects the measure of the liability.

38. Consider a contract in which premiums are received in advance. The liability is measured by reference to the present value of the future claims. If the discount rate reduces at the end of one period, the liability for remaining coverage increases. Without any adjustment to the basic formula, the measure of earned premiums for the current period would decrease by the same amount. However, a change in the discount rate applied to future cash flows should not affect the measure of revenue earned to date. Therefore, it is necessary to exclude from the measure of the earned premiums the effects of a change in discount rates.

39. However, we think that there might not be a need for later adjustments to reverse the effects. As explained in paragraph 12(c), the expected claims used to measure revenue are measured at their present value when the claims are incurred. The amounts are the same irrespective of the discount rates applied before then, ie between initial recognition of the liability and the claims being incurred. A reduction in discount rates during the course of the contract would increase the liability measured at that time, but reduce the interest accreted in the period up until the claims being incurred. Our formula would reflect this effect: it would include a bigger reduction in the liability as coverage is provided, but a correspondingly smaller amount of accreted interest, the combination of which would not affect earned premium.

Summary of adjustments

40. Taking into account all of the matters discussed in this section, the formula for measuring earned premiums by reference to the change in liability could have all of the following components:

Measurement of earned premiums by reference to change in liability	Currency units
Premiums received	F
Accretion of interest on liability for remaining coverage	E
+/- decrease/increase in liability for remaining coverage	-G
-/+ decrease/increase in liability for remaining coverage caused by changes in *some* (but not other) estimates and reversals of changes in estimates	H
+/- reduction/increase in liability for remaining coverage caused by change in discount rates	I
Earned premiums	F+E-G+H

Illustrative example

41. This section includes a simple example to illustrate the effects of changes in estimates of expected future cash flows on the presentation of earned premiums by insurers applying the building block approach. The changes in estimate would be recognised either in the statement of comprehensive income or by offsetting some changes against ('unlocking') the residual margin.

42. The financial results are different depending on whether the changes are recognised in the statement of comprehensive income or offset against the residual margin. So the example illustrates both situations.

43. The example in this section does not represent any particular type of contract. It is designed only to illustrate very simple generic contracts.

Illustrative example – fact pattern

44. Consider a portfolio of five-year contracts with premiums of CU1,500 and expected claims at inception of CU500, which arise evenly over the contract. For simplicity, we ignore the time value of money and risk. It is assumed that services are transferred evenly over the contract. Consequently, the margin (single or residual) is allocated on the basis of the passage of time. Earned premiums would be measured as follows:

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Premiums earned	300	300	300	300	300	**1,500**
Expected claims	(100)	(100)	(100)	(100)	(100)	**(500)**
Underwriting result	**200**	**200**	**200**	**200**	**200**	**1,000**

45. At the end of year 3 the insurer expects an increase of future claims in years 4 and 5 as follows:

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Expected claims	(100)	(100)	(100)	(250)	(250)	**(800)**

46. The change in estimates results in an increase in expected claims and a decrease in expected contract profitability of CU300. The insurer would account for those two situations differently, depending upon whether the margin is locked at inception or unlocked. The insurer would recognise different underwriting results in years 3-5.

Underwriting result	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Margin locked	200	200	(100)	200	200	**700**
Margin unlocked	200	200	200	50	50	**700**

Presentation of the changes in the estimates in the statement of comprehensive income when margin is locked

47. When the margin is locked, the margin established at inception is not adjusted for changes in estimates. Instead, the insurer accounts for the increase in the estimates of the future claims by an increase in the insurance contract liability and by recognising a corresponding expense in the statement of comprehensive income.

48. The table below presents the insurance contract liability recognised if the margin is locked. It disaggregates the total liability into three components to present how the measure of earned premiums is derived from the statement of financial position. Disaggregating the liability in this way ensures that earned premium is measured by reference to the change in the liability for remaining coverage only (see paragraphs 19-21) and excluding the effects of changes in estimates of future cash flows (see paragraphs 26-28).

49. The example assumes that claims are paid in the period after they are incurred.

	Inception	Year 1	Year 2	Year 3	Year 4	Year 5
Liability for remaining coverage - unearned premiums	1,500	1,200	900	600	300	0
Liability for remaining coverage - changes in estimates	0	0	0	300	150	0
Liability for incurred claims	0	100	100	100	250	250
Insurance contract liability	**1,500**	**1,300**	**1,000**	**1,000**	**700**	**250**

50. The table below presents how changes in estimates might be presented in the statement of comprehensive income when margin is locked.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Earned premiums	300	300	300	300	300	**1,500**
Claims incurred	(100)	(100)	(100)	(250)	(250)	**(800)**
Adjustment for reversals of changes in estimates. (See paragraph 27)				150	150	**300**
Income (expense) from changes in estimates			(300)			**(300)**
Underwriting result	**200**	**200**	**(100)**	**200**	**200**	**700**

51. Premiums earned consist of the following:

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Expected claims	100	100	100	100	100	**500**
Release of margin	200	200	200	200	200	**1,000**
Premiums earned	**300**	**300**	**300**	**300**	**300**	**1,500**

Presentation of the changes in the estimates in the statement of comprehensive income when margin is unlocked

52. If the margin is unlocked, the changes in estimates are offset against the margin (the present value of the fulfilment cash flows increases but the residual margin decreases by the same amount). The effect of the change in estimates is therefore recognised in the statement of comprehensive income only when the margin is released.

53. The table below presents the insurance contracts liability when the margin is unlocked.

	Inception	Year 1	Year 2	Year 3	Year 4	Year 5
Liability for remaining coverage - unearned premium	1,500	1,200	900	600	300	0
Liability for remaining coverage - changes in estimates[2]	0	0	0	0	0	0
Liability for incurred claims.	0	100	100	100	250	250
Insurance contract liability	**1,500**	**1,300**	**1,000**	**700**	**550**	**250**

54. The table below presents how the changes in estimates might be presented in the statement of comprehensive income when the margin is unlocked and allocated based on the same allocation pattern as that originally estimated, ie the passage of time.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Earned premiums	300	300	300	300	300	**1,500**
Changes in estimates	0	0	0	0	0	**0**
Claims incurred	(100)	(100)	(100)	(250)	(250)	**(800)**
Underwriting result	**200**	**200**	**200**	**50**	**50**	**700**

[2] If the margin had been exhausted, any further increases in the estimates of future cash flows would increase the liability. The accounting would be similar to that for a locked scenario (or for an onerous contract under the premium allocation approach).

55. Earned premiums consist of:

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Expected claims	100	100	100	250	250	**800**
Margin release	200	200	200	50	50	**700**
Earned premiums	**300**	**300**	**300**	**300**	**300**	**1,500**

56. When changes in estimates are offset against the residual margin, the insurer might not need to track the reversals of the changes in estimates in order to measure earned premiums—the premium could be allocated based on the revised estimates of the claims and margin. However, if the margin has been used up, any further increases in net outflows would be recognised in profit or loss. They would need to be tracked in the same way as changes in estimates for the "locked" approach.