STAFF PAPER

November 2016

IASB Meeting

Project	**Insurance contracts**		
Paper topic	Experience adjustments		

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Purpose of this paper

1. This paper considers whether the requirements in a draft of IFRS 17 *Insurance Contracts* (draft IFRS 17) on changes to the carrying amount of the contractual service margin for experience adjustments should be amended.

Structure of this paper

2. This paper is set out in two sections:

   (a) The first section (paragraphs 7 to 27) considers the treatment of changes in fulfilment cash flows for contracts without direct participation features (i.e. under the general model), in particular, the combined effect of experience adjustments and any directly related changes in the estimates of future cash flows.

   (b) The second section (paragraphs 28 to 31) considers whether the treatment of experience adjustments for contracts with direct participation features (i.e. under the variable fee approach) should be amended to be consistent the treatment under the general model.

Scope of this paper

3. An experience adjustment is defined as a difference between:

   (a) previous estimates of premium receipts, and claims and expenses expected to be incurred in the period, and the actual premiums received, and claims and expenses incurred in the period; or

   (b) previous estimates of claims and expenses incurred, and the related cash flows or current estimates of those incurred claims and expenses.

4. The experience adjustments described in (a) above relate to liabilities for the remaining coverage. The experience adjustments described in (b) above relate to liabilities for incurred claims.

5. This paper considers only the treatment of experience adjustments that relate to liabilities for the remaining coverage. All experience adjustments relating to liabilities for incurred claims do not relate to future coverage and other services and are recognised in profit or loss.

Staff recommendations

6. The staff recommends that:

   (a) for contracts measured under the general model:

      (i) when an experience adjustment directly causes a change in the estimate of the present value of future cash flows, the combined effect of the experience adjustment and the change in the estimate of the present value of the future cash flows should not adjust the contractual service margin but should be recognised in profit or loss;

      (ii) guidance should be added to draft IFRS 17 explaining that an experience adjustment directly causes a change in the estimate of the present value of future cash flows only when it causes a change in the future rights and obligations for the group of contracts (ie the number of coverage units). A change in the measurement only of existing rights and obligations is not directly caused by an experience adjustment.

(b) For contracts measured under the variable fee approach, experience adjustments arising from non-financial risk that do not affect the underlying items, and any directly caused changes in the estimates of the present value of future cash flows, should not adjust the contractual service margin but should be recognised in profit or loss.

Contracts measured under the general model

The International Accounting Standard Board's (the Board) tentative decisions to date

7. In March 2014, the Board tentatively decided:

   (a) that differences between the current and previous estimates of the present value of cash flows related to future coverage and other future services should be added to, or deducted from, the contractual service margin, subject to the condition that the contractual service margin should not be negative; and

   (b) differences between the current and previous estimates of the present value of cash flows that do not relate to future coverage or other services should be recognised in profit or loss.

8. In June 2016, the Board tentatively decided that when an experience adjustment causes a change in the estimate of the present value of future cash flows the combined effect is regarded as relating to future coverage or other services. The relevant paragraphs of draft IFRS 17 are set out in Appendix A.

Feedback from respondents

9. Some respondents found paragraph B93 in draft IFRS 17 difficult to interpret, in particular how to determine if a change in the estimate of the present value of future cash flows is caused by an experience adjustment.

10. Some respondents noted that for insurance contracts measured using the general model, the majority of experience adjustments would cause a change in the estimates of the present value of future cash flows and would adjust the contractual service margin. Some of these respondents questioned whether this was the Board's intention.

11. A few respondents expressed concern that adjusting the contractual service margin for experience adjustments might cause operational challenges. One respondent was concerned that information about incurred claims would have to be extracted from one system and allocated to specific groups of contracts within a different system (ie the system used to calculate the contractual service margin). Another respondent stated that existing systems do not identify the cause of changes in the estimates of the present value of future cash flows.

12. Some respondents stated that they did not believe that it was appropriate to defer the recognition of experience adjustments to future periods. In contrast, other respondents stated that it would be appropriate to adjust the contractual service margin for the combined effect of experience adjustments and any directly caused changes in the estimates of the present value of future cash flows, because this would reduce volatility in the statement of profit or loss.

Staff analysis

Background

13. The only experience adjustments identified by participants in the external testing that would not cause a change in the estimates of the present value of future cash flows were expense adjustments (other than experience adjustments that relate to estimates of liabilities for incurred claims).

14. Any experience adjustment that causes the number of contracts at the end of a reporting period to differ from the expected number would cause a change in the estimate of the present value of future cash flows even if there was no change made to the underlying assumptions about for example, mortality, longevity or persistency rates. This is because the number of contracts to which rate assumptions are applied to estimate the present value of future cash flows would change if the experience in the period was not exactly as expected.

15. Periodically, an entity might undertake experience studies to determine appropriate assumptions when determining estimates of future cash flows. Experience studies consider past experience and the likelihood that past experience represents a trend, or trends, that can be expected to continue into the future. Such studies may contribute to a decision by the entity to make a change to

a rate assumption that it will apply when estimating future cash flows. However, the staff did not intend that a decision to change a rate assumption would be regarded as being caused by experience adjustments that had occurred in the current period, or past periods.

16. The staff thinks that it is possible to make a clear distinction between changes in estimates of cash flows that should be combined with experience adjustments and other changes in estimates of cash flows. The changes in estimates of cash flows that should be combined are those directly caused by an experience adjustment because the experience adjustment changes the future rights and obligations for the group of contracts (ie the number of coverage units), and not just the measurement of those rights and obligations. The staff proposes to add guidance to this effect in the application guidance.

17. If the Board decides that the combined effect of experience adjustments and any directly caused changes in the estimates of the present value of future cash flows should not adjust the contractual service margin, but should be recognised in profit or loss, the only changes in the estimates of the present value of the future cash flows that would adjust the contractual service margin would arise from changes in rate assumptions and experience adjustments arising from premiums received in the period that relate to future services.

18. Conversely, if the Board decides to adjust the contractual service margin for the combined effect of experience adjustments and any directly caused changes in the estimates of the present value of future cash flows, the only experience adjustments that would be recognised in profit or loss (other than experience adjustments that relate to estimates of liabilities for incurred claims) would be adjustments to expenses.

Comparison of the different approaches

19. Combining the effects of experience adjustments and any directly caused changes in the estimates of the present value of future cash flows means that either:

    (a) not all experience adjustments are recognised in profit or loss; or

(b) not all changes in the estimates of the present value of future cash flows are adjusted against the contractual service margin.

20. The different approaches that could be adopted are summarised in the table below.

	Approach A	Approach B
Combined effect of experience adjustments and the resulting changes in the estimates of the present value of future cash flows	CSM	P&L
Other experience adjustments	P&L	P&L
Other changes in the present value of future cash flows	CSM	CSM

21. Only the combined effect of experience adjustments and the directly caused changes in the estimates of the present value of future cash flows would be treated differently under Approach A and Approach B.

22. Under the current tentative decisions (Approach A), the combined effect would adjust the contractual service margin. The recognition of profit for the group of contracts would be smoothed, compared to Approach B, but the recognition of revenue would be more volatile, compared to Approach B.

23. An example illustrating these effects is provided in Appendix B.

Operational impacts

24. Experience adjustments relating to liabilities (and assets) for the remaining coverage can be expected to occur for most, if not all, groups of contracts in every reporting period. If the combined effect of an experience adjustment and a resulting change in the estimate of the present value of future cash flows is regarded as relating to future service (Approach A), it is likely that an adjustment would be made to the contractual service margin for most, if not all, groups of contracts in every reporting period.

25. In order to determine the amount of each adjustment, the actual claims and fulfilment expenses incurred for each group of contracts would need to be determined. This could require information about incurred claims to be extracted from one set of systems and attributed to each group of contracts within a different system (ie the system used to calculate the contractual service margin). This could require changes to existing systems and processes and incur significant implementation and increased operational costs.

26. However, the staff believes that if the combined effect of an experience adjustment and a directly caused change in estimate of the present value of future cash flows is not adjusted against the contractual service margin there would be no need to determine the actual claims and expenses at a the level of a group of contracts. Adjustments would be made to the contractual service margin only when changes are made to rate assumptions. Changes to rate assumptions are expected to occur less frequently.

Conclusion

27. The staff recommends that the combined effect of experience adjustments and any directly caused changes in the estimates of the present value of future cash flows for a group of contracts should not adjust the contractual service margin but should be recognised in profit or loss (Approach B). The staff believes that this approach would provide more relevant information about the performance of a group of contracts in each period and could reduce operational complexity (compared to Approach A).

Question 1 – Changes in the contractual service margin for insurance contracts under the general model

Does the Board agree that for contracts measured under the general model:

(a) when an experience adjustment directly causes a change in the estimate of the present value of future cash flows, the combined effect of the experience adjustment and the change in the estimate of the present value of the future cash flows should not adjust the contractual service margin but should be recognised in profit or loss;

(b) guidance should be added to draft IFRS 17 explaining that an experience adjustment directly causes a change in the estimate of the present value of future cash flows only when it causes a change in the future rights and obligations for the group of contracts (ie the number of coverage units). A change in the measurement only of existing rights and obligations is not directly caused by an experience adjustment.

Contracts measured under the variable fee approach

28. For variable fee contracts, there are potentially three types of experience adjustments:

(a) experience adjustments that affect the underlying items because the entity shares not only investment experience with policyholders, but also experience in respect of non-financial risk (eg insurance risk; persistency risk; and expense risk). Such experience adjustments are treated in the same way as any other change in the underlying items;

(b) experience adjustments that do not affect the underlying items because the contracts do not share in such experience with policyholders:

(i) arising from financial risk. The contractual service margin is adjusted for these effects;

(ii) arising from non-financial risk. This paper discusses the treatment of these experience adjustments.

29. The intention of the wording in paragraph B102 (b)(ii) of draft IFRS 17 was that all experience adjustments described in paragraph 28 (b)(ii) above (other than those relating to liabilities for incurred claims) should adjust the contractual service margin. However, many respondents found this wording difficult to interpret. Also, adjusting the contractual service margin for these items would be different from the treatment under the general model for:

(a) experience adjustments that do not directly cause changes in the estimates of the present value of future cash flows and,

(b) if the Board agrees with the staff recommendation in paragraph 27, with the treatment of experience adjustments that are combined with directly caused changes in the estimates of the present value of future cash flows.

30. The staff does not believe that there is a good reason for a difference between the general model and the variable fee approach in the treatment of experience adjustments described in B102 (b)(ii) of draft IFRS 17 and any directly caused changes in the estimates of the present value in future cash flows. This was not identified as a difference between the two approaches in Agenda paper 2A when this was discussed by the Board at its November 2015 meeting.

31. Accordingly, the staff proposes that for contracts measured under the variable fee approach, experience adjustments arising from non-financial risk that do not affect the underlying items, and any directly caused changes in the estimates of the present value of future cash flows, should not adjust the contractual service margin but should be recognised in profit or loss.

Question 2 – Changes in the contractual service margin for insurance contracts under the variable fee approach
Does the Board agree that for contracts measured under the variable fee approach, experience adjustments arising from non-financial risk that do not affect the underlying items, and any directly caused changes in the estimates of the present value of future cash flows, should not adjust the contractual service margin but should be recognised in profit or loss?

Appendix A: Existing guidance on changes in the carrying amount of the contractual service margin:

Insurance contracts measured under the general model

B92 The contractual service margin for a group of such contracts is not adjusted for an experience adjustment or a change in the present value of future cash flows of the group if they are caused by changes in assumptions that give rise to financial risk (being the effect, if any, on estimated future cash flows and the effect of a change in discount rate). This is because changes in assumptions that give rise to financial risk are not regarded as related to future service.

B93 In general, an entity shall regard experience adjustments other than those described in paragraph B92 as relating to current or past services and changes in estimates of future cash flows other than those described in paragraph B92 as relating to future services. However, circumstances where this does not apply are:

(a) the following changes in the liability for remaining coverage:

  (i) experience adjustments arising from premiums paid in the period that relate to future services. These experience adjustments relate to future service; and

  (ii) the effect of events that result in an experience adjustment that causes a change in estimate of future cash flows. The combined effect is regarded as relating to future service. Hence, for example, the contractual service margin for insurance contracts that provide death benefits is adjusted for the combined effect of experience adjustments and changes in estimates of future cash flows caused by more or fewer deaths than expected in the current period if that change in the number of deaths causes a change in the number of deaths expected in the group in future periods; and

(b) changes in estimates of incurred claims, which relate to current or past services.

Appendix A: Existing guidance on changes in the carrying amount of the contractual service margin:

Insurance contracts measured under the variable fee approach

B102 Accordingly the variable fee can be regarded as the entity's share of the underlying items less any fulfilment cash flows that do not vary directly with the fair value of the underlying items. Hence the change in the variable fee for the period equals:

(a) the change in the entity's share of the underlying items;

(b) plus or minus the changes in the fulfilment cash flows that do not vary directly with the underlying items, which comprise changes in the fulfilment cash flows:

(i) relating to incurred claims;

(ii) relating to future insurance coverage and claims; and

(iii) not relating to insurance coverage or claims.

B103 To depict the variable nature of the fee in these contracts, an entity shall apply paragraph 42(c) to remeasure the contractual service margin to reflect all the changes in the variable fee set out in paragraph B102, except:

(a) for changes relating to incurred claims (B102(b)(i)); and

(b) to the extent that paragraph B104 applies, changes that do not vary directly with the underlying items and do not relate to insurance coverage or claims (B102(b)(iii)).

B104 An entity may choose not to recognise a change in the contractual service margin to reflect the changes in some or all of the fulfilment cash flows set out in B102(b)(iii), if, in accordance with a previously documented risk management objective and strategy for using derivatives to mitigate financial market risk arising from those fulfilment cash flows:

(a) the entity uses a derivative to mitigate the financial market risk arising from those fulfilment cash flows;

(b) an economic offset exists between the specified fulfilment cash flows and the derivative, ie the fulfilment cash flows and the derivative generally move in opposite directions because they respond in a similar way to the changes in the risk being mitigated. An entity shall not consider accounting measurement differences in assessing the economic offset; and

(c) credit risk does not dominate the economic offset.

Appendix B: Example illustrating the different approaches

1. The paper discuss two approaches to the treatment of the combined effect of experience adjustments and directly caused changes in the estimates of the future cash flows:

   (a) Approach A: adjust the contractual service margin; and

   (b) Approach B: do not adjust the contractual service margin.

2. These approaches are demonstrated in the following example:

   (a) An entity issues 20 contracts with a coverage period of 5 years.

   (b) The annual premium for each contract is CU 100.

   (c) The death benefit payable under each contract is CU 1,200.

   (d) At the start of each year, the entity determines that there is a 5% probability that each existing policyholder will die during the year.

   (e) All premiums are expected to be paid at the beginning of each year and all claims are expected to be incurred and paid at the end of each year.

   (f) The contracts are aggregated into a group to determine whether to recognise a loss for a group of onerous contracts, and to measure the contractual service margin after initial recognition.

   (g) For simplicity, there are no other expected cash flows and no contracts are expected to lapse during the coverage period.

   (h) For simplicity, the time value of money and the risk adjustment are negligible.

3. At the inception of the contracts, the expected cash inflows for the group of contracts are CU 9,049[1]. The expected cash outflows for the group of contracts is CU 5,429[2]. The contractual service margin at the inception of the group of contracts is CU 3,620.

[1] Expected cash inflows at inception: = CU100*20*[1 + (1-0.05) + (1-0.05)^2 + (1-0.05)^3 + (1-0.05)^4]

[2] Expected cash outflows at inception:
= CU1,200*20*0.05*[1 + (1-0.05) + (1-0.05)^2 + (1-0.05)^3 + (1-0.05)^4]

Base case

4. If all cash flows occur as expected, the movements in the contractual service margin would be as follows:

	Year 1	Year 2	Year 3	Year 4	Year 5
Balance brought forward	3,620	2,820	2,060	1,338	652
Release of CSM	-800[3]	-760	-722	-686	-652
Balance carried forward	2,820	2,060	1,338	652	0

5. The amounts presented in the statement of profit or loss would be as follows:

	Year 1	Year 2	Year 3	Year 4	Year 5
Release of CSM	800	760	722	686	652
Expected claims	1,200	1,140	1,083	1,029	977
Insurance contract revenue	**2,000**	**1,900**	**1,805**	**1,715**	**1,629**
Incurred claims	-1,200	-1,140	-1,083	-1,029	-977
Profit for year	**800**	**760**	**722**	**686**	**652**

6. During the second year, two policyholders die. The death benefits incurred and paid in the period are CU2,400 (= CU 1,200*2). The expected amount is CU1,140[4]. There is a negative experience variance of CU 1,260.

7. As a consequence of the incurred claims, the number of contracts at the end of year 2 is lower than expected. The estimate of the future cash inflows in years 3 to 5 is revised downwards from CU 5,149 to CU 4,849. The estimate of

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[3] Release of the contractual service margin in year 1:

= CU3,620 *20/[1 + (1-0.05) + (1-0.05)^2 + (1-0.05)^3 + (1-0.05)^4]

[4] Expected death benefits in year 2 = CU1,200*20*0.05*(1-0.05)

the future cash outflows is revised downwards from CU 3,089 to CU 2,909. The net change in the estimate of the future cash flows is a reduction of CU 120.

Approach A

8. As at the end of year 2, the movements in the contractual service margin in years 1 and 2, and the revised estimates of the contractual service margin in years 3 to 5, would be as follows:

	Year 1	Year 2	Year 3	Year 4	Year 5
Balance brought forward	**3,620**	**2,820**	**1,035**	**672**	**328**
Experience adjustment		-1,260			
Change in future cash flows		-120			
Release of CSM	-800	-405	-363	-344	-328
Balance carried forward	**2,820**	**1,035**	**672**	**328**	**0**

9. The amounts presented in the statement of profit or loss would be as follows:

	Year 1	Year 2	Year 3	Year 4	Year 5
Release of CSM	800	405	363	344	328
Expected claims	1,200	1,140	1,020	969	921
Experience adjustment		1,260			
Insurance contract revenue	**2,000**	**2,805**	**1,383**	**1,313**	**1,249**
Incurred claims	-1,200	-2,400	-1,020	-969	-921
Profit for year	**800**	**405**	**363**	**344**	**328**

10. The experience adjustment is recognised as an adjustment to revenue in the current period and the combined effect of the experience adjustment and the consequential reduction in the estimate of the future cash flows is adjusted against the contractual service margin.

11. Insurance contract revenue increases in year 2, reflecting the increase in claims incurred, but is significantly reduced in years 3 to 5 (compared to the base case). The reduction in the expected profits is effectively spread over years 2 to 5.

Approach B

12. As at the end of year 2, the movements in the contractual service margin in years 1 and 2, and the revised estimates of the contractual service margin in years 3 to 5, would be as follows:

	Year 1	Year 2	Year 3	Year 4	Year 5
Balance brought forward	**3,620**	**2,820**	**2,026**	**1,316**	**641**
Release of CSM	-800	-794	-710	-675	-641
Balance carried forward	**2,820**	**2,026**	**1,316**	**641**	**0**

13. The amounts presented in the statement of profit or loss would be as follows[5]:

	Year 1	Year 2	Year 3	Year 4	Year 5
Release of CSM	800	794	710	675	641
Expected claims	1,200	1,140	1,020	969	921
Change in future cash flows			-42	-40	-38
Insurance contract revenue	**2,000**	**1,934**	**1,688**	**1,604**	**1,524**

[5] Other presentations are possible, as described on page 16.

Incurred claims	-1,200	-2,400	-1,020	-969	-921
Change in future cash flows		-120	42	40	38
Profit for year	**800**	**-586**	**710**	**675**	**641**

14. The combined effect of the experience adjustment and the consequential change in the estimate of the future cash flows is recognised in profit or loss. No adjustment is made to the contractual service margin.

15. Insurance contract revenue is reduced by the change in the estimate of the future cash flows caused by the experience adjustment. The change in the estimate of the future cash flows must be included as an adjustment to insurance contract revenue, otherwise the total insurance contract revenue recognised over the coverage period would not be the same as the total premiums received.

16. In this example, the adjustment to insurance contract revenue is made in years 3 to 5 when the reductions in the estimates of the future cash flows are expected to occur.

17. An alternative approach would be to adjust insurance contract revenue for the full amount (ie CU 120) in the year in which the experience adjustment occurs (ie year 2). This alternative approach would create less operational challenges than the approach presented.