# Staff paper

Agenda reference: 4B

**IASB® meeting**

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| Project | **Dynamic Risk Management (DRM)** | |
| Topic | **Performance assessment and unexpected changes** | |
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## Introduction

1. The IASB's objective of developing the DRM model, is to better reflect an entity's interest rate risk management strategy and activities in its financial statements. As a result, an entity's current net open risk position (CNOP) is determined on the basis of its risk management strategy (subject to the qualifying criteria for items included), reflecting the expected rather than contractual cash flows.

2. Since these expected cash flows are based on the entity's internal models and include, for example, modelling of prepayments or core demand deposits, there could be unexpected changes in the actual cash flows or the entity's expectations could change due to unexpected events.

3. To ensure the DRM model provides information that is relevant and a faithful representation of the economic substance of an entity's dynamic risk management activities in the financial statements, a retrospective assessment of the success and performance of these activities are needed. This will ensure the robustness of the DRM model and maintain the required discipline when applying any hedge accounting or risk mitigation model.

4. The purpose of this paper is to analyse how unexpected changes could be reflected in the assessment and measurement of performance in the DRM model. This paper is structured as follows:

   (a) summary of staff recommendation;

   (b) summary of previous discussions;

   (c) staff analysis; and

   (d) question for the IASB.

## Summary of staff recommendation

5. For the reasons explained in paragraphs 18–27, the staff recommends not requiring the retrospective assessment against an entity's target profile. In addition, in order to address the challenge described in paragraphs 29–35, the staff recommends the introduction of another retrospective assessment based on the entity's capacity to realise the expected benefits, as explained in paragraphs 46–48.

## Summary of previous discussions

6. This section summarises how, applying the principles already tentatively decided on by the IASB, an entity would assess the performance of the DRM model, and capture the effect of such performance assessments in its financial statements.

7. When the IASB introduced the concept of current net open risk position and risk mitigation intention (RMI) in November 2021, it tentatively decided that the designation of RMI should be accompanied by two prospective assessments to ensure that an entity is using the DRM model to mitigate repricing risk due to changes in interest rates and achieve its target profile consistent with its risk management strategy

8. These prospective assessments are performed at the start of each DRM assessment period, and thus are based on all relevant and supportable information at that time. The aim of the prospective assessments are to ensure that the entity only applies the DRM model to activities that achieve its risk management strategy. The IASB considered that:

   (a) the cumulative amount of risk to be mitigated through derivatives must reduce the interest rate risk of the current net open risk position by time bucket and cannot exceed the total amount of risk by time bucket (ie an entity cannot over mitigate its current net open risk position); and

   (b) the risk mitigation intention has to transform the current net open risk position to a residual risk position that is within the target profile.

9. In addition to the prospective assessments, the IASB also tentatively decided to introduce two similar retrospective assessments to reflect misalignment arising from unexpected changes in the DRM model, being whether:

   (a) the entity has mitigated interest rate risk (ie did unexpected changes during the period result in over-hedging?); and

(b) the target profile has been achieved (ie did the risk mitigation intention transform the current net open risk position to a residual risk position that falls within the target profile?).

10. As an entity is only able to designate a RMI that satisfies the prospective assessments at the start of the assessment period, any breaches against the retrospective assessments are likely to be caused by unexpected changes in the underlying cash flows during the DRM assessment period. As a result, the retrospective assessments are designed to capture potential misalignment arising from unexpected changes in the current net open risk position.

### Assessment against risk mitigation

11. The retrospective assessment against risk mitigation criteria is designed to capture the effects when there is a decrease in the current net open risk position during the DRM assessment period. In such cases, there is a possibility that the risk mitigation intention would lead to over-mitigation of the actual risk exposures, and the derivatives had the effect of creating a synthetic risk position, rather than mitigating the 'organic' risk exposures.

12. For example, an entity may face the following scenario:

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| Current net open risk position at the start of the period | 100 |
| RMI | 80 |
| Designated derivatives | 80 |
| Residual risk at beginning of period | 20 |
| Due to unexpected changes, current net open risk position at end of period | 60 |

For the retrospective assessment, the entity compares its RMI of 80 to the current net open risk position of 60 at the end of the period. As the RMI exceeds the CNOP at the end of the period, the entity has over-mitigated the risk and therefore need to take into consideration the effect of unexpected changes when applying the lower of test to measure the DRM results in the financial statements.

13. This retrospective assessment therefore serves as a warning that the entity needs to reduce the extent of risks that are mitigated through the DRM model and thus only recognise the DRM adjustment to that extent. Assuming there was a rate shift of one basis point during the period, when measuring the DRM results in the financial statements in the example above, the

entity would recognise as the DRM adjustment the lower of the fair value change of adjusted RMI[1] of CU60 and the designated derivatives of CU80. The DRM adjustment is therefore recognised at CU60, with CU20 recognised in profit or loss.

14. Some stakeholders suggested that extending the look-back period to more than one DRM assessment period would more faithfully reflect unexpected changes in the current net open risk position. Since the risk mitigation intention may be changed frequently reflecting the entity's risk mitigation activities, there may be situations where changes in the current net open risk position have no direct impact on the most recent period, but do affect previous periods. These stakeholders said that such effects should be reflected as well to ensure that the application of the DRM model provides useful information to users of the financial statements.

### Assessment against target profile

15. On the other hand, the retrospective assessment against an entity's target profile is aimed at determining whether the risk mitigation intention has transformed the current net open risk position to a residual risk position that falls within the target profile. To the extent that the residual risk position falls within the entity's target profile for the period there would be no impact on misalignment. Conversely, if the residual risk position falls outside the target profile that would give rise to misalignment reported in the statement of profit or loss.

16. The intention of this retrospective assessment is to ensure that the DRM model would provide information about alignment or misalignment to the entity's target profile, which would help the users of financial statements to assess whether and to what extent an entity has achieved its risk management strategy for the period.

17. As illustrated in the example in Agenda paper 4B of the September 2021 IASB meeting[2], failure in the retrospective assessment against the target profile would usually happen when there are unexpected increases in the current net open risk position during the period under assessment. When that happens, the entity is expected to determine the minimum additional risks it needs to mitigate in order to achieve its target profile, and then calculate the effects of these additional risks during the DRM assessment period.

[1] This is the original RMI adjusted by the effect of unexpected changes.
[2] See the example in bucket Year 4 in page 10 of the Agenda paper 4B of September 2021 IASB meeting.

## Staff analysis

18. The staff continues to be of the view that reflecting the effect of unexpected changes in the measurement of the DRM adjustment and performance, is important to provide information to users of financial statements that is relevant and a faithful representation of the entity's DRM activities.

19. However, we are questioning whether a retrospective assessment against the target profile continues to be an appropriate performance measure for an entity's DRM activities. In our view, whether an entity has achieved its target profile is a matter of fact. While it makes sense to require that the DRM model can only be applied prospectively when the derivatives help the entity to achieve its target profile, the subsequent measurement of the DRM adjustment should be based on the actual risk management actions taken by the entity, rather than what should have happened as per the ex-post information available by the end of the DRM assessment period.

20. Whether the RMI has achieved the target profile or not, has no direct effect on the measurement of the DRM results in the financial statements. This is especially true when the entity's current net open risk position has increased unexpectedly during the period and retrospective assessment may lead to counter-intuitive accounting results in such a situation.

21. For example, when an entity fails to achieve the target profile retrospectively due to an unexpected increase in the current net open risk position, capturing the effect of such unexpected change may result in an entity recognising more (rather than less) gains or losses from designated derivatives as the DRM adjustment in the statement of financial position.

22. Although such effects would be the source of misalignment in the DRM model, it is worth noting that not all misalignments caused by the unexpected changes would necessarily be recognised in profit or loss immediately. One of the reasons is because the measurement of the DRM adjustment is based on the lower of:

    (a) gains or losses from the designated derivatives; and

    (b) changes in the fair value of the RMI after including the effect of unexpected changes in the current net open risk position during the period.

23. When an entity fails the retrospective assessment against its target profile, capturing the effect of such unexpected changes is likely to result in an increase in the total fair value changes as

calculated in paragraph 22(b), because the effect of the unexpected changes would be in the same direction as the changes in the value of the benchmark derivatives.[3]

24. This could lead to three possible outcomes in the measurement of the DRM adjustment:

    (a) the gains or losses from the designated derivatives from inception of the DRM model across all time buckets were the *lower* amount both before and after the effect of unexpected changes was added to the changes in the fair value of the benchmark derivatives. In such a scenario, the retrospective assessment would not have a direct impact on amounts recognised as DRM misalignment and all the gains or losses from the designated derivatives would be offset by the DRM adjustment;

    (b) the gains or losses from the designated derivatives were the *higher* amount both before and after the effect of unexpected changes was added to the changes in the fair value of the benchmark derivatives. In such a scenario, the retrospective assessment would actually reduce the amounts recognised as DRM misalignment, since adding on the effect of unexpected changes would reduce the gap between the two fair values; or

    (c) the gains or losses from the designated derivatives were the *higher* amount before but became *lower* once the effect of unexpected changes was added to the changes in the fair value of the benchmark derivatives. In such a scenario, capturing the effect of unexpected changes would also reverse any amounts previously recognised as DRM misalignment.

25. In the scenarios described in paragraph 24(b) and 24(c), the entity would end up with a higher (rather than lower) DRM adjustment in the statement of financial position, and therefore offset more (rather than less) of the designated derivatives' profit or loss. In other words, the entity would report less (rather than more) in misalignment profit or loss.

26. For example, comparing Entity A, which passed the retrospective assessment against its target profile, and Entity B, which failed such an assessment, it is clear that Entity A is more successful in achieving its risk management strategy, and thus should record less misalignment in profit or loss. However, the retrospective assessment could reflect the complete opposite picture in the financial statements, where Entity B is likely to achieve better alignment in the ‘lower-of’ test.

[3] As mentioned in paragraph 17, when an entity fails the retrospective assessment against its target profile, it usually indicates that the entity should have mitigated more risks than what was in its original risk mitigation intention, and therefore result in an increase in the total fair value changes as calculated in paragraph 22(b).

27. As a result, we are of the view that such an assessment would not provide useful information to the users of the financial statements, and applying such mechanics could even confuse or mislead users in some circumstances.

28. Therefore, we recommend not requiring the retrospective assessment against an entity's target profile, and only keep the retrospective assessment to check whether the entity has mitigated interest rate risk during the assessment period when applying the DRM model.

## Alternatives to assess performance retrospectively

### *The challenges of the current mechanics*

29. As explained in paragraph 14, some stakeholders commented that the current DRM mechanics tentatively agreed by the IASB may not capture the full effects of unexpected changes since the retrospective assessment would only consider the effects for the DRM period under assessment.

30. As mentioned in paragraph 22, the DRM adjustment is calculated based on the 'lower-of' test, and once recognised, it would be unwound into profit or loss over time based on the profile of the benchmark derivatives and the designated derivatives.

31. The DRM adjustment represents the extent to which the designated derivatives mitigated the variability in the fair value of the risk mitigation intention, and the subsequent unwinding of the DRM adjustment over time would provide the 'offset' to the net interest income generated from the underlying items, regardless of what happened to the underlying items after the DRM assessment period. Therefore, the DRM adjustment represents the extent to which the DRM activities have provided 'protection/benefit' in the form of reduced variability from an economic value or earnings perspective to be gained in future from the DRM adjustment.

32. Under the current DRM model, the risk mitigation intention is not comprised of individually recognised assets or liabilities. Instead, the risk mitigation intention is a *portion* of a net open risk position derived from underlying items that are dynamically changing, and based on the expected cash flows including eligible future transactions. As a result, it is not possible to attribute the DRM adjustment to changes in the individual underlying items that were aggregated into the current net open risk position, because the risk management is performed holistically based on the overall risk exposures from all underlying items.

33. However, large prepayments or other unexpected changes to the underlying items may significantly change the fair value or future net interest income within the underlying items that

were caused by market movements in previous DRM assessment periods. While the entity's risk management activities would be adjusted prospectively to incorporate these unexpected changes, it is less straightforward to reflect the economic effects of such unexpected changes in the financial statements. It is particularly challenging to determine how such unexpected changes may affect the DRM adjustment. In some circumstances, there is a risk that the DRM adjustment may no longer represent the future benefit to be realised if most of the underlying items have for example prepaid earlier than initially expected.

34. For example, an entity may hold some fixed rate assets that are funded by floating rate liabilities, and manage the interest rate risk via a pay-fixed receive-floating interest rate swap. The benchmark interest rate may have dropped since the origination of the asset, and thus the fixed coupon rate is higher than the current market rate, while the interest rate swap would be out-of-the-money. Assuming the entity has applied the DRM model (and assuming perfect alignment) since the origination of the asset, it would have a debit balance in the DRM adjustment. Such a DRM adjustment not only provides the 'offset' to the cumulative losses from the pay-fixed receive-floating interest rate swap (ie designated derivative) used for risk mitigation purpose, but also provides the future 'offset' in net interest income to ensure the net interest income is stable over time.

35. However, if in the current period a significant portion of the previous outstanding fixed rate assets were repaid early and replaced by new fixed rate loans at the current (lower) market interest rate, the entity would likely see a significant reduction in its economic value and future net interest income, driven by the interest rate differential on the portion of assets being replaced. Therefore, continuing to recognise the full amount of DRM adjustment no longer provides the faithful representation of the actual economic phenomenon, since the 'economic offset' would no longer be available.

36. In order to address the challenge described in paragraphs 29 to 35, we considered a number of potential solutions and their advantages and disadvantages in this section of the paper.

***Tracking the changes in the fair value of the underlying positions***

37. This alternative would be similar to the existing requirements in IAS 39 for a portfolio fair value hedge of interest rate risk, where an entity may use a 'percentage approach' to calculate the impact of any early repayments or other unexpected changes, based on the changes to the

fair value of the underlying positions.[4] The DRM adjustment would then be adjusted to reflect the effect of unexpected changes in underlying positions proportionately[5].

38. This alternative focuses on unexpected changes in individual underlying positions rather than unexpected changes in the total current net open risk positions. For example, assuming an entity had a cumulative fair value change of CU100 in its underlying positions driven by interest rate risks, and a DRM adjustment of CU60 (because it has on average mitigated 60% of the total interest rate risk). When there is an early repayment which reduces the total fair value change of the underlying position by 30% to CU70, applying this alternative, the entity would reduce the DRM adjustment by 30% to CU42 accordingly.

39. However, we are of the view that this method is not appropriate because:

    (a) tracking the fair value changes of individual items would be inconsistent with the actual risk management which considers the effects of all underlying items holistically based on the aggregated risk position instead of individual underlying items. Therefore, this alternative would be inconsistent with the objective of the DRM model, which is to better reflect an entity's interest rate risk management strategy and activities in its financial statements. In our view, it is not appropriate to assume the underlying positions were managed proportionately and release the DRM adjustment proportionately when the fair value of underlying items changes. In fact, the DRM adjustment does not represent a remeasurement of the underlying items but instead represents the economic protection/benefit from the designated derivatives to the extent they were successful in mitigating interest rate risk. Using the example in paragraph 38, the asset being early repaid might not have been included in the risk mitigation, since the entity constantly only mitigate 60% of the total interest rate risk, and thus economically the DRM adjustment may not be affected by the early repayments at all;

    (b) both the current net open risk position and the risk mitigation intention may change frequently from period-to-period, and thus it is not possible to determine the appropriate write-off in the DRM adjustment based merely on the fair value changes in the underlying items. Also using the example in paragraph 38, the entity may have chosen to mitigate different amounts of interest rate risk in different periods. Without the individual items that constitute the RMI for each period, it would not be possible to obtain

[4] The percentage approach is discussed in the Basis for Conclusion of IAS39 in paragraph BC199.
[5] It is worth noting that in our view, consistency with the mechanics in the existing portfolio fair value hedge is not a merit by itself, given the DRM model is a brand new model and focuses on representing the economic protection/benefit of dynamic interest rate risk management.

the history of how the DRM adjustment of CU60 was calculated to make adjustments when individual instruments are derecognised during the period.

40. Therefore, in our view, the accounting outcome from applying this approach would need to be either extremely onerous or arbitrary, and would not reflect the entity's actual performance.

***Extending retrospective assessment against risk mitigation to multiple periods***

41. This alternative would entail extending the retrospective assessment against the risk mitigation to multiple DRM assessment periods, so that the assessment is done for each of the periods since the start of the DRM model, based on the latest current net open risk position.

42. Using this method, the entity would be required to keep a record of the underlying items that were used to calculate the CNOP and RMI for each of the past DRM periods.[6] This would allow the entity to carry out the retrospective assessment for each of the past periods based on the updated expectation of cash flows from assets and liabilities in the relevant period. When there is an unexpected change to any of the underlying items, the entity would then be able to recalculate its current net open risk position for all the past DRM assessment periods in which such underlying items were included in the calculation of the CNOP. This would allow the entity to assess whether the unexpected change have caused any retrospective assessment breaches in the past assessment periods, and to measure the effect of these unexpected changes for each of the periods where this was the case.

43. This alternative is consistent with the holistic risk management view underlying the DRM model, as it does not require the entity to attribute the DRM adjustment to individual underlying assets or liabilities. Instead, it continues to apply the risk view and only captures the effect of unexpected changes to the extent that the retrospective assessment has been breached.

44. However, although this alternative would conceptually provide the most 'pure' answer to the challenge raised, we note the significant complexity and potential high implementation cost associated with such a method. To adopt such a method, an entity would need to track the details of the underlying positions and the risk management intention in each of the DRM assessment periods for the whole life of the DRM model. As the DRM model progresses with more DRM assessment periods added to the model, both the number of the retrospective

[6] This is in essence similar to the tracking requirements in the Interest Margin Hedging model proposed by EBF in 2006, as discussed in agenda paper 9A and 9B of December 2006 IASB meeting. In that model, the calculation of hidden ineffectiveness requires the tracking of the maturity gap as initially analysed, and the history of derivatives designated.

assessments required and the difficulties of calculating the effect of unexpected changes will also increase significantly, which could eventually make the model too complicated to operate.

45. In our view, the incremental benefit of this approach to the users of financial statements is limited and is unlikely to outweigh the cost of application. This is because the DRM model already acknowledged that an entity may not necessarily mitigate the full current net open risk position and may determine the extent of risk it intends to mitigate using derivatives (ie RMI) dynamically. Extending the retrospective assessment to multiple periods would not provide further information comparing to the methods described in paragraph 46–48.

***Assessment of capacity to realise the expected benefits***

46. This alternative is based on an assessment of the fair value of the current net open risk position at the assessment date, assuming no further increases or decreases in the current net open risk position until the end of the time horizon. This fair value represents an entity's capacity to realise the expected benefits (of reduced earnings or economic value variability) represented by the DRM adjustment.

47. In other words, this assessment will ensure that the DRM adjustment is not recognised at an amount higher than the expected benefit of reduced variability to be realised in future. Any excess of the DRM adjustment over the fair value of an entity's current net open risk position is written off via profit or loss in the period of the assessment.

48. This method has the following advantages:

    (a) it is based on a snapshot of fair value of the current net open risk position at the end of the DRM assessment period and does not require the entity to track the full history of risk management intention and the changes in the underlying items as the other alternatives. This alternative is a natural extension of the current retrospective assessment in the DRM model, where the entity already needs to consider the effects of unexpected changes and identify the current net open risk position at the end of each DRM assessment period;

    (b) it is consistent with the holistic risk management view on which the DRM model is based as there is no need to identify which, or how much, of the individual underlying items were designated for risk mitigation in prior periods; and

    (c) it provides a systematic solution to ensure that the DRM adjustment in the statement of financial position is used to provide the appropriate 'economic offset' and any amount in excess is written off immediately. Therefore it is consistent with the rationale to

recognise such a DRM adjustment in the statement of financial position as discussed in Agenda Paper 4A of May 2022 IASB meeting.

### *Staff recommendation*

49. In our view, an assessment based on the capacity to realise the expected future benefits (as discussed in paragraphs 46–48 of this paper), is the most appropriate approach to respond to the challenge described in paragraphs 29–35 of this paper and provide further robustness and discipline to the DRM model. Such an approach will ensure that the DRM adjustment represents the extent to which the derivatives will mitigate the future variability in both the fair value of and the net interest income from the risk mitigation intention. It also avoids situations where amounts continue to be recognised as a DRM adjustment in the statement of financial position when the economic benefit in the underlying items is no longer expected to be realised (or have been realised early) due to unexpected changes in the current net open risk position.

## Question for the IASB

| Question for the IASB |
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| Does the IASB agree with the staff recommendation set out in paragraph 5 of this paper? |