
Project	Financial Instruments (Replacement of IAS 39)—Hedge accounting
Topic	Nominal components—layers

Introduction

Background and purpose

1. In December 2010, the Board published the exposure draft *Hedge Accounting* (ED). The three-month comment period ended on 9 March 2011. During the public consultation period the IASB engaged in extensive outreach activities on its proposals set out in the ED. In March 2011, the Board discussed a high level summary of the comment letters received and a summary of the outreach activities. In April 2011, the Board began the redeliberations of the ED.
2. This paper addresses the designation of a layer of the nominal amount of an item as the hedged item. Question 5 in the ED's invitation to comment relates to this issue.
3. The purpose of this paper is to ask the Board whether it wants to:
 - (a) essentially retain the proposals in the ED; and
 - (b) change the eligibility of a layer-based designation of hedged items in some circumstances when the hedged item includes a prepayment option.
4. This paper includes four questions to the Board.

Overview of the Board's proposal in the ED

5. The ED addresses layers of nominal amounts in:

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IASB Staff paper

- (a) paragraphs B19 and B21-B23 in general; and
- (b) paragraph 36(e) specifically for groups of items.

Paragraphs BC65-BC69 of the Basis for Conclusions provide the rationale for the proposals.

Proposed changes

- 6. The exposure draft proposes that:
 - (a) a *layer component* of the nominal amount of an item would be eligible for designation as a hedged item.
 - (b) a layer component of a contract that includes a *prepayment option* would *not* be eligible as a hedged item in a fair value hedge *if* the option's fair value is affected by changes in the hedged risk.
- 7. The proposals would change how an entity could designate the hedged item for scenarios other than forecast transactions, for which a layer-based designation is already permitted under IAS 39 *Financial Instruments: Recognition and Measurement*. The proposals would extend the eligibility of a layer-based designation to assets and liabilities (including firm commitments).

Rationale for the proposals

- 8. The proposed changes would address two aspects:¹
 - (a) the fact that there may be a level of uncertainty surrounding the hedged item, eg a contract might be cancelled for breach of contract (ie non-performance).
 - (b) a part of an item is managed separately, eg a contract with an early termination option might be terminated before maturity or debt might be repurchased before maturity.

¹ For more detailed examples refer to agenda paper 5 of the 24 August 2010 IASB meeting.

IASB Staff paper

9. There is uncertainty for both anticipated transactions and existing transactions and hence the Board decided not to distinguish between such transactions for the purposes of designating a layer component of a nominal amount. Moreover, the Board noted that if the designation of the component of a nominal amount was not aligned with the risk management strategy of the entity, it might result in less useful information to users of financial statements.
10. When a layer component of a contract includes a *prepayment option*, the Board decided that the layer component would not be eligible as a hedged item in a fair value hedge *if* the option's fair value is affected by changes in the hedged risk. The rationale for that decision was that if the prepayment option's fair value changed in response to the hedged risk a layer-based designation of a hedged item would be tantamount to identifying a risk component that was not separately identifiable (because the change in the value of the prepayment option owing to the hedged risk would not be part of how hedge effectiveness would be measured).

Feedback from comment letters and outreach activities

11. The comment letter feedback:
 - (a) agreed with the proposal that a layer component of the nominal amount of an item should be eligible for designation as a hedged item;
 - (b) was mixed regarding the proposal that a layer component of a contract that includes a *prepayment option* would *not* be eligible as a hedged item in a fair value hedge (*if* the option's fair value is affected by changes in the hedged risk).
12. Those who agreed with the proposal regarding layers that include a prepayment option did so because of the same rationale as that set out in the Basis for Conclusions. Those who disagreed did so primarily with a view to portfolios of items and the 'behavioural patterns' that can be modelled at such a level of aggregation. They were also concerned about possible implications regarding

IASB Staff paper

the Board's macro hedge accounting deliberations. Other arguments that respondents who disagreed cited are:

- (a) the proposal is inconsistent with common risk management strategies;
- (b) the value of a prepayment option of a bottom layer is nil (owing to the portfolio context);
- (c) the value of a prepayment option of a bottom layer is irrelevant; and
- (d) the proposal is inconsistent with the eligibility of bottom layers for variable cash flows that are subject to prepayment.

13. The outreach feedback was largely consistent with the comment letter feedback:

- (a) Most participants in the outreach were also supportive of the proposed change that would allow a layer component for fair value hedges. They agreed that the flexibility in designating nominal components in layers would allow entities to better reflect different risk management approaches.
- (b) However, most participants in the outreach—especially financial institutions—also would like this proposal to be extended to prepayable items for which the prepayment option's fair value *is* affected by changes in the hedged risk, particularly in considering groups of items.

14. The main issues that respondents suggested to be addressed by the redeliberations are:

- (a) **Relevant reference point of the prepayment option:** the Board was asked to clarify that the prepayment option is only relevant and thus would result in the proposed restriction if it *relates to* the designated *layer* instead of the (entire) item or contract.
- (b) **Designations including the effect of a prepayment option:** the Board was asked to consider whether a layer component *can* be designated *if* it *includes* the effect of a related prepayment option (when determining the change in fair value of the hedged item).

IASB Staff paper

(c) **Differentiation between written and purchased prepayment**

options: the Board was asked to consider differentiating between written and purchased prepayment options and to allow designating a layer component for items with a *purchased* option, ie if the entity is the option holder (eg a debtor's call option included in prepayable debt).

15. Also, one respondent requested that the Board clarify whether 'top layers' would be allowed to be designated as the hedged item and whether their eligibility would depend on whether the layer relates to an open or a closed population of items.

Staff analysis***Eligibility of layer designation***

16. The feedback on the proposal that a layer component of the nominal amount of an item should be eligible for designation as a hedged item (Question 5(a) of the ED) was *overwhelmingly supportive*. The only issue related to this part of the proposal was a *clarification* by one respondent regarding the eligibility of a 'top layer'².

'Top layers'

17. The staff note that the ED permits designating a top layer³ (subject to the general requirement of documenting the identification of the hedged item)⁴. An example is the designation of the *first* CU20m⁵ of repayments from a total amount of CU100m of fixed rate debt that can be prepaid at fair value.

² See paragraph 15.

³ See ED.B19 and B21 (refer also to agenda paper 5 of the 24 August 2010 IASB meeting).

⁴ See ED.19(b).

⁵ In this paper monetary amounts are denominated in 'currency units (CU)'.

IASB Staff paper

18. The staff note that the clarification request was not widespread, which indicates that the ED is already clear. However, it seems that the request for clarification resulted from the examples in the ED not specifically including a top layer designation. Since this is a change from IAS 39 the staff consider that adding a top layer designation to the examples in paragraph B21 of the ED would be helpful.
19. Conversely, the question whether a layer can also relate to an open or only a closed population of items is not specific to any proposed changes but already relates to IAS 39. It is addressed by the general requirement that the identification of the hedged item is documented,⁶ which means that the hedged item must be unambiguous. Hence, the staff consider that any clarification is unnecessary.
20. (The question to the Board on this issue is Question 1.)

The prepayment option issue

21. The only aspect of the proposals that received *mixed* feedback was that regarding layers of items that include a *prepayment option* (Question 5(b) of the ED). These layers would *not* be eligible as a hedged item in a fair value hedge *if* the option's fair value is affected by changes in the hedged risk (prepayment option issue).
22. Hence, the remainder of the staff analysis will focus on the prepayment option issue.

Relevant reference point of the prepayment option

23. Some requested the Board for *clarification* regarding the implication of a prepayment option. They wanted clarification that the prepayment option is only relevant if it *relates to* the designated *layer* instead of the (entire) item or contract. The background is that some contracts are only prepayable for *part* of

⁶ See ED.19(b)—the corresponding requirement of IAS 39 is paragraph 88(a).

IASB Staff paper

their entire amount, which means the remainder is not prepayable and hence does not have an associated prepayment option. The wording of the ED would not allow designating any layers in this circumstance.⁷

24. An example is a loan with CU100 principal and a maturity of five years that allows the debtor to repay up to CU10 at the end of each year. That means that only CU40 are prepayable (at varying points in time) whereas CU60 are non-prepayable but have a five year fixed term.
25. The staff note that the Board's rationale for proposing the requirements regarding the implication of prepayment options for layers was that if the prepayment option's fair value changed in response to the hedged risk, using a layer designation would result in excluding from the hedge ineffectiveness the change in the value of the prepayment option owing to the hedged risk.
26. Applying the Board's rationale to the example of the *partially* prepayable loan (see paragraph 24) means:
 - (a) An amount of CU60 is fixed term debt that is not affected by prepayments and hence its fair value does not include the effect of a prepayment option. Hence, this amount is unrelated to fair value changes of the prepayment option for other amounts. Consequently, the designation of a layer for these amounts would *not* conflict with the Board's rationale.
 - (b) If the debtor does not prepay the full amount of CU10 at the end of a period that means an additional amount of up to CU10 (the amount for which the prepayment option was not exercised) becomes fixed term debt *from that point on time*. Hence, from that point in time (rather than inception) that amount would no longer be affected by prepayments and hence its fair value does not include the effect of a prepayment option. Hence, these amounts are unrelated to fair value

⁷ See Appendix A for an extract of the relevant paragraphs of the ED.

IASB Staff paper

changes of the prepayment option for other amounts. Consequently, the designation of a layer for these amounts would *not* conflict with the Board's rationale.

- (c) For amounts that are *still prepayable* at a given point in time, the fair value *includes* the effect of a prepayment option (ie CU40 at inception, CU30 after one year, CU20 after two years and CU10 after three years). Consequently, the designation of a layer for these amounts would conflict with the Board's rationale (*if* the layer *excluded* the effect of the prepayment option—see the section 'Designations including the effect of a prepayment option' below).

27. It is important not to confuse the layer of CU60 in this analysis with a bottom layer of CU60 that is *expected to remain* at maturity from a total amount of CU100 that is *prepayable in its entirety*. The crucial difference is that the expected remaining amount of a larger prepayable amount is the expected eventual outcome—in contrast to the definite outcome of a *fixed* contractual maturity. Hence, even if ultimately at least CU60 remain (as expected) the full CU100 is contractually prepayable so the fair value of this amount would still be affected over the entire five years by the fair value of prepayment option, which captures the *possible* outcomes (and hence the risk that an amount that would be 'in the money' might be repaid at a different amount than fair value⁸ such as par). This does not apply to the layer of CU60 in the above example because it cannot be repaid at a different amount than par at maturity (after five years).
28. Therefore, the staff consider that the prepayment option is only relevant if it *relates to* the designated *layer* instead of the (entire) item or contract. Hence, for *partially* prepayable items a layer-based designation should be allowed **for those amounts that are not⁹ prepayable at the time of designation.**¹⁰ As

⁸ Excluding the effect of the prepayment option's exercise/strike price.

⁹ That means *not expectations* of the actual outcomes regarding contractually permitted prepayments.

¹⁰ The question of whether prepayable amounts should be eligible for designation as a layer is addressed in the following section 'Designations including the effect of a prepayment option'.

IASB Staff paper

illustrated above, these amounts can change over time as prepayment options expire (before maturity). This eligibility of layer-based designation would be consistent with the Board's rationale for the proposals regarding the effect of prepayment options for layer-based designations.

29. (The question to the Board on this issue is Question 2.)

Designations including the effect of a prepayment option

30. The *previous section* addresses the question whether for partially prepayable items the prepayable and the non-prepayable amounts should be considered separately regarding what layers are eligible for designation. *This section* addresses the request of some respondents that the Board consider the eligibility of designating layers of amounts that *are prepayable* (ie affected by a prepayment option). Some suggested that a layer component should be available for designation as the hedged item *if it includes* the effect of a related prepayment option when determining the change in fair value of the hedged item. The wording of the ED would not allow designating any layers in this circumstance.¹¹
31. The **first question** is how this suggestion relates to the Board's rationale for proposing the requirements regarding the implication of prepayment options for layers (see paragraphs 25 and 10). Including the change in fair value of the prepayment option that affects a layer in determining hedge ineffectiveness has the following consequences:
- (a) The designated hedged item would include the *entire* effect of changes in the hedged interest rate (hedged risk) on the fair value of the layer. This effect is the combination of the effect that changes in the hedged interest rate would have on:
- (i) the fair value of a non-prepayable amount with otherwise the same characteristics as the designated layer; *and*

¹¹ See Appendix A for an extract of the relevant paragraphs of the ED.

IASB Staff paper

- (ii) the fair value of the prepayment option.
- (b) If the layer was hedged with a ‘normal’ fixed term interest rate swap that does not have any option features that mirror the layer’s prepayment option¹² hedge ineffectiveness would arise. This hedge ineffectiveness results from the (changes in the) fair value of prepayment option, which captures the *possible* outcomes and hence the *risk* that an amount that would be ‘in the money’ might be repaid at a different amount than fair value¹³ such as par. Consequently, hedge ineffectiveness would arise even if there were no actual prepayments for that layer.
32. Hence, the staff consider that a designation of a layer as the hedged item *if it includes* the effect of a related prepayment option when determining the change in fair value of the hedged item would *not conflict* with the Board’s rationale for proposing the requirements regarding the implication of prepayment options for layer designations.
33. The **second question** is how this suggestion relates to fair value hedge accounting for a portfolio hedge of interest rate risk. The ED did not address the special requirements in IAS 39 for those fair value hedges (portfolio hedge accounting model) because of the Board’s concurrent deliberations of macro hedge accounting. Hence, for those fair value hedges the ED does not apply but instead refers to the requirements of IAS 39.¹⁴
34. The portfolio hedge accounting model in IAS 39 gives entities two alternatives to calculate hedge ineffectiveness.¹⁵ An entity can compare the change in the fair value of the hedging instrument to:

¹² Instead of a swap with an embedded option feature that mirrors the layer’s prepayment option the same could be achieved by combining (and jointly designating) a ‘normal’ interest rate swap with a separate option that mirrors the embedded written prepayment option. Hedge ineffectiveness arises if no such combination is used but instead *only* the interest rate swap.

¹³ Excluding the effect of the prepayment option’s exercise/strike price.

¹⁴ See ED.3, which refers to paragraphs 81A, 89A and AG114–AG132 of IAS 39.

¹⁵ See IAS 39.AG126.

IASB Staff paper

- (a) the fair value change of the *entire* hedged item attributable to the hedged risk, ie *including* the fair value change of the embedded prepayment option (direct method); or
 - (b) an amount determined in several steps based on *expected* repricing dates. This approach uses the *percentage* of the assets or liabilities in each time bucket (based on repricing dates) that was hedged and updates the balances in each time bucket for changes in prepayment estimates to calculate the change in fair value of the hedged item (percentage approach). The percentage approach is an indirect method that is a broad approximation of the direct method.
35. However, irrespective of the alternative used to calculate hedge ineffectiveness an entity cannot designate a layer as the hedged item as this is not currently allowed by IAS 39. Hence, even if an entity chose the direct method its hedging relationship would still be affected by any decline in the total balance of a given time bucket owing to sales, impairment or differences between originally estimated prepayments and actual prepayments or revised estimates of prepayments. Only if an entity could designate a bottom layer that would allow attributing those changes in the total balance of the time bucket to amounts above that bottom layer as long as the total balance is at least equal to the amount of that bottom layer.
36. The suggestion to allow designating a layer as the hedged item *if it includes* the effect of a related prepayment option when determining the change in fair value of the hedged item essentially results in the same calculation of hedge ineffectiveness for the general hedge accounting model as the direct method of the portfolio hedge accounting model. The staff consider that this would result in ‘competition’ between those two hedge accounting models.
37. In the staff’s view, entities might prefer the layer-based designation under the general hedge accounting model over the direct method of the portfolio hedge accounting model. The reason is that using the layer-based designation would allow an entity to designate a bottom layer and hence the hedging relationship

IASB Staff paper

would not be affected by any decline in the total balance of a given time bucket owing to sales, impairment or differences between originally estimated prepayments and actual prepayments or revised estimates of prepayments—as long as the total balance is at least equal to the amount of that bottom layer.

38. This raises the question whether such a competition between those two hedge accounting models would be detrimental to hedge accounting. Some considerations are:
- (a) alignment of accounting with risk management;
 - (b) providing an incentive for a conceptually preferable calculation of hedge ineffectiveness;
 - (c) insufficient conceptual basis for prohibiting layer-based designation in conjunction with the *direct method*; and
 - (d) the effect of prepayment penalties.
39. **Alignment of accounting with risk management:** Under the current general hedge accounting model an entity could designate as a hedged item from an overall population individual items or groups of items (in their entirety—ie without layers). This means that the change in the fair value of any prepayment option would have to be included in the measurement of the change in the fair value of the hedged item.
40. The effect of any actual prepayments, impairments or sales would then depend on whether the particular item affected by these events is the individual hedged item or part of the group of items as designated (as opposed to an item of the remainder of the overall population). This is in substance a *lottery*.
41. However, the lottery gives the entity a *chance* that the hedging relationship remains unaffected by actual prepayments, impairments or sales whereas in the portfolio hedge accounting model any such change would *always* affect the hedging relationship. Hence, entities might be better off with a lottery approach.
42. But the lottery approach would not faithfully reflect the economic phenomenon of an entity that hedges a layer—that would require a layer-based designation of

IASB Staff paper

the hedged item. Hence, the ED's objective of more closely aligning hedge accounting with risk management could be better achieved by allowing a layer-based designation. That would replace the artificial, purely accounting driven incentive to use a lottery approach with an incentive to use a designation that more faithfully represents the economic phenomenon of an entity that hedges a layer.

43. Moreover, the Board's rationale for proposing the requirements regarding the implication of prepayment options for layer designations (ie preventing that hedge ineffectiveness from the fair value change of embedded prepayment options is omitted) is addressed by both models (the general hedge accounting model and the portfolio hedge accounting model).¹⁶ Hence, the eligibility of layer-based designation of the hedged item would allow entities to align the hedge accounting with risk management in more scenarios than under IAS 39 today (eg when the risk management is based on layers) *without* undermining the calculation of hedge ineffectiveness.
44. **Providing an incentive for a conceptually preferable calculation of hedge ineffectiveness:** A layer-based designation of the hedged item is only available if hedge ineffectiveness is essentially calculated like under the direct approach of the portfolio hedge accounting model (ie by calculating the change in fair value including that of the embedded prepayment option). When finalising the portfolio hedge accounting model, the Board noted that the direct method was *conceptually preferable* to the percentage approach (ie an indirect method).¹⁷ Hence, the eligibility of layer-based designation would make the conceptually preferable calculation of hedge ineffectiveness more attractive.
45. **Insufficient conceptual basis for prohibiting layer-based designation in conjunction with the *direct method*:** When developing the portfolio hedge accounting model the Board rejected a layer-based designation of the hedged

¹⁶ See paragraph 36.

¹⁷ See IAS 39.BC204.

IASB Staff paper

item because it is incompatible with the percentage approach. All the arguments cited in the Basis for Conclusions of IAS 39 against layer-based designation¹⁸ only apply to approaches of determining hedge ineffectiveness that would omit the fair value change of an embedded prepayment option (an extract of the relevant section of the Basis for Conclusions of IAS 39 is provided in Appendix A, paragraph A4). These arguments support the Board's decision to require the percentage approach, which provided a means to capture hedge ineffectiveness from changes in prepayment estimates *without a direct valuation of the embedded prepayment option* (but also meant layers cannot be allowed).

46. However, the *direct method* includes the fair value change of an embedded prepayment option. Hence, the arguments cited in the Basis for Conclusions of IAS 39 against layer-based designation do not apply if hedge ineffectiveness is determined in this way. The Basis for Conclusion of IAS 39 also shows that the direct method was only included in the final requirements in response to feedback on the exposure draft for the portfolio hedge accounting model but not envisaged in the development of that model.¹⁹ This explains why the portfolio hedge accounting model as a whole was not tailored to the direct method. This has resulted in requirements (such as the prohibition of layers) that were designed for the percentage approach being applied to the direct method as well even if not justified because of the differences between the two alternatives of calculating hedge ineffectiveness.
47. Actually, the fact that under the portfolio hedge accounting model only *earlier than expected* prepayments result in a derecognition of the related fair value hedge adjustment demonstrates that this model did not aim at a percentage designation like under the general model of IAS 39²⁰ but rather intended to

¹⁸ See IAS 39.BC201.

¹⁹ See IAS 39.BC204 (provided as an extract in Appendix A, paragraph A5).

²⁰ See IAS 39.81 (referring to designation as a percentage of fair value).

IASB Staff paper

approximate the fair value change of the hedged item including the effect of the prepayment option.²¹

48. **The effect of prepayment penalties:** one respondent noted that many prepayable items are not prepayable at par but instead include a mechanism to compensate the lender for early repayments, eg ‘make whole’ provisions or ‘prepayment penalties’. If these result in aggregate in an exercise price of the prepayment option at fair value (ie repayment at the concurrent fair value on the repayment date) the ED would allow layer-based designation of the hedged item. However, if the compensation mechanism does not exactly result in an exercise price of the prepayment option at fair value but partial compensation a layer-based designation is not eligible.
49. However, a compensation mechanism would still reduce the hedge ineffectiveness if the prepayable item is hedged with a ‘normal’ interest rate swap (ie with a mirror option feature for the prepayment option) because the fair value of the prepayment option is smaller the closer the compensation mechanism moves the exercise price of the prepayment option to the item’s fair value at the repayment date.
50. The effect of a compensation mechanism is appropriately captured by the direct method because it is part of the embedded prepayment option that is included in the calculation of the fair value of the hedged item. Under the percentage approach accommodating and capturing the effect of a compensation mechanism is much more difficult (if at all practicable).
51. (The question to the Board on this issue is Question 3.)

Differentiation between written and purchased prepayment options

52. Some respondents suggested that for the eligibility of layer-based designation of hedged items written and purchased prepayment options should be

²¹ See IAS 39.BC204 (last sentence) (provided as an extract in Appendix A, paragraph A5).

IASB Staff paper

differentiated. These respondents support allowing a layer component for purchased items with an embedded *purchased* option.

53. The rationale of those respondents is that if the entity is the option holder (eg a debtor's call option included in prepayable debt) the entity controls the exercise of the option and could hence demonstrate that the option was not affected by the hedged risk.
54. The staff are not supportive of making this distinction. The staff consider that the hedged risk affects the fair value of a prepayment option irrespective of whether the *particular option holder* actually exercises it at that time or intends to actually exercise it in the future. As explained earlier, the fair value of the option captures the *possible* outcomes and hence the *risk* that an amount that would be 'in the money' might be repaid at a different amount than fair value²² such as par. Hence, the staff consider that the (absolute) fair value change of the prepayment option is not an issue of whether it is a purchased or a written option (which rather determines whether it is a gain or a loss from the entity's perspective, ie whether the entity is the holder or the writer of the option).
55. Instead, the staff consider that the aspect of who controls the exercise of the option relates to whether any intrinsic value would be *realised* (or not).
56. Consequently, if for items with an embedded purchased prepayment option a layer-based designation that *excludes* the fair value change of the option were allowed hedge ineffectiveness would not be captured. This would *conflict* with the Board's rationale for proposing the requirements regarding the implication of prepayment options for layer designations.
57. (The question to the Board on this issue is Question 4.)

²² Excluding the effect of the prepayment option's exercise/strike price.

IASB Staff paper

Analysis of the arguments cited for disagreement with the prepayment option related proposals

58. After analysing the main suggestions by respondents, the staff in this section analyse the arguments²³ that respondents cited for disagreement with the prepayment option related proposals in the ED.
59. The most significant concern of those who disagreed relates to the issue of ‘behavioural patterns’ that can be modelled for prepayments at high levels of aggregation. This concern also relates to possible implications regarding the Board’s macro hedge accounting deliberations. In the staff’s view, the aspect of ‘behavioural patterns’ cannot be addressed by the general hedge accounting model because of the Board’s concerns regarding the omission of fair value changes of the hedged item from hedge ineffectiveness if the fair value change of a prepayment option is excluded from that exercise.
60. In the staff’s view, the implications of ‘behavioural patterns’ are a central aspect of the macro hedge accounting model because these implications arise from large aggregation of items that result in more stable patterns. This was the subject of the Board’s deliberations of the macro hedge accounting model at the main April 2011 meeting.²⁴
61. Hence, the staff consider that the concerns of respondents regarding the ‘behavioural patterns’ can only and would more appropriately be addressed and will be considered as part of the Board’s macro hedge accounting deliberations.
62. Another concern was that the proposal was inconsistent with common risk management strategies. This concern mainly relates to the earlier discussed concern regarding ‘behavioural patterns’ and macro hedge accounting. Many entities that manage portfolios using layers would need a macro hedge accounting model to be able to align the accounting with their risk management.

²³ See paragraph 12.

²⁴ See agenda paper 6A of the main April 2011 IASB meeting.

IASB Staff paper

However, the staff consider that if the Board allowed layer-based designation of hedged items as discussed in the previous sections on:

- (a) 'Relevant reference point of the prepayment option'; or/and
- (b) 'Designations including the effect of a prepayment option'

that would allow more entities to align the accounting with their risk management strategies than under the proposals in the ED. Hence, this would at least in part address the concerns of respondents.

63. Some respondents think that the value of a prepayment option of a bottom layer is nil or irrelevant. The staff consider that the fair value of a prepayment option is not affected by whether it relates to an item in a bottom layer or not. Hence, the value of a prepayment option is not nil simply because it is associated with a bottom layer. Instead, the aspect of the bottom layer only relates to the allocation of items for which the prepayment option was actually exercised to groups that are used for risk management or accounting purposes (ie whether they need to be removed from a particular subset of the overall population or not). This issue is similar to the one regarding the actual exercise of options discussed in the section 'Differentiation between written and purchased prepayment options' above.
64. The view that the prepayment option of a bottom layer is irrelevant reflects the view of a 'behavioural patterns' and that an entity is not affected by the change in the fair value of a prepayment option if it is not realised (as in the case of a bottom layer that remains). The staff consider that this concern can only be addressed as part of the Board's deliberations of the macro hedge accounting model.
65. One concern was that the proposals regarding the layer-based designation of hedged items were inconsistent with bottom layers for variable cash flows that are subject to prepayment. The staff note that a cash flow hedge of variable cash flows hedges a different risk than the fair value hedge of a fixed rate prepayable item. An important difference is:

IASB Staff paper

- (a) The variable cash flows of a particular prepayable item have the risk of *non-occurrence* (in case of prepayment) but they could be replaced by reinvesting the cash received from the prepayment in a similar item (or borrowing the cash needed for an early repayment by issuing a similar item) that generates variable cash flows of the same kind (eg variable LIBOR).
- (b) For a fixed rate item that is prepayable at an amount other than fair value (eg par) the cash received from the prepayment typically does not allow to reinvest in a similar item that generates the fixed cash flows that would have been received from the prepaid asset because the required reinvestment would be at fair value (similarly, the borrowing that would be required to replace a liability that is repaid early could typically not be arranged paying similar fixed cash flows as those that would have been paid on the prepaid liability).

66. Hence, the staff consider that the scenarios are different and hence the consistency concern is unwarranted. Moreover, the implications of the hedged item no longer existing is different for fair value hedges (effect on fair value change, which affects hedge ineffectiveness) and cash flow hedges (probability of occurrence, which affects discontinuation). This is similar to the different implications of credit risks for the two types of hedges.²⁵

Staff recommendation and questions to the Board

Eligibility of layer designation

67. The proposal received overwhelming support. The staff recommend to confirm the proposal in the ED (subject to adding a top layer designation example).²⁶

²⁵ See IAS 39.IG F.4.3.

²⁶ See paragraph 18.

IASB Staff paper

Question 1: Eligibility of layer designation

Does the Board agree with the staff recommendation to confirm the proposal of allowing layer-based designation of a hedged item (when the item does not include a prepayment option whose fair value is affected by changes in the hedged risk)?

If the Board does not agree, what does the Board prefer instead and why?

Relevant reference point of the prepayment option

68. The staff agree with respondents that the prepayment option is only relevant if it *relates to* the designated *layer* instead of the (entire) item or contract.
69. The staff also consider that eligibility of layer-based designation would be *consistent* with the Board's rationale for the proposals regarding the effect of prepayment options for layer-based designations.

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70. Hence, the staff recommend that for *partially* prepayable items a layer-based designation of the hedged item should be allowed *for those amounts that are not*²⁷ *prepayable at the time of designation.*

Question 2: Relevant reference point of the prepayment option
Does the Board agree with the staff recommendation in paragraph 70?
If the Board does not agree, what does the Board prefer instead and why?

Designations including the effect of a prepayment option

71. The staff agree with respondents that a designation of a layer as the hedged item should be allowed *if it includes* the effect of a related prepayment option when determining the change in fair value of the hedged item.
72. The staff consider that this designation:
- (a) would *not conflict* with the Board's rationale for proposing the requirements regarding the implication of prepayment options for layer designations.
 - (b) would allow entities to better align accounting with their risk management.
 - (c) would provide an incentive for a conceptually preferable calculation of hedge ineffectiveness.
 - (d) would more appropriately capture the effect of prepayment penalties (compared to the percentage approach of the portfolio hedge accounting model).

²⁷ That means *not expectations* of the actual outcomes regarding contractually permitted prepayments.

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73. The staff also note that a layer-based designation could help mitigate the insufficient conceptual basis for prohibiting layer-based designation in conjunction with the *direct method* under the portfolio hedge accounting model.
74. Hence, the staff recommend that a designation of a layer as the hedged item should be allowed *if it includes* the effect of a related prepayment option when determining the change in fair value of the hedged item.

Question 3: Designations including the effect of a prepayment option

Does the Board agree with the staff recommendation in paragraph 74?

If the Board does not agree, what does the Board prefer instead and why?

Differentiation between written and purchased prepayment options

75. The staff disagree with respondents that for the eligibility of layer-based designation of hedged items written and purchased prepayment options should be differentiated.
76. The staff consider that:
- (a) the hedged risk affects the fair value of a prepayment option irrespective of whether the *particular option holder* actually exercises it at that time or intends to actually exercise it in the future.
 - (b) if for items with an embedded purchased prepayment option a layer-based designation that *excludes* the fair value change of the option were allowed hedge ineffectiveness would not be captured, which would *conflict* with the Board's rationale for proposing the requirements regarding the implication of prepayment options for layer designations.

IASB Staff paper

77. Hence, the staff recommend *not* differentiating written and purchased prepayment options for the purpose of the eligibility of layer-based designation of hedged items. Instead, the staff recommend confirming that aspect of the proposals in the ED (which does not make that differentiation).

Question 4: Differentiation between written and purchased prepayment options

Does the Board agree with the staff recommendation in paragraph 77?

If the Board does not agree, what does the Board prefer instead and why?

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Appendix A

A1. This appendix provides extracts of the ED and IAS 39.

A2. Extracts of the ED (paragraphs 36(e) and B23) [emphasis added]:

[36](e) the items in the group do not contain prepayment options other than those whose fair value is not affected by the hedged risk.

B23 A layer component of a contract that includes a prepayment option is not eligible to be designated as a hedged item in a fair value hedge if the option's fair value is affected by changes in the hedged risk.

A3. Extract of IAS 39 (paragraph AG126):

An entity tests effectiveness periodically. If estimates of repricing dates change between one date on which an entity assesses effectiveness and the next, it shall calculate the amount of effectiveness either:

- (a) as the difference between the change in the fair value of the hedging instrument (see paragraph AG114(h)) and the change in the value of the entire hedged item that is attributable to changes in the hedged interest rate (including the effect that changes in the hedged interest rate have on the fair value of any embedded prepayment option); or
- (b) using the following approximation. The entity:
 - (i) calculates the percentage of the assets (or liabilities) in each repricing time period that was hedged, on the basis of the estimated repricing dates at the last date it tested effectiveness.
 - (ii) applies this percentage to its revised estimate of the amount in that repricing time period to calculate the amount of the hedged item based on its revised estimate.
 - (iii) calculates the change in the fair value of its revised estimate of the hedged item that is attributable to the hedged risk and presents it as set out in paragraph AG114(g).
 - (iv) recognises ineffectiveness equal to the difference between the amount determined in (iii) and the change in the fair value of the hedging instrument (see paragraph AG114(h)).

A4. Extract of IAS 39 (paragraph BC201):

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The arguments against the layer approach are as follows:

- (a) The considerations that apply to a fair value hedge are different from those that apply to a cash flow hedge. In a cash flow hedge, it is the cash flows associated with the reinvestment of probable future collections that are hedged. In a fair value hedge it is the fair value of the assets that currently exist.
- (b) The fact that no ineffectiveness is recognised if the amount in a repricing time period is re-estimated upwards (with the effect that the entity becomes underhedged) is not in accordance with IAS 39. For a fair value hedge, IAS 39 requires that ineffectiveness is recognised both when the entity becomes overhedged (ie the derivative exceeds the hedged item) and when it becomes underhedged (ie the derivative is smaller than the hedged item).
- (c) As noted in paragraph BC200(e), a prepayable item can be viewed as a combination of a non-prepayable item and a prepayment option. When interest rates change, the fair value of both of these components changes.
- (d) The objective of applying fair value hedge accounting to a hedged item designated in terms of an amount (rather than as individual assets or liabilities) is to obtain results that closely approximate those that would have been obtained if individual assets or liabilities had been designated as the hedged item. If individual prepayable assets had been designated as the hedged item, the change in both the components noted in (c) above (to the extent they are attributable to the hedged risk) would be recognised in profit or loss, both when interest rates increase and when they decrease. Accordingly, the change in the fair value of the hedged asset would differ from the change in the fair value of the hedging derivative (unless that derivative includes an equivalent prepayment option) and ineffectiveness would be recognised for the difference. It follows that in the simplified approach of designating the hedged item as an amount, ineffectiveness should similarly arise.
- (e) All prepayable assets in a repricing time period, and not just a layer of them, contain a prepayment option whose fair value changes with changes in interest rates. Accordingly, when interest rates change, the fair value of the hedged assets (which include a prepayment option whose fair value has changed) will change by an amount different from that of the hedging derivative (which typically does not contain a prepayment option), and ineffectiveness will arise. This effect occurs regardless of whether interest rates increase or decrease—ie regardless of whether re-estimates of prepayments result in the amount in a time period being more or less.

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- (f) Interest rate risk and prepayment risk are so closely interrelated that it is not appropriate to separate the two components referred to in paragraph BC200(e) and designate only one of them (or a part of one of them) as the hedged item. Often the biggest single cause of changes in prepayment rates is changes in interest rates. This close relationship is the reason why IAS 39* prohibits a held-to-maturity asset from being a hedged item with respect to either interest rate risk or prepayment risk. Furthermore, most entities do not separate the two components for risk management purposes. Rather, they incorporate the prepayment option by scheduling amounts based on expected maturities. When entities choose to use risk management practices—based on not separating prepayment and interest rate risk—as the basis for designation for hedge accounting purposes, it is not appropriate to separate the two components referred to in paragraph BC200(e) and designate only one of them (or a part of one of them) as the hedged item.
- (g) If interest rates change, the effect on the fair value of a portfolio of prepayable items will be different from the effect on the fair value of a portfolio of otherwise identical but non-prepayable items. However, using a layer approach, this difference would not be recognised—if both portfolios were hedged to the same extent, both would be recognised in the balance sheet at the same amount.

A5. Extract of IAS 39 (paragraphs BC203-204) [emphasis added]:

[BC203]

The Board also considered comments on the Exposure Draft that:

- (a) some entities hedge prepayment risk and interest rate risk separately, by hedging to the expected prepayment date using interest rate swaps, and hedging possible variations in these expected prepayment dates using swaptions.
- (b) the embedded derivatives provisions of IAS 39 require some prepayable assets to be separated into a prepayment option and a non-prepayable host contract* (unless the entity is unable to measure separately the prepayment option, in which case it treats the entire asset as held for trading†). This seems to conflict with the view in the Exposure Draft that the two risks are too difficult to separate for the purposes of a portfolio hedge.

[BC204]

In considering these arguments, the Board noted that the percentage approach described in paragraph AG126(b) is a proxy for measuring the change in the fair value of the entire asset (or liability)—including any embedded prepayment option—that is attributable to

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changes in interest rates. The Board had developed this proxy in the Exposure Draft because it had been informed that most entities (a) do not separate interest rate risk and prepayment risk for risk management purposes and hence (b) were unable to value the change in the value of the entire asset (including any embedded prepayment option) that is attributable to changes in the hedged interest rates. However, the comments described in paragraph BC203 indicated that in some cases, entities may be able to measure this change in value directly. The Board noted that such a direct method of measurement is conceptually preferable to the proxy described in paragraph AG126(b) and, accordingly, decided to recognise it explicitly. Thus, for example, if an entity that hedges prepayable assets using a combination of interest rate swaps and swaptions is able to measure directly the change in fair value of the entire asset, it could measure effectiveness by comparing the change in the value of the swaps and swaptions with the change in the fair value of the entire asset (including the change in the value of the prepayment option embedded in them) that is attributable to changes in the hedged interest rate. However, the Board also decided to permit the proxy proposed in the Exposure Draft for those entities that are unable to measure directly the change in the fair value of the entire asset.