Project **Financial Instruments (Replacement of IAS 39)—Hedge Accounting**

Topic **Meaning of the unbiased requirement**

Introduction

Background

1. This paper is one in a series of papers that addresses the feedback received on the proposals in the exposure draft *Hedge Accounting* (ED) regarding the hedge effectiveness assessment.

2. This paper addresses one criterion of the proposed hedge effectiveness requirements: the objective of the hedge effectiveness assessment, ie that a hedging relationship should produce an unbiased result and minimise expected hedge ineffectiveness. Question 6 in the invitation to comment relates to this issue.

3. This paper does not contain any questions to the Board. These will be asked in agenda paper 1C

Overview of the proposal in the ED[1]

4. The ED proposes eliminating the 80-125 per cent 'bright-line' in IAS 39 *Financial Instruments: Recognition and Measurement* and replacing the combination of a prospective and a retrospective hedge effectiveness assessment with new prospective hedge effectiveness requirements that comprise two criteria—the hedging relationship:

[1] Refer to paragraphs 19(c)(ii) and B29 to B31of the ED (the proposals were addressed by agenda paper series 4 presented at the 24 August 2010 IASB meeting).

(a) must meet the objective of the hedge effectiveness assessment (ie it ensures that the hedging relationship will produce an *unbiased result* and *minimise expected hedge ineffectiveness*); and

(b) must be expected to achieve *other than accidental offsetting*.

5. With regard to the first criterion (ie the objective of the hedge effectiveness assessment) the ED's application guidance also sets out that:

(a) a hedging relationship should not reflect a deliberate mismatch between the weightings of the hedged item and the hedging instrument that would create hedge ineffectiveness. This would mean that an entity has no expectation that changes in the value of the hedging instrument will systematically either exceed or be less than the change in value of the hedged item such that they would produce a biased result.

(b) however, that would not mean that a hedging relationship would have to be expected to be perfectly effective in order to qualify for hedge accounting.

Rationale for the proposals

6. The requirement that the hedging relationship will produce an unbiased result and minimise expected hedge ineffectiveness reflects the Board's concern that an entity might designate hedging relationships that would not be appropriate because they would give rise to systematic hedge ineffectiveness that could be avoided by a more appropriate designation. This was considered inappropriate 'bias'.

7. The issue arises as a consequence of eliminating the bright line of 80-125 per cent in IAS 39, which created a trade-off for an entity's choice of the hedge ratio: if an entity chooses a hedge ratio that would have a 'biased' result that would come at the expense of higher hedge ineffectiveness, which increases the risk of falling outside the 80-125 per cent range.

8. The proposals also reflect the Board's concern that by using an inappropriate designation of a quantity of the hedged item that is different from the quantity actually hedged, an entity could avoid the recognition of hedge ineffectiveness for a cash flow hedge by abusing the 'lower of' test (ie that hedge

ineffectiveness is not recognised when it arises while the cumulative change in the value of the hedged item exceeds that on the hedging instrument).

9. Therefore, the ED proposes a requirement for how an entity must determine the hedge ratio when designating a hedging relationship (ie such that it gives an unbiased result and minimises expected hedge ineffectiveness).

10. However, the Board also acknowledged that entities accept basis risk as part of cost-effective hedging relationships and that therefore many hedging relationships inevitably involve some hedge ineffectiveness.

Feedback from comment letters and outreach activities

11. In addition to the feedback summarised in paper 1A the staff summarises in the paragraphs below the specific feedback received on the other elements of the objective based effectiveness test.

12. Many commentators asked for more guidance, particularly on the meaning of the 'unbiased result' requirement and the minimisation of expected hedge ineffectiveness. These commentators raised objections to the way the objective-based effectiveness assessment has been drafted as it is perceived to be more restrictive and onerous than the bright-line effectiveness test in IAS 39 and not aligned with risk management.

13. The feedback received indicated that commentators (particularly the ones who *conditionally* agreed to the proposals) still feel that the two elements of the objective-based effectiveness assessment (ie that the hedging relationship gives an unbiased result and minimises expected ineffectiveness) can easily be interpreted as requiring that entities need to set up a hedging relationship that is perfectly effective and they therefore inferred that the proposed effectiveness assessment would be based on a new bright-line of 100 per cent. Assuming that was not the intention they felt that clarification was needed.

14. In addition, they feel that the concepts being introduced by the Board, despite being useful, are new and therefore the Board has been asked to provide additional guidance on the way in which these concepts can be operationalised.

15. For some commentators it was also unclear whether the references to 'unbiased result' and 'minimise expected hedge ineffectiveness' constitute two separate,

cumulative criteria or whether the reference to minimising expected hedge ineffectiveness elaborates on the requirement of producing an 'unbiased result' (ie a single criterion).

16. Commentators who expressed concerns about these elements of the new objective-based effectiveness assessment thought the requirement that a hedging relationship needs to produce an unbiased result and minimise expected hedge ineffectiveness could be interpreted as a *mathematical optimisation* exercise, by which entities would need to search for the perfect hedging relationship at inception (and on a continuous basis), because if they do not, the results could be considered to be biased and ineffectiveness will probably not be *minimised*.

17. Many commentators were also concerned that the proposed requirement that a hedging relationship gives an unbiased result and minimises expected hedge ineffectiveness would not take into account the fact that entities from a risk management perspective in many situations do *not* use the hedging instrument that would make the hedging relationship perfectly effective (ie by reference to a bright line of 100 per cent) because that hedging instrument is:

    (a) not available; or

    (b) not cost-efficient as a hedge (compared to a standardised instrument that is cheaper and/or more liquid but does not provide the perfect fit).

    These commentators were concerned that a narrow interpretation of the hedge ratio related proposals would prohibit hedge accounting in those situations.

18. Some commentators argued that the Board should allow entities to use the design of the hedging relationship used for risk management purposes and disclose what level of ineffectiveness entities tolerate, by hedged risk. Others argued that it should simply reflect what entities do for risk management purposes and that this should the basis for hedge accounting.

19. Few participants in the outreach sessions disagreed with the proposals. The ones who disagreed feel that the hedge accounting model should still be based on thresholds. Some of these participants still agree with the use of a quantitative threshold similar to the one in IAS 39, while others within this group believed that a qualitative threshold similar to the one proposed in the Financial Accounting Standards Board's (FASB) proposals on accounting for financial instruments would be appropriate.

20. The comment letter responses were consistent with the outreach feedback because very few respondents disagreed with the proposals. As noted above, some agreed with the removal of the bright-line tests but were concerned that the proposals could be interpreted as being overly restrictive, so requested clarification. Those who disagreed with the proposals did so because they thought that the proposal would have very little impact and that it would be more burdensome than helpful. This view has been formed on the basis that the objective-based effectiveness assessment would require entities to set the perfect hedging relationship to be compliant with hedge accounting and also because these respondents thought that the qualitative threshold of 'reasonably effective' proposed by the FASB would be a better approach to effectiveness than the IASB's proposed revised effectiveness test.

Staff analysis

Elements of the proposals regarding determination of the hedge ratio

21. The proposed requirement that a hedging relationship must meet the objective of the hedge effectiveness assessment included *four* elements:[2]

    (a) that the hedging relationship will produce an unbiased result;

    (b) that the hedging relationship will minimise expected hedge ineffectiveness;

    (c) that the entity has no expectation that changes in the value of the hedging instrument will systematically either exceed or be less than the change in value of the hedged item such that they would produce a biased result;

    (d) that the hedging relationship shall not reflect a deliberate mismatch between the weightings of the hedged item and the hedging instrument that would create hedge ineffectiveness.

22. In the following sections the staff consider the implications of the feedback for each of those elements.

[2] See paragraph B29 of the ED.

Unbiased result

23. The reference to ‘unbiased result’ was confusing to commentators, mainly because:

    (a) in their view, the term was *unclear* and hence:

        (i) as drafted, the proposals are perceived as requiring entities to identify as the starting point for hedge accounting the 'perfect' hedging instrument instead of the hedging instrument actually used; and

        (ii) could result in a 100 per cent bright-line test for hedge effectiveness (albeit as an unintended consequence);

    (b) the term *overlaps* with other elements regarding minimising expected hedge ineffectiveness and the prohibition of a deliberate mismatch between the weightings of the hedged item and the hedging instrument, which left people wondering how many criteria there actually are.

24. The commentators’ major concern regarding the identification of the ‘perfect’ hedging instrument was that this interpretation of the proposals would require an entity to:

    (a) either actually enter into the technically perfect or best fitting hedging instrument (even if not cost-efficient); or

    (b) to determine the hedge ratio as if they had entered into the best fitting hedging instrument, which would have distorted the hedge ratio for the actual hedging relationship that includes the hedging instrument actually entered into.

    This raised concerns whether in situations in which entities use hedging instruments that do not provide the best fit (eg a standardised instrument that is cheaper and/or more liquid than a better fitting hedge) the proposed hedge effectiveness assessment meant that the entity’s commercial decision of which hedging instrument to actually use would be restricted or second guessed.

25. The staff note that determining the hedge ratio is not an accounting decision but is instead a risk management decision that takes into consideration, among other things, the following factors:

(a) the availability of hedging instruments and the underlyings of those instruments (and, as a consequence, the level of basis risk involved between the hedged item and the hedging instrument);

(b) the tolerance levels in relation to expected sources of hedge ineffectiveness (which determine when the hedging relationship is adjusted for risk management purposes); and

(c) the costs of hedging (including the costs of adjusting an existing hedging relationship).

26. On the basis of these factors, entities determine from a risk management perspective which is the best hedge ratio to be used in a hedging relationship. It is a commercial decision reflecting cost/benefit considerations (instead of a mathematical optimisation for accounting purposes).

27. Unlike IAS 39[3], the proposed hedge accounting model would *require* entities to (where applicable) establish a hedge ratio of other than one-to-one to comply with the objective of the hedge effectiveness assessment. However, it was intended that an entity would use the *actual* hedging instruments it chose based on commercial considerations (and its hedged items) as a starting point and on that basis determine the hedge ratio that complies with the proposed requirements. Consequently, the intention was that the proposed requirements would *not* consider the hedge effectiveness and the related hedge ratio that could have been achieved with a different hedging instrument that would have been a better fit for the hedged risk but that the entity did not enter into.

28. Therefore, the staff consider that the term 'unbiased' creates the unintended consequence of (at least in terms of perception) restricting or second guessing an entity's commercial decision of which hedging instrument to actually use.

29. The staff also consider that referring to the term 'unbiased' creates the issue of using an *umbrella term* that was discussed in agenda paper 1A. For the reasons set out in that paper, the staff consider that using an umbrella term should be avoided. Instead, to improve clarity the term should be disaggregated into the

[3] IAS 39 gives an entity the *choice* to use a hedge ratio that improves hedge effectiveness (see IAS 39.AG100 and AG107A). In addition, the explicit 80-125 per cent range also allows some latitude for not identifying the best available hedge ratio. Therefore, the effectiveness assessment can still be met with a range of hedge ratios.

relevant aspects. This would also address the concerns regarding the overlap with other elements.

Minimising expected hedge ineffectiveness

30. The reference to *minimising* expected hedge effectiveness was arguably the most concerning for commentators. The requirement to 'minimise' something is widely understood to require an optimisation in a strict mathematical sense. This raised concerns that:

    (a) identifying a minimum would involve considerable effort (ie a quantitative analysis) in all scenarios that are not 'perfectly' (ie 100 per cent) effective—in other words, for all scenarios without fully matched terms; this would bring back much of the operational burden of the effectiveness assessment of IAS 39;

    (b) no matter what effort involved, it might still be difficult to demonstrate that *the* minimum has been identified (because in many cases there is no obvious answer).

31. The staff agree with commentators' concerns that the requirement to achieve a minimum would be burdensome and make it difficult for entity's to demonstrate that a hedging relationship complies with the proposed hedge effectiveness requirements. This would also increase the risk of errors that would result in restatements. Hence, the staff consider that any reference to 'minimising' would not be operational.

32. The staff also consider that any reference to 'minimising' would re-create one of the most significant problems associated with the quantitative 80-125 per cent range used for the effectiveness assessment in IAS 39: the general concept of materiality cannot be applied to such a quantitative criterion as it has a binary outcome based on a mathematical result.

33. The staff also consider that the feedback means this proposal would *regularly* result in an accounting centric exercise that is disconnected from risk management. This would conflict with the overall objective of the ED to better align hedge accounting with risk management.

34. Hence, the staff consider that any reference to 'minimising' (or any other term that implies identifying an optimum) should be avoided

No expectation that changes in the value of the hedging instrument will systematically either exceed or be less than the change in value of the hedged item

35. Some commentators asked how the requirement that 'the entity has no expectation that changes in the value of the hedging instrument will systematically either exceed or be less than the changes in value of the hedged item such that they would produce a biased result' would relate to situations commonly known as 'late hedges'. These are situations where a derivative is designated as a hedging instrument only after its inception so that it is already in- or out-of-the-money at the time of its designation. Commentators wondered whether they would have to adjust the hedge ratio in such situations with regard to the (non-zero) fair value of the derivative at the time of its designation.

36. The staff consider that in these situations the proposal would create a problem. The fair value of the hedging instrument at the time of its designation is a present value. Hence, over the remaining life of the hedging instrument this present value will accrete to the undiscounted amount (this effect is often referred to as the unwinding of the discount). There is no offsetting fair value change in the hedged item for this effect. Hence, in those situations when the derivative is designated as a hedging instrument only after that instrument's inception an entity *would have* an expectation (in fact, definite knowledge) that the changes in the value of the hedging instrument will *systematically* either exceed or be less than the changes in value of the hedged item. This arguably would produce a biased result.

37. Hence, the entity would need to explore whether it could adjust the hedge ratio to avoid the systematic difference between the value changes of the hedging instrument and the hedged item over the hedging period. That would require deliberately creating a mismatch between the quantities of the hedging instrument and the hedged item in order to generate hedge ineffectiveness that offsets the unwinding of the discount that (only) affects the hedging instrument. However, in order to create an amount of hedge ineffectiveness equal to offset the unwinding of the discount on the derivative (to have a net effect of zero) the entity would have to know what the actual price or rate of the underlying (eg

commodity price) will be at the end of the hedging relationship, ie it would require prefect foresight.[4] Appendix A illustrates that issue.

38. Therefore, in those (quite common) situations when an entity has a 'late hedge' it would fail the proposed hedge effectiveness requirements because—without perfect foresight—it cannot identify a hedge ratio for the designation of the hedging relationship that would not involve an expectation that the changes in the value of the hedging instrument will systematically either exceed or be less than the changes in value of the hedged item. In contrast, in accordance with IAS 39 those hedging relationships typically qualify for hedge accounting because the 80-125 per cent range can accommodate the mismatch but they involve considerable effort for the quantitative effectiveness assessment because of the need to ensure they stay within the 80-125 per cent range.

39. The staff consider that this outcome was neither intended nor that it would be useful. Hence, the staff consider that the final requirements should avoid any reference to having no expectation that changes in the value of the hedging instrument will systematically either exceed or be less than the changes in value of the hedged item.

Deliberate mismatch between the weightings of the hedged item and the hedging instrument that would create hedge ineffectiveness

40. The feedback did not raise concerns about the proposed requirement that the hedging relationship shall not reflect a deliberate mismatch between the weightings of the hedged item and the hedging instrument that would create hedge ineffectiveness.

41. The difference in feedback compared to the other three elements[5] indicates that this is the clearest articulation of the requirement. Hence, the staff analyse in the following sections how this element could be used further to satisfy the objective that the Board pursued with the new hedge effectiveness assessment.

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[4] This is different from the forward price, which is the current spot price adjusted for the forward points. It would be entirely accidental if it coincided with the later actual spot price. This is also different from underlyings that are subject to basis risk, for which a relationship can be determined, eg that two underlyings change in a ratio of 1:1.05 (which does not require knowing the actual spot price in the future).

[5] See paragraph 21.

The Board's objective for the new hedge effectiveness assessment

42. When the ED was developed, the Board included both the concept of 'unbiased result' and of 'minimisation of expected hedge ineffectiveness' in the new objective-based effectiveness assessment with the aim of addressing two potential issues:

    (a) **Deliberate mismatch between hedged quantity and designated quantity**: the Board wanted to ensure that entities would not deliberately create a difference between the quantity actually hedged and the quantity designated as the hedged item in order to achieve a particular accounting outcome; and

    (b) **Inappropriate hedge ratio**: the Board wanted to ensure that an entity would not inappropriately designate a hedging relationship such that it would give rise to systematic hedge ineffectiveness that could be avoided by a more appropriate designation.

Deliberate mismatch between hedged quantity and designated quantity

43. Because of the concerns that an entity might deliberately create a difference between the quantity actually hedged and the quantity designated as the hedged item to achieve a particular accounting outcome, the Board decided to retain the *effect* of the requirement in paragraph AG107A of IAS 39[6] for the ED. This aspect was *implicitly* included in the new objective-based effectiveness assessment.

44. Some commentators suggested that if this is the Board's intention then it might be more straightforward and hence clearer to carry forward the requirement of paragraph AG107A of IAS 39 directly instead of combining it with other aspects into a different, single criterion or umbrella term as an implicit part.

45. The staff agree that if the effect of the requirement of paragraph AG107A of IAS 39 is carried forward that should be done *explicitly* because that would make the requirements clearer.

[6] Reproduced in Appendix B.

46. The staff consider that carrying forward the effect of the requirement of paragraph AG107A of IAS 39 would prohibit an entity:

    (a) undermining the 'lower of' test for cash flow hedges by designating a greater quantity of a hedged item than it actually hedges; or

    (b) achieving fair value hedge adjustments on a greater quantity of hedged item than it actually hedges (ie expanding fair value accounting disproportionately to its actually hedged quantity).

47. Hence, the staff consider that this would address the Board's concerns regarding the deliberate mismatch between hedged quantity and the quantity designated as the hedged item.

Inappropriate hedge ratio

48. The staff note that the concern regarding the use of an inappropriate hedge ratio arises as a consequence of eliminating the bright line of 80-125 per cent in IAS 39.[7] Hence, this issue cannot be addressed by carrying forward a requirement of IAS 39 (except retaining that bright line for which there was little support).

49. Thus, the question is what requirements for determining the hedge ratio are needed to address the Board's concern regarding the use of an inappropriate hedge ratio.

Fair value hedges

50. For a fair value hedge, there is no opportunity to *reduce* the *overall* effect of the hedging relationship on profit or loss by choosing an inappropriate hedge ratio. Because hedge ineffectiveness is immediately recognised in profit or loss irrespective of whether the value change of the hedging instrument or the hedged item is higher (ie the 'lower of' test does not apply), any hedge ratio other than the one that minimises hedge ineffectiveness would increase the effect on profit or loss.

[7] See paragraph 7.

51. However, the choice of an inappropriate hedge ratio would provide an opportunity for an entity to achieve fair value hedge adjustments on a larger quantity of hedged items than would be adjusted when using an appropriate hedge ratio. This could be considered an inappropriate expansion of fair value accounting compared to what is justified by hedge accounting. At the same time this creates additional hedge ineffectiveness.

Cash flow hedges

52. For a cash flow hedge, there is an opportunity to *reduce* the effect of the hedging relationship on profit or loss by choosing an inappropriate hedge ratio. Because of the 'lower of' test, hedge ineffectiveness is *not recognised* when it arises while the cumulative change in the value of the hedged item exceeds that on the hedging instrument. Hence, by choosing a hedge ratio that results in the fair value change of the hedged item exceeding that of the hedging instrument the *recognition* of ineffectiveness could be avoided.

Requirement for determining the hedge ratio

53. As a result, determining the hedge ratio gives rise to a similar issue to that of determining the hedged quantity. Choosing an inappropriate hedge ratio has a similar effect on hedge accounting as creating a deliberate mismatch between the hedged quantity and the quantity designated as the hedged item.

54. Hence, this issue could be addressed by a similar requirement to that used to address the issue of determining the hedged quantity (see section 'Deliberate mismatch between hedged quantity and designated quantity'). That requirement could state that an entity's designation of the hedging relationship should in effect be based on the economic hedge ratio, ie be based on:

    (a) the quantity of hedged item that it actually hedges; and

    (b) the quantity of the hedging instrument that it actually uses to hedge that quantity of hedged item.

55. The *first* part of that requirement (ie paragraph 54(a)) is the equivalent of paragraph AG107A of IAS 39[8] and would hence at the same time also address the issue of determining the quantity designated as the *hedged item*.[9]

56. The *second* part of that requirement (ie paragraph 54(b)) would include the quantity of the *hedging instrument* thereby extending the requirement to the hedge ratio (which results from the quantities of the hedged item and the hedging instrument). In the same way that paragraph AG107A of IAS 39 refers to the quantity hedged, this second part could refer to the quantity of hedging instrument used to hedge.

57. This requirement would also have the following advantages:

    (a) The use of the hedge ratio resulting from this requirement would provide information about the hedge ineffectiveness in situations in which an entity uses a hedging instrument that does not provide the best fit, eg because of cost-efficiency considerations. The staff consider that the adjusted hedge ratio (ie a ratio other than one-to-one) determined for risk management purposes has the effect of showing the characteristics of the hedging relationship, which includes hedge ineffectiveness that results from using a hedging instrument that does not provide the best fit.

    (b) It would also align hedge accounting with risk management and hence be consistent with the overall objective of the new hedge accounting model.

    (c) It would address the requests from commentators to clarify that the relevant hedging instrument to be considered in the hedge effectiveness assessment is the actual hedging instrument the entity decided to use (instead of a potentially better fitting one that was not chosen—see paragraphs 17 and 24).

    (d) It would retain the notion in the ED that the hedge ratio is not a free choice for accounting purposes like under IAS 39 today (see paragraph 27).

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[8] The example in paragraph AG107A of IAS 39 would be retained as an illustration of this requirement (see agenda paper 1C).

[9] See section 'Deliberate mismatch between hedged quantity and designated quantity'.

Remaining opportunity for abuse?

58. That leaves the question whether there would be any opportunities left for 'abuse'. The staff consider that the only situation open to abuse is if an entity *actually* (ie for risk management purposes) used a hedge ratio that would be considered 'inappropriately loose' from an accounting perspective:

    (a) If an entity used an *excess* quantity of the *hedging instrument* that would mean the entity has more costs and risk because of having more hedging instruments than needed. However, from an accounting perspective, this would create no advantage because it would create fair value changes for the hedging instrument that affect profit or loss for both fair value hedges and cash flow hedges (because it results in an 'overhedge'). Also, for fair value hedges this would not result in achieving fair value hedge adjustments on a larger quantity of hedged items than would be adjusted when using an appropriate hedge ratio. Hence, the effect of an entity using an excess quantity of the hedging instrument would be presentation within profit or loss of fair value changes as hedge ineffectiveness instead of other or trading gains or losses. This increases the hedge ineffectiveness in an entity's financial statements (which is a natural disincentive for entities) while having no impact on overall profit or loss. Hence, the staff consider that the outcome is not advantageous for an entity from either an economic or an accounting perspective.

    (b) If an entity uses a quantity of the *hedging instrument* that is *too small* ('deficit') that would mean that the entity leaves economically a gap in its hedging. From an accounting perspective, this might create an advantage for fair value hedges if an entity wanted to achieve fair value hedge adjustments on a greater quantity of hedged items than would be adjusted when using an appropriate hedge ratio. Also, for cash flow hedges an entity could abuse the 'lower of' test (because the hedge ineffectiveness arising from the larger fair value change on the hedged item compared to that on the hedging instrument would not be recognised). Hence, even if using a 'deficit' quantity of the hedging instrument is economically not advantageous, from an accounting perspective it might have a desired outcome from a preparer's perspective (potentially inappropriate from the perspective of others).

59. That potential for abuse is *implicitly* addressed in IAS 39 by the 80-125 per cent bright line of the retrospective hedge effectiveness assessment. For the new hedge accounting model this issue could be *explicitly* addressed by a requirement that for the purpose of hedge accounting an entity should not designate a hedging relationship such that it reflects a deliberate mismatch between the weightings of the hedged item and the hedging instrument that would create hedge ineffectiveness (irrespective of whether recognised or not) *in order to achieve* an inappropriate accounting outcome (eg in order to avoid recognising hedge ineffectiveness for cash flow hedges or in order to achieve fair value hedge adjustments for more hedged items to increase the use of fair value accounting without offsetting fair value changes of the hedging instrument).

60. An example of a hedging relationship that would *not* create hedge ineffectiveness *in order to achieve* an inappropriate accounting outcome is a situation in which there is a commercial rationale for a mismatch between the weightings of the hedged item and the hedging instrument that would create hedge ineffectiveness. For example, an entity enters into and designates a different quantity of the hedging instrument than what it determined as the best quantity to hedge the hedged item because the standard size of hedge contracts does not allow it to enter into that exact quantity of hedging instruments (a 'lot size issue'). For example, when hedging a 100 tonnes of coffee purchases with standard forward contracts that have a contract size of 37,500 pounds (lbs) an entity could only use either 5 or 6 contracts (equivalent to 85.0 and 102.1 tonnes, respectively) to hedge the purchase volume of 100 tonnes.

Contrast with a model relying on a qualitative threshold such as 'reasonably effective'

61. The staff also considered the contrast between the proposed objective-based effectiveness test and a model containing a test relying on a qualitative threshold such as 'reasonably effective'. This is outlined in Appendix C.

Appendix A

A1. Appendix A illustrates the issue of a 'late hedge' (see paragraph 37).

A2. The example is the hedge of a forecast purchase of Commodity A in t_3. The hedging relationship is designated in t_1 using a forward purchase contract that was entered into in t_0.

Hedge of a forecast purchase of Commodity A

Discount rate	10%		
Hedging instrument (forward purchase contract)		Hedged item (forecast purchase)	
Forward price (per unit)	100		
Contract size	1 unit	Volume	1 unit
Maturity	t_3	Delivery	t_3
Inception	t_0		
Designation as hedging instrument	t_1	Designation as hedged item	t_1

	t_0	t_1	t_2	t_3	Total t_2-t_3
Periods	*0*	*1*	*2*	*3*	
Forward price (for t_3)	100	200	300	200	
Hedge ratio 1:1 (nominal amounts)					
Hedged item					
Fair value		0.00	-90.91	0.00	
Change in fair value			-90.91	90.91	0.00
Hedging instrument					
Fair value	0.00	82.64	181.82	100.00	
Change in fair value		82.64	99.17	-81.82	17.36
Difference between changes in fair values			8.26	9.09	17.36

1.

A3. The example demonstrates that the unwinding of the discount on the forward contract's fair value of CU82.64[10] at the time of designation in t_1 (ie CU17.36) systematically exceeds the change in fair value of the hedged item (if the forward contract matures in-the-money, ie as an asset). Conversely, if the

[10] In this paper, monetary amounts are denominated in 'currency units (CU)'.

forward contract matures out-of-the-money (ie as a liability), the unwinding of the discount on the forward contract's fair value of CU82.64 at the time of designation in t_1 (ie CU17.36) is systematically less than the change in fair value of the hedged item. This is illustrated in the variation of the example below (assuming a different commodity spot price in t_3).

	t_0	t_1	t_2	t_3	Total t_2-t_3
Periods	*0*	*1*	*2*	*3*	
Forward price (for t_3)	100	200	300	50	
Hedge ratio 1:1 (nominal amounts)					
Hedged item					
Fair value		0.00	-90.91	150.00	
Change in fair value			-90.91	240.91	150.00
Hedging instrument					
Fair value	0.00	82.64	181.82	-50.00	
Change in fair value		82.64	99.17	-231.82	-132.64
Difference between changes in fair values			8.26	9.09	17.36

A4. If the hedge ratio was adjusted on the basis of perfect foresight the systematic hedge ineffectiveness could be avoided, as illustrated below (using an adjusted hedge ratio of 1.13 to 1 that is calibrated to the spot price in t_3 of CU50).

		t_0	t_1	t_2	t_3	Total t_2-t_3
Periods		*0*	*1*	*2*	*3*	
Forward price (for t_3)		100	200	300	50	
Adjusted hedge ratio ('unbiased')	1.13					
Hedged item						
Fair value			0.00	-90.91	150.00	
Change in fair value				-90.91	240.91	
Hedging instrument						
Fair value		0.00	93.46	205.61	-56.54	
Change in fair value			93.46	112.15	-262.15	
Difference between changes in fair values				21.24	-21.24	0.00

A5. However, if the spot price in t_3 is not the one anticipated with perfect foresight (ie any price other than CU50—in the variation of the example below the actual spot price in t_3 is CU250) hedge ineffectiveness arises (in this case CU26.17) and can be *exacerbated* compared to the unwinding of the discount of CU17.36 (which is the hedge ineffectiveness that arises over the total hedge period if the hedge ratio is based on the nominal quantities of the hedging instrument and the hedged item—see paragraph A3).

		t_0	t_1	t_2	t_3	Total t_2-t_3
Periods		*0*	*1*	*2*	*3*	
Forward price (for t_3)		100	200	300	250	
Adjusted hedge ratio ('unbiased')	1.13					
Hedged item						
Fair value			0.00	-90.91	-50.00	
Change in fair value				-90.91	40.91	
Hedging instrument						
Fair value		0.00	93.46	205.61	169.63	
Change in fair value			93.46	112.15	-35.98	
Difference between changes in fair values				21.24	4.93	26.17

A6. Note that in the base case in paragraph A2, adjusting the hedge ratio would result in a ratio of 0 per cent (ie no hedge accounting at all) because the calculation would mean dividing two numbers one of which is a zero (this is because the spot price is anticipated to be the same on maturity as on the date of designation of the hedging relationship).

Appendix B

B1. Paragraph AG107A of IAS 39 is as follows:

> If an entity hedges less than 100 per cent of the exposure on an item, such as 85 per cent, it shall designate the hedged item as being 85 per cent of the exposure and shall measure ineffectiveness based on the change in that designated 85 per cent exposure. However, when hedging the designated 85 per cent exposure, the entity may use a hedge ratio of other than one to one if that improves the expected effectiveness of the hedge, as explained in paragraph AG100.

Appendix C

Considerations regarding the use of 'reasonably effective' threshold for the hedge effectiveness assessment

C1. This appendix sets out considerations regarding the use of a 'reasonably effective' threshold for the hedge effectiveness assessment. Some commentators who disagreed with the proposals in the ED suggested using that 'qualitative threshold' instead.

C2. The considerations are:

a. use of an umbrella term that mingles different aspects;

b. using a criterion that is described as an amendment of *the* hedge effectiveness threshold; and

c. the danger of retaining an accounting centric approach that is disconnected from risk management.

Use of an umbrella term that mingles different aspects

C3. As set out in paper 1A, using a threshold or bright line for the hedge effectiveness assessment means that the assessment would be based on a criterion that *mingles* the different relevant aspects that need to be evaluated. Hence, replacing the 'highly effective' threshold in IAS 39 with a 'reasonably effective' threshold would result in using a single criterion that would have the character of an umbrella term.

C4. This would be tantamount to *aggregating* the different aspects of the effectiveness assessment in the ED, ie:

a. that there is an economic relationship between the hedged item and the hedging instrument;

b. that the effect of credit risk does not dominate the value changes that result from the economic relationship (ie the effect of the changes in the underlying);

c. that the designation of the hedging relationship shall be based on the quantity of hedged item that it actually hedges and the quantity of the

hedging instrument that it actually uses to hedge that quantity of hedged item; and

d. that a hedging relationship shall not reflect a deliberate mismatch between the weightings of the hedged item and the hedging instrument that would create hedge ineffectiveness (irrespective of whether recognised or not) *in order to achieve* an inappropriate accounting outcome.

C5. The fact that a 'highly effective' threshold would comprise such aspects can be seen from the fact that the FASB's proposals also refer to an economic relationship between the hedging instrument and the hedged item[11] and that the basis for conclusions refers to:[12]

> i. 'a holistic consideration of all the facts and circumstances that led an entity to enter into a hedging relationship. That would include, for example, consideration of whether the objective of applying hedge accounting was to compensate for accounting anomalies or to achieve a fair value measurement option for items not currently eligible for fair value measurement.'

C6. However, the feedback on the ED clearly demonstrates that using an umbrella term is too abstract. Hence, the staff recommend *disaggregating* the criteria described in the ED into those aspects. Conversely, *aggregating* the criteria in the ED would exacerbate the concerns of commentators.

C7. Generally, the staff consider that a genuine move from a quantitative to qualitative assessment requires disaggregation into the relevant aspects (ie an explanation of specific elements) because a qualitative assessment cannot 'directly' be applied to one umbrella term.

Using a criterion that is described as an amendment of the hedge effectiveness threshold

C8. The effectiveness assessment proposed in the ED is an objective-based approach that avoids using a bright-line or threshold. That approach was chosen in response

[11] See the FASB's Proposed Accounting Standards Update *Accounting for Financial Instruments and Revisions to the Accounting for Derivative Instruments and Hedging Activities* (ASU AFI), paragraph 113.
[12] See basis for conclusions of the ASU AFI, paragraph BC220.

to the problems that the quantitative threshold used in IAS 39 created. The feedback on these proposals is set out in agenda papers 1A and 1B.

C9. The change to the 'reasonably effective' criterion is described in the basis for conclusions of FASB's proposals on accounting for financial instruments as 'amending the hedge effectiveness threshold to reasonably effective'[13]. Hence, the 'reasonably effective' criterion would *retain* the threshold design of the effectiveness assessment that is used by IFRSs and US GAAP.

C10. Moving instead of removing the threshold would not address the root cause of the problem but instead only change the level of the threshold. Even though the threshold is of a qualitative nature this creates a danger that the threshold will revert to a quantitative measure in order to be operationalised. This concern has been raised by respondents to the IASB ED and in the outreach (and was also raised in responses to the FASB's proposals).

C11. Also, if IFRSs use the term reasonably effective and the FASB also proceed with that term there will be a risk of confusion and/or misinterpretation if the IASB intend that the words be used in a different way.

The danger of retaining an accounting centric approach that is disconnected from risk management

C12. The use of a bright line or threshold is a characteristic of a hedge accounting model that is based on a 'good hedge'/'bad hedge' perspective whereby in accordance with *accounting centric* considerations (such as the 80-125 range of IAS 39) hedging relationships get awarded hedge accounting treatment if considered 'good hedges' while hedge accounting is denied for those hedges that are considered 'bad hedges'. This is a main contributing factor for the disconnect between hedge accounting and risk management under IAS 39.

C13. This was also reflected in the feedback from commentators. The staff note that one of the major concerns commentators raised regarding the ED's reference to 'unbiased result' was that it could be perceived as requiring entities to identify the 'perfect' hedging instrument and hence that in situations in which entities use hedging instruments that do not provide the best fit (eg a standardised instrument

[13] See basis for conclusions of the ASU AFI, paragraph BC218.

that is cheaper and/or more liquid than a better fitting hedge) the proposed hedge effectiveness assessment might mean that the entity's commercial decision of which hedging instrument to actually use would be restricted or second guessed.

C14. The staff consider that using a reference to 'reasonably effective' would give rise to similar concerns because it would raise the question of how much ineffectiveness that results from the choice of the actual hedging instrument that does not have a perfect fit would still be 'reasonable' (compared to 'unbiased' under the ED)? This would have a particular impact on emerging economies that often have to transact hedges in more liquid markets abroad and hence a bigger mismatch (more basis risk) compared to their actual exposures than entities in economies with those liquid markets.