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Project **Financial Instruments: Hedge Accounting**

Topic **Hedge accounting: hedges of credit risk using credit derivatives—the 'insurance approach'**

Introduction

1. At the 28 July 2011 meeting, the Board asked the staff to further explore an 'insurance approach' to accounting for credit derivatives as an alternative to hedge accounting. This approach involves applying accrual accounting to credit derivatives. This paper describes this approach and sets out the staff analysis.

2. A comparison of this approach with two other alternatives to hedge accounting discussed in this series of papers and at the 28 July 2011 meeting is set out in agenda paper 16C. That paper also includes the questions to the Board.

Insurance approach to accounting for credit derivatives

Overview

3. The staff consider that under the insurance approach the following accounting could apply to a CDS that is used to manage credit exposures:

(a) any premium paid at inception of the CDS[1] would be amortised over the life of the CDS;

(b) the quarterly premium would be expensed as paid each quarter (including adjustments for premium accruals);

(c) the fair value of the CDS would be disclosed in the notes; and

(d) in the assessment of impairment, the cash flow that might result from the CDS in case of a credit event is treated in the same way as cash flows that might result from the collateral/guarantee of a collateralised/guaranteed financial asset. In other words, the loan[2] or loan commitment for which credit risk is managed using the CDS is treated like a collateralised/guaranteed financial asset with the CDS accounted for like collateral or a guarantee (see paragraphs 16 to 21).

Summary

4. The insurance approach is a simple and straightforward solution if the CDS is acquired and used as credit protection for one particular credit exposure with a matching (remaining) maturity. Using an already recognised CDS works in the same way.

5. Situations in which the maturity of the CDS exceeds that of the credit exposure can be addressed by using an aligned CDS. However, the aligned CDS only addresses maturity mismatches. It that would not capture differences between the actual CDS and the exposure that do not relate to CDSs because the insurance approach only intends to change the accounting for the CDS instead of adjusting the credit exposure for value changes that reflect all its characteristics (see alternative 1B).

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[1] CDSs have been standardised over recent years in order to achieve uniform coupon payments and thus make the instruments more suitable for trading and clearing (see agenda paper 16B, paragraph 11). This involves an upfront premium, which can be payable to the writer or the holder of the CDS (depending on the market situation).

[2] In this paper references to 'loan' are used in a wider sense so as to include financial instruments such as bonds.

6. The insurance approach has a simple interaction with the impairment model because of the treatment like collateral or a guarantee, which means it affects the estimate of the recoverable cash flows. Hence, this interaction is at the most basic level of the information that any impairment model uses so it does not have different effects on them. This assumes that *only* credit derivatives with a remaining life *equal to or longer* than the remaining exposure period would qualify for the insurance approach.

7. However, difficulties arise when the insurance approach is discontinued before maturity of the credit exposure—then the consequences of using accrual accounting for the CDS become obvious, ie the problem of having to revert to measurement at fair value. There are three alternatives for that situation (see alternatives 2A-C) but each one has its drawbacks. In essence, the alternatives are different positions in a trade-off between preventing earnings management, complexity and conceptual weaknesses (see eg paragraphs 41 and 47).

Feedback from comment letters and outreach activities

8. In the comment letters and outreach activities there was some support for an insurance approach or accrual accounting for credit derivatives. Respondents who supported an insurance approach as an alternative to hedge accounting believe that this approach:

   (a) best addresses the accounting mismatch between the loans and loan commitments versus the credit derivatives;

   (b) is consistent with the business practice/approach of financial institutions; and

   (c) meets the objective of the ED to reflect an entity's risk management activities.

Staff analysis of the insurance approach

9. The staff note that credit portfolio managers view credit derivatives as an 'insurance policy' that protects the financial institution from future credit losses (in return for paying an upfront and/or periodic premiums). In the context of credit risk management, the insurance approach would align the accounting with the risk management view of the economic purpose of the credit derivatives, ie to seek protection for credit exposure. Hence, credit portfolio managers generally prefer an insurance approach over elective fair value through profit or loss (FVTPL) because it is most consistent with their business approach.

Qualification criteria

10. The staff consider that the same qualification criteria developed for elective FVTPL could also apply to the insurance approach.

11. More specifically:

    (a) that the borrower (or the holder of the loan commitment) matches the reference entity of the credit derivative (ie match of name); and

    (b) the seniority of the financial instrument matches that of the instrument that can be delivered in accordance with the credit derivative[3].

12. The qualification criteria considered are consistent with regulatory requirements and risk management practice of financial institutions.

13. The staff note that these qualification criteria would restrict the eligibility to 'single name' credit derivatives (ie index hedging of a bond portfolio for credit risk would not qualify). Hence it would limit the application of the insurance approach accounting for credit derivatives in order to ensure that qualifying CDSs have a direct link to the credit exposure.

[3] See paragraphs BC227 and BC228 of the Basis for Conclusions of the ED.

Discontinuation

14. The staff also consider that the same discontinuation criteria as those developed for elective FVTPL could be applied to the insurance approach:[4]

    (a) an accounting mismatch no longer exists because the credit derivative expires or is sold, terminated or settled; or

    (b) the credit exposure of the financial instrument is no longer managed on a fair value basis using credit derivatives, for example because of:

        (i) improvements in the credit quality of the borrower; or

        (ii) changes to capital requirements imposed on the financial institution.

15. However, the staff note that under the insurance approach the Board needs to address the accounting of the credit derivative when it no longer qualifies for the accounting under the insurance approach and that accounting is discontinued (see paragraphs 22 to50).

Interaction with impairment

16. The Board noted at the 28 July 2011 meeting that the accounting treatment for the credit derivative used to manage credit risk should be considered in the context of the impairment accounting for the credit exposure (ie loan or loan commitment) because the amount and timing of the impairment loss is determined by the impairment model.

17. Under IAS 39 *Financial Instrument: Recognition and Measurement* and the exposure draft *Financial Instruments: Amortised Cost and Impairment* (Impairment ED) the estimates of expected cash flows of a collateralised financial asset reflect the cash flows that may result from foreclosure less costs for obtaining and selling the collateral[5].

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[4] See paragraphs 19 to 21 of agenda paper 21B of the October 2010 meeting.
[5] IAS 39.AG84 and paragraph B10 of the Impairment ED.

18. The staff consider that under an insurance approach, the loans and loan commitments for which credit risk is hedged become economically similar to a collateralised financial asset. On default, the financial institution can expect to recover cash flows from the CDS in a similar manner to how it can recover cash flows from collateral or guarantees. Hence, the protection effect of the CDS could be treated in a similar way to the credit enhancement resulting from collateral or guarantees.

19. However, the staff note that there is one difference between CDSs and collateral or guarantees that could give rise to operational issues.

20. If the CDS protection is only for a part of the total exposure period (eg hedging a 5 year loan for the first 3 years with a 3 year CDS), an entity would only consider the benefit of the protection from the CDS for the first 3 years. Hence, the loan can only be treated like a collateralised asset in years 1 to 3 but not in years 4 and 5 (because no protection is provided for years 4 and 5). The *timing* of the expected credit losses would have to be estimated when considering the effect of the CDS on the credit exposure.

21. The staff note that the Board has learnt from feedback received in the impairment phase of the project to replace IAS 39 that estimating the *timing* of future credit losses is operationally difficult and involves significant uncertainty. Hence, when only a part of the remaining exposure period is hedged, operational challenges (including how to appropriately include the uncertainty of the estimate) could arise in estimating the timing of expected credit losses and the effects of CDS hedges when measuring impairment. The staff note that this problem does not arise if an entity designates CDSs with maturities that are equal to or longer than the remaining exposure period (see paragraph 23). Hence the staff consider that for the insurance approach there should be an additional qualification criterion that *only* credit derivatives with a remaining life *equal to or longer* than the remaining exposure period would qualify for the insurance approach.

Active and flexible credit risk management

22. The staff note that credit portfolio managers typically engage in an active and flexible risk management approach. Because of the nature of the risk management approach and the characteristics of the loans and loan commitments, credit portfolio managers often do not hedge for the exact contractual maturity of the loans and loan commitments. Instead, they commonly hedge credit risk depending on the circumstances from time to time. The credit derivatives used as hedging instruments often do *not* correspond with the origination and maturity of the loans and loan commitments.

23. The staff learnt that financial institutions that manage credit risk frequently use CDSs that have longer maturity dates than the underlying loans or loan commitments. Financial institutions tend to hedge their short term credit exposures with five year CDSs because the market for CDSs is most liquid for five year CDSs. In addition, the loans and loan commitment are frequently refinanced and their maturity extended, and the bid/offer costs of unwinding an existing CDS in order to extend the maturity can be substantial. Hence, financial institutions typically hedge using CDSs with maturities that are 5 years or longer. Financial institutions often accept the mismatch that arises from the different maturities rather than incurring costs to more continuously match maturities of the CDSs to those of the underlying loans or loan commitments[6]. The staff learnt that for regulatory and prudential reasons, it is not uncommon that financial institutions as part of their risk management strategy would require that hedge maturities always equal or exceed the maturity of the credit exposure.

24. The staff note that as a result of the active and flexible risk management approach, it is rare that the credit exposure and the credit derivative would have corresponding origination and maturity terms. Rather it is common for the following scenarios to occur:

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[6] The staff learnt that in the event of default and if the credit quality deteriorates significantly credit markets exhibit the behaviour that the value of a five year obligation and the value of a one year obligation would converge. This is because at the event of default, all pari-passu creditors are entitled to a pro-rata share of the recoveries regardless of the original maturity.

(a) scenario 1: the total credit exposure to a specific borrower fell below the risk limit and the financial institution no longer manages that exposure for credit risk. However, the CDS is not disposed of but internally transferred to the 'trading book' or used as a broader 'portfolio hedge' of credit exposures that are correlated (but not the same).

(b) scenario 2: like scenario 1 but the financial institution disposes of the CDS and realises[7] a gain or loss on disposal.

(c) scenario 3: the CDS has a longer maturity than the credit exposure and the loan or loan commitment matures or the loan or loan commitment is repaid early (leaving the financial institution with only the CDS).

(d) scenario 4: the CDS has a longer maturity than the credit exposure; after the first exposure has matured, the financial institution retains the CDS and then subsequently uses the CDS to cover another (second) credit exposure.

Appendix A illustrates the different scenarios described above in graphical form.

25. The staff consider that when the credit derivative is not used to manage a particular credit exposure, it does not have the effect of credit insurance and hence should *not* be accounted for under the insurance approach (ie like an insurance premium or guarantee) but instead at fair value through profit or loss (ie in the same way as other derivatives).

26. Therefore, in situations in which the acquisition date and maturity of the CDS do not coincide with the start of protecting against the credit risk of the loan or loan commitment[8] and its maturity, respectively, the following issues must be addressed:

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[7] In economic terms—accounting for CDSs at fair value through profit or loss means that from an accounting perspective there is no gain or loss on disposal as gains and losses from changes in the fair value are recognised concurrently in profit or loss while the entity holds the CDS.

[8] That could be considered the 'designation' date of the CDS as a credit risk hedge.

(a) the accounting for the CDS during the periods for which it is *not* used to manage a particular credit exposure; and

(b) how to account for the changeover between those situations and situations when the CDS *is used* as protection against a particular credit risk (scenarios outlined in paragraph 24).

27. The staff consider that there are different ways to address the difference arising on a change between the carrying amount under the insurance approach and fair value.

28. Alternatives for accounting for a change from fair value to the carrying amount under the insurance approach (ie when a CDS *starts* to qualify for the insurance approach) are:

(a) **alternative 1A**: amortising the difference over the remaining life of the CDS; or

(b) **alternative 1B**: amortising the difference over the remaining life of the CDS but on the basis of an 'aligned' CDS value.

29. Alternatives for accounting for a change from the carrying amount under the insurance approach to fair value (ie when a CDS *ceases* to qualify for the insurance approach and that accounting is discontinued) are:

(a) **alternative 2A**: recognising the difference as a gain or loss in profit or loss immediately;

(b) **alternative 2B**: recognising the difference as a gain or loss in profit or loss immediately and switching the measurement of loans and loan commitments to fair value; and

(c) **alternative 2C**: amortising the difference to profit or loss.

Alternative 1A

30. Alternative 1A is to amortise to profit or loss the fair value that the CDS has on the date it qualifies for the insurance approach over the remaining life of the CDS. The staff note that for scenario 4, alternative 1A produces the same accounting outcome if the financial institution acquires a CDS from the market with the same

terms and conditions. The fair value of the CDS at the inception of the hedge is economically the same as the premium paid or received when acquiring such a CDS at that point in time (see paragraph 3). Hence, alternative 1A would produce the same accounting outcome for an existing CDS that the financial institution already holds and for a CDS with identical terms and conditions acquired from the market.

31. The staff note that the accounting under alternative 1A is similar to the treatment of the measurement change adjustment (MCA) under elective FVTPL. However, because the amortisation relates to the CDS instead of the credit exposure, the relevant amortisation period is determined by the remaining life of the CDS—otherwise any part of the premium that is paid for a term after expiry of the credit exposure would be attributed to a period to which it does not relate. But even amortisation over the remaining life of the CDS still leaves the problem that *linear* amortisation could not reasonably be assumed to reflect the pattern of how the premium relates to the remaining periods. The value of a one year CDS is typically *not* one fifth of the value of a five year CDS. That problem would only be addressed by alternative 1B.

32. In addition, when a CDS *ceases* to qualify for the insurance approach and that accounting is discontinued, there is interaction with alternatives 2A-C (refer to the explanation of those alternatives below).

Alternative 1B

33. Alternative 1B is a more sophisticated version of alternative 1A. In order to determine the part of the CDS premium that relates to the period for which the credit exposure is protected, it uses the fair value of a CDS that exactly matches the term of the underlying exposure—'aligned' CDS value. Only the 'aligned' CDS value is subject to accrual accounting (ie its upfront premium or discount is amortised and its fair value changes remain unrecognised) whereas the differences between the fair value changes of the actual CDS and the 'aligned'

CDS during the period for which the insurance approach applies would be taken to profit or loss.[9]

34. The staff note that alternative 1B would be the most complicated of all alternatives as entities would have to compute an additional 'aligned' CDS value. However, this aligned CDS would *not* capture differences between the actual CDS and the exposure that do not relate to CDSs—it only aligns maturity. This is because the insurance approach only intends to change the accounting for the CDS but not to adjust the credit exposure for value changes that reflect all its characteristics. For example, if a loan was prepayable the aligned CDS under the insurance approach would not include that feature because it only aims to construct a CDS with a fixed maturity (which would be set to the *default* maturity of the credit exposure). If the intention is to show the effect of the prepayment option that is included in the credit exposure then the insurance approach is not suitable but instead an approach must be chosen that involves adjusting the credit exposure for changes in its value (eg the deemed credit adjustment approach—see paper 16B—or elective FVTPL accounting).

35. When a CDS *ceases* to qualify for the insurance approach and that accounting is discontinued *before* the aligned CDS premium has been fully amortised there is interaction with alternatives 2A-C (refer to the explanation of those alternatives below).

Alternative 2A

36. Alternative 2A is to take at the end of applying the insurance approach any difference between the carrying amount under that approach and the CDS' fair value to profit or loss immediately. This alternative is the simplest for accounting for a change from the carrying amount under the insurance approach to fair value

[9] Assuming that an additional qualification criterion is that *only* credit derivatives with a remaining life *equal to or longer* than the remaining exposure period would qualify for the insurance approach (see paragraph 21) the value of the aligned CDS would be equal to or lower than that of the actual CDS (given that name and seniority matching is required). Only in very few situations could the value of the aligned CDS be larger than that of the actual CDS. For that case the approach could require to limit the amortisation to that resulting from the lower value of the actual CDS.

(ie when a CDS *ceases* to qualify for the insurance approach and that accounting is discontinued). However, a significant disadvantage of this approach is the potential for earnings management.

37. The staff note that if alternative 1B is used when a CDS *starts* to qualify for the insurance approach, that would reduce the number of situations with an opportunity for earnings management that alternative 2A presents, but it would not avoid all of them. Alternative 1B avoids a gain or loss arising on discontinuation of the insurance approach if the maturity of the aligned CDS is the same as that of the credit exposure and the insurance approach is applied until that point in time. In that case the aligned CDS has a carrying amount of zero (ie is fully amortised) when the insurance approach is discontinued. This means the credit exposure must have a fixed maturity and the insurance approach must be applied until that maturity. Conversely, if the maturity of the credit exposure expires early (eg because of prepayment) or the the insurance approach is discontinued early (eg the financial institution no longer manages the exposure for credit risk using the CDS), the carrying amount of the aligned CDS is not zero because there is still an unamortised amount.

38. If the maturity of a credit exposure is extended (before its original maturity), recognising a gain or loss on discontinuation of the insurance approach can be avoided by amortising any difference between the carrying amount of the CDS and its fair value at the time of extension[10] over the new maturity of the extended credit exposure (assuming that the combination of the CDS and the credit exposure after extension qualifies for the insurance approach).

39. Under alternative 2A the amortisation under alternatives 1A and B would end because any unamortised amount would become part of the gain or loss when changing the measurement of the CDS from the insurance approach to fair value.

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[10] That difference equals the difference between the cumulative amortisation and the cumulative fair value change of the aligned CDS from inception of the insurance approach to the time of extending the maturity of the credit exposure).

Alternative 2B

40. Alternative 2B is to measure the loan or loan commitment at FVTPL *after* switching the measurement of a CDS from the insurance approach to fair value. This was suggested to address the potential for earnings management that alternative 2A presents because it would result in a gain or loss from changing measurement of the credit exposure to fair value that would counterbalance the gain or loss from switching the measurement of a CDS from the insurance approach to fair value. The staff note that while such an accounting treatment could address concerns about earnings management it has different implications for fixed and variable rate instruments:

    (a) for variable rate instruments the gain or loss from changing the measurement of the loan or loan commitment to fair value *could broadly* offset the gain or loss from changing the CDS' carrying amount under the insurance approach to fair value. However, this depends on how the credit exposure's fair value at the time the CDS was entered into already reflected credit risk. For example, if a CDS was only entered into when a variable rate bond traded at 85 per cent of its nominal amount and the lender sells the CDS when the bond's credit quality improved and its fair value has risen back to par there would be no gain or loss from changing the carrying amount of the bond to fair value but the switch of the CDS from a carrying amount to fair value would result in a significant loss.

    (b) for fixed rate instruments the gain or loss from changing the measurement of the loan or loan commitment to fair value could *in addition* include significant fair value changes from interest rate risk.

41. The staff note that this alternative is a form of FVTPL accounting for loans and loan commitments that would otherwise be classified at amortised cost or would be unrecognised, respectively. It also means that even if the CDS is disposed after insurance approach is discontinued the loan or loan commitment would continue to be accounted for at FVTPL. In particular for fixed rate instruments

this would result in recognising interest rate related fair value changes in profit or loss on an ongoing basis even though:

(a) the default measurement was amortised cost;

(b) the items were only managed for credit risk but not interest rate risk;

(c) and even the credit risk management has changed and no longer involves a fair value based approach using CDSs.

42. One possible way of mitigating the effect of changing measurement of the credit exposure to fair value might be to link the FVTPL accounting for the loan or loan commitment to the retention of the CDS (ie only apply FVTPL accounting for the loan or loan commitment *as long as* the CDS is retained). While that would not address interest rate related fair value changes of the loan or loan commitment it would ensure that fair value changes on the loan or loan commitment that also reflect credit risk are only recognised on a fair value basis as long as a CDS exists for which fair value changes are also recognised (which would move in the opposite direction). However, the staff consider that a requirement of such a link between the CDS and the credit exposure when they are *no longer* managed in contemplation of each other would create operational challenges because:

(a) tracking the CDS would be difficult (eg after transfer to a trading book); and

(b) if the CDS were disposed of, the fair value of the loan or loan commitment at that point in time would have to be unwound to the remaining cash flows (for the loan) or derecognised (loan commitment—unless an amortisation approach was adopted for the loan commitment even though its measurement is not amortised cost[11]), which involves tracking for the credit exposures.

[11] See paragraph 31(b)(ii) of paper 16B.

43. In case of a loan commitment its derecognition as a result of disposing of the CDS would result in a gain that still leaves room for earnings management that alternative 2B was intended to prevent.

44. Under alternative 2B the amortisation under alternatives 1A and B would end because any unamortised amount would become part of the gain or loss when changing the measurement of the CDS from the insurance approach to fair value. Depending on the remaining unamortised amount, how the CDS' fair value has changed since it qualified for the insurance approach and how credit risk is reflected in the fair value of the credit exposure, the unamortised amount could significantly affect the net gain or loss resulting from switching the CDS and the credit exposure to fair value. For example, if an entity ceased managing the credit exposure with the CDS before the CDS' initial upfront premium has been significantly amortised there could be a small overall gain or loss on switching the CDS back to fair value while the difference between the carrying amount of the credit exposure and its fair value could be large (eg if the credit exposure had a fair value with a large discount to par).

45. The difference between combining alternative 2B with alternative 1A or 1B is that alternative 1B is more focused and hence would reduce the number of situations in which unamortised balances remain (and their size) on discontinuation of the insurance approach (see paragraph 37).

Alternative 2C

46. Alternative 2C is to amortise any difference between the carrying amount under the insurance approach and the CDS' fair value at the end of applying the insurance approach. This alternative is also intended to address the potential for earnings management that alternative 2A presents—by using amortisation to avoid the *immediate* recognition of the gain or loss from switching the measurement of the CDS to fair value.

47. The difficulty of applying an amortisation approach is finding an appropriate amortisation period:

(a) In situations in which the previously protected *credit exposure* no longer exists (eg in scenario 3) the amortisation charge recognised in future periods after switching the measurement of a CDS from the insurance approach to fair value does not relate to those future periods but is a result of the accounting for a past economic relationship.

(b) Moreover, this alternative raises the question whether amortisation is appropriate if the *CDS* is derecognised (eg in scenario 2). If the remaining unamortised amount is included in profit or loss as a gain or loss on derecognition of the CDS, significant potential for earnings management would remain. Conversely, if amortisation continues it would result in amortising amounts associated with items that no longer exist (from the entity's perspective).

48. Therefore, the staff consider that there is no obvious amortisation period (without drawbacks) that could be used.[12]

49. There is also interaction between alternative 2C and alternatives 1A and B. The amortisation under alternatives 1A and B would end because any unamortised amount would become part of the gain or loss when changing the measurement of the CDS from the insurance approach to fair value. These unamortised amounts would therefore indirectly (as part of that gain or loss) be amortised under alternative 2C.

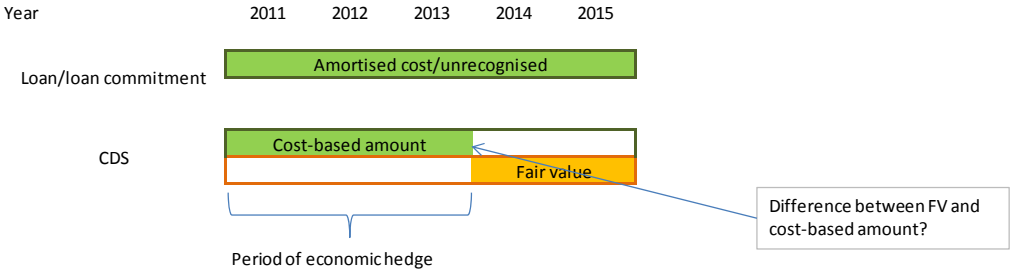
50. Similarly to alternative 2B, the difference between combining alternative 2C with alternative 1A or 1B is that alternative 1B is more focused and hence would reduce the number of situations in which unamortised balances remain (and their size) on discontinuation of the insurance approach (see paragraph 37).

[12] The staff note that, in contrast, the amortisation of an MCA under elective FVTPL is tied to the accounting for the credit exposure (instead of the CDS).

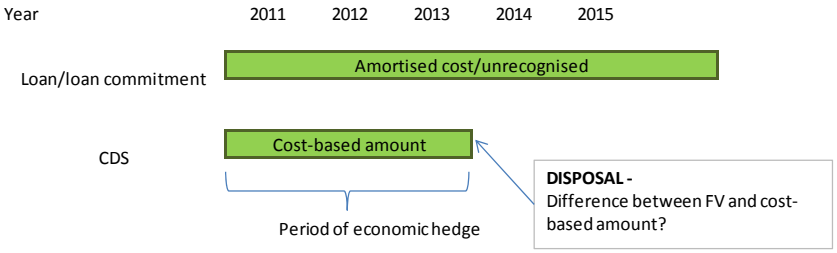
Appendix A

A1 This appendix sets out the different scenarios that are common under the active and flexible risk management approach that financial institutions adopt in managing credit risk.

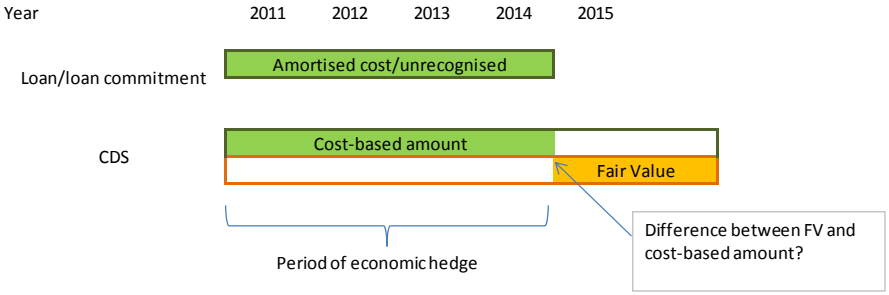
Scenario 1
Economic hedging relationship ends but CDS and exposure are retained



Scenario 2
Unwind of the CDS but the exposure still exists



Scenario 3
Exposure no longer exists but CDS remains



IASB Staff paper

Scenario 4

One CDS used for two economic hedging relationships