



Project	Financial Instruments – Recognition and Measurement
Topic	Classification – details and examples regarding the principles that govern characteristics of financial instruments

Introduction

Background

1. As set out in the classification cover paper (see agenda paper 2), at its May 2009 meeting the IASB requested that the staff develop a classification approach in more detail.
2. Agenda paper 2B develops a principles-based classification approach regarding the *characteristics* of financial instruments. That paper also discusses how the principles could be made operational but with a limited extent of details and examples.

Purpose of this paper

3. This agenda paper provides more details for the principles-based classification approach regarding the *characteristics* of financial instruments and illustrates classification outcomes of that principles-based approach for some examples.
4. This paper does not ask the boards for any decisions. The staff recommendation and the questions to the Board regarding the classification approach are included in agenda paper 2E.

This paper has been prepared by the technical staff of the IASCF for discussion at a public meeting of the IASB.

The views expressed in this paper are those of the staff preparing the paper. They do not purport to represent the views of any individual members of the IASB.

Comments made in relation to the application of an IFRS do not purport to be acceptable or unacceptable application of that IFRS—only the IFRIC or the IASB can make such a determination.

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Principles that classify degrees of cash flow variability

Primary principle: cash flows that represent principal and interest

5. As set out in agenda paper 2B, the **primary principle** is that a financial instrument is eligible for amortised cost measurement only if (all) its cash flows represent *principal and interest*.

6. The rationale for deriving this primary principle is discussed in the section ‘Implications of amortised cost measurement’ in agenda paper 2B. The following discussion elaborates on the primary principle and the notion of principal and interest.

7. In accordance with the primary principle the contractual cash flows of financial instruments that qualify for amortised cost must in substance represent principal and interest, that is to say they represent a ‘**lending-type arrangement**’. Thus, all interest type cash flows would need to have a *close relation to the funding volume*¹ that reflects the economic characteristics of interest. To illustrate: a LIBOR based payment is not an interest payment solely by virtue of the indexation to a benchmark interest rate—it is only an interest payment if the LIBOR based payment is also consideration for the use of cash or cash equivalents or amounts due to or from the entity. Thus, an interest rate swap would not satisfy this criterion because even though the variable leg is indexed to LIBOR the payments under the swap do not reflect interest in terms of economic characteristics.²

¹ Funding volume refers to the amount advanced (including any interest capitalised into the loan balance) less repayments. This term is used rather than principal or notional amount because it is not affected by product design features (such as discounts or premiums). For a simple loan originated and repayable at par with uniform fixed interest coupons the funding volume would be the nominal amount.

² For the effect of leverage in the context of derivatives see section ‘No leverage’ below.

Secondary principles: ‘determinable’ and ‘no leverage’

8. As set out in agenda paper 2B, there are two secondary principles that concretise the primary principle: the cash flows of a financial instrument represent *principal and interest* if:
- (a) the contractual cash flows are **determinable**; and
 - (b) the financial instrument has **no leverage**.

Determinable

Existing use of ‘fixed or determinable’

9. IAS 39 *Financial Instruments: Recognition and Measurement* uses the criterion ‘fixed or determinable’ for the amortised cost based measurement categories (ie loans and receivables and held-to-maturity).³
10. Thus, using the criterion ‘fixed or determinable’ would allow drawing on existing practice but the assessment of what is ‘determinable’ has caused application problems. The range of interpretations of ‘determinable’ regarding amounts encompasses:⁴
- (a) A narrow interpretation that focuses on *interest* formulas of debt instruments; that essentially includes (only) variability of amounts resulting from contractual indexation to benchmark interest rates and variable margins that reset in response to changes in the credit quality of the financial instrument.
 - (b) A broader interpretation that considers any amounts set by formulas in a debt instrument as determinable provided they can be estimated or

³ The definitions of the categories loans and receivables and held-to-maturity refer to ‘fixed or determinable’ (see IAS 39.9).

⁴ NB: this discussion does not intend to indicate what an appropriate interpretation of existing IFRS requirements; the intention is to illustrate the potential diversity of outcomes in order to facilitate a decision on the extent of guidance that the boards might want to provide on this matter.

forecast with some degree of reliability (eg this could include features that allow the holder to participate in the profit of the issuer).

11. This paper (like agenda paper 2B) uses the criterion ‘determinable’. Fixed cash flows are a subset of determinable cash flows. In fact, ‘fixed’ is the highest degree of determinability. Thus, using ‘fixed’ in addition to ‘determinable’ does not add anything. In addition, it is undesirable from a logical perspective as defining a category as the total (combination) of a set and a subset creates a complete overlap for the latter. Instead, the notion of ‘fixed’ can be used to describe some instances of ‘determinable’.

How to make ‘determinable’ operational

12. In order to make the criterion ‘determinable’ operational the aspects of it have to be considered. Aspects of ‘determinable’ are:
 - (a) **Specification:** for cash flows to be determinable they need to be defined in terms of being contractually stipulated. That specifies the reference basis (linkage) that determines contractual cash flows that are not fixed. That also specifies whether cash flows are:
 - (i) discretionary or non-discretionary; and
 - (ii) contingent or non-contingent.
 - (b) **Predictability:** for cash flows to be determinable they must also be able to be forecast, ie the reference basis must allow a foreseeable outcome.
13. The following sections are an analysis of how the criterion ‘determinable’ could be made operational for classification purposes. Agenda paper 2B sets out two different types of variability that are further analysed in the following sections:
 - (a) variability of cash flow *amounts*; and
 - (b) variability in the *timing* of cash flows.

Variability of amounts

Indexation

14. Agenda paper 2B explains the relation between determinability and specification⁵ and that the primary issue in the context of variability of *amounts* is indexation (linkage).

15. The following paragraphs elaborate on the various forms of indexation that create links between cash flows and different types of variables:
 - (a) benchmark interest rates;
 - (b) variables reflecting changes in the credit quality of the financial instrument; and
 - (c) other variables.

16. A benchmark interest rate is a rate that is commonly used in specifying the interest payments of variable rate financial instruments. It is not a risk-free rate (such as rates often referred to as ‘basic rates’) but reflects the credit risk of the parties that can borrow at the benchmark rate (without margin adjustment). For example, LIBOR reflects the time value of money and the credit risk of the banks that lend to each other at LIBOR. IAS 39 describes a benchmark rate as ‘a well-accepted and readily observable general rate, such as LIBOR or a swap rate’.⁶

17. There is a variety of variables that reflect changes in the credit quality of the financial instrument. Their common denominator is that they are designed to track the credit quality of the financial instrument over its term. Examples are:
 - (a) credit ratings; and

⁵ See also paragraph 12 above.

⁶ See IAS 39.AG82(a).

- (b) default risk related measures defined in debt covenants (such as the interest coverage ratio or the gearing).
18. The indexation linked to this type of variable can adjust (the initial margin on) a benchmark interest rate as well as an initial fixed rate that reflects the credit quality of the financial instrument at inception. For example, the interest on a 'fixed rate' loan changes in steps of 25 basis points (bps) by reference to a table that stratifies a range for the borrower's gearing. Or interest coupons on a variable rate loan might be reset in 20bps steps in response to a target interest coverage ratio with mark-ups and mark-downs for negative and positive deviations.
19. Financial instruments can also be indexed to various different variables and combinations of them (multiple indexations). Among the more common variables are:
- (a) inflation: contractual cash flows are adjusted by reference to a measure of inflation such as a consumer price index.
 - (b) performance measures regarding the debtor: contractual cash flows are adjusted by reference to a performance measure such as the profit or operating result of the debtor, or by reference to the performance of a business division or specific assets of the debtor (eg real estate owned by the debtor).
 - (c) credit risk of other financial instruments: contractual cash flows are adjusted by reference to credit risk related events or value changes of another financial instrument, for example credit linked notes (CLNs). Some structures of collateralised debt obligations (CDOs) also include

links to the credit risk of other reference assets that are not held by the issuer of the CDO.⁷

- (d) value of equity instruments: contractual cash flows are adjusted by reference to the value of a specified equity instrument or basket of such instruments (eg a stock index).
- (e) commodity prices: contractual cash flows are adjusted by reference to the value of a specified commodity or basket of such items.

20. In this context, the *primary principle* for classification derived in agenda paper 2B is important (ie that all the contractual cash flows of any financial instrument that is eligible for the amortised cost category must represent principal and interest). As that agenda paper explained, the notion of interest has the following implications:

- (a) cash flows that in economic substance represent interest are always associated with a ‘funded’⁸ financial instrument; and
- (b) the return associated with the financial instrument must have a close relation to the funding volume⁹ that reflects the essential economic characteristics of interest:
 - (i) consideration for the time value of money; and
 - (ii) consideration for the credit risk associated with the financial instrument.

⁷ The IASB discussed aspects of CDO structures—including this feature, which relates to the ‘location of the reference asset’—in its meetings in November and December 2008 (see agenda papers 11B and 6E, respectively). The focus of those discussions was the application of IAS 39.AG30(h).

⁸ The notion of ‘funding’ was discussed in agenda paper 14 of the April 2009 IASB meeting (see paragraph 14 of that paper).

⁹ Funding volume refers to the amount advanced (including any interest capitalised into the loan balance) less repayments. This term is used rather than principal or notional amount because it is not affected by product design features (such as discounts or premiums). For a simple loan originated and repayable at par with uniform fixed interest coupons the funding volume would be the nominal amount.

21. The implication for the making the criterion ‘determinable’ operational for classification purposes regarding *amounts* are as follows: the cash flows of a financial instruments have determinable amounts if:
- (a) amounts of principal cash flows are fixed;
 - (b) amounts of interest cash flows are (including combinations):
 - (i) fixed;
 - (ii) determined as a fixed rate (this is different from fixed amounts if the term of the instrument is variable)¹⁰; or
 - (iii) determined by indexation or linked to variables that:
 - are benchmark interest rates; or
 - reflect changes in the credit quality of the financial instrument—in other words indexation using ‘interest formulas’.
22. The only other type of variable that warrants consideration whether it should be included in the notion of determinable is *inflation* indexation (for principal and / or interest cash flows). This could be justified because of the relationship between inflation and the time value of money. Since time value of money is a key element of interest indexation to inflation can be viewed as a mechanism that resets the consideration for the time value of money to a current level. The decision depends on whether someone looks at interest as a nominal or real phenomenon.
23. All other types of indexation¹¹ are not reflecting the economic substance of interest and should therefore be excluded from the notion of determinable for the purpose of determining whether financial instruments qualify for the amortised cost category.

¹⁰ The effect of a variable term on cash flow amounts is addressed in the section about the variability in the timing of cash flows (see paragraph 42 below).

¹¹ See paragraph 19 above.

24. The above discussion of how the ‘specification’ aspect of ‘determinable’ could be made operational for *amounts* would limit the variability of amounts to that resulting from *interest formulas*. The cash flows determined under interest formulas are generally able to be forecast to a degree that allows a foreseeable outcome. Thus, the ‘predictability’ aspect of determinable¹² does not require separate analysis.
25. A limitation of the variability of amounts to that resulting from *interest formulas* would also clarify that the ‘specification’ aspect of ‘determinable’ would only include non-discretionary cash flows.¹³ It is incompatible with the economic substance of interest that the consideration for the use of cash or cash equivalents or amounts due to or from the entity would be discretionary.¹⁴
26. Whether the ‘specification’ aspect of ‘determinable’ would include any contingent¹⁵ cash flow amounts depends on the meaning of contingent in this context:
- (a) adjustments of cash flow amounts as the result of resets under *interest formulas* are not considered ‘contingent’; for example, an increase in the interest cash flow due to a reset of the contractual interest to LIBOR does not give rise to a contingent cash flow for the amount of the increase; a change of amount is not ‘contingent’ in relation to the change in the variable that it is indexed to;
 - (b) a different type of contingency regarding the variable that interest cash flows might be indexed to results from caps, floors and collars that are

¹² See paragraph 12(b) above. Other forms of indexation than interest formulas would require separate consideration of the aspect of predictability.

¹³ See paragraph 12(a)(i) above.

¹⁴ This is consistent with the use of amortised cost only for debt instruments. In contrast, discretionary cash flows are associated with equity-type instruments.

¹⁵ See paragraph 12(a)(ii) above.

embedded in a hybrid contract as well as any barrier features that might be related to them; this warrants a separate discussion, which follows below;

- (c) changes in cash flow amounts that depend on a contingency regarding the maturity of the entire financial instrument relate primarily to changes in the timing of cash flows (for example, overall cash flows are generally lower if a loan is repaid early as some interest cash flows will not be paid as a result); thus, such changes are addressed in the section about the variability in the timing of cash flows¹⁶;
- (d) contingencies that affect cash flow amounts for other reasons than those above would be incompatible with the economic substance of interest as consideration for the use of cash or cash equivalents or amounts due to or from the entity; for example, if interest cash flows indexed to LIBOR would not be payable if the oil price exceeds USD100 per barrel the this contingent indexation would not be considered as an *interest formula*, and thus not meet the ‘determinable’ criterion.

Embedded caps, floors and collars

- 27. Caps, floors and collars that are embedded in a hybrid contract¹⁷ are option type features of instruments that amend the cash flows that would otherwise occur under the contract. Thus, they affect the cash flow variability of the hybrid contract.

- 28. Because the effect of *embedded* caps, floors and collars is to amend cash flows of the hybrid contract they *reduce* the cash flow variability of the hybrid contract. This applies for both purchased and written options. To illustrate: a variable benchmark rate loan with an interest cap gives rise to:

¹⁶ See paragraph 42 below.

¹⁷ The implications of embedded derivative accounting for classification are discussed in a separate paper (see agenda paper 2A).

- (a) an embedded *written* call option from the perspective of the *holder* of the loan; and
- (b) an embedded *purchased* call option from the *issuer's* perspective.

The cash flow variability is reduced for both parties to the loan contract because the variable rate on the loan cannot exceed the strike rate of the embedded cap even though the reference benchmark interest rate may increase further.

- 29. Embedded caps, floors and collars can reduce the cash flow variability resulting from both indexation and leverage¹⁸.
- 30. This dampening effect of embedded cap, floor and collar features on cash flow variability has the following implication for classification: Any financial instrument that without these features would have a level of cash flow variability such that it would be considered eligible for the amortised cost measurement category would remain eligible if these features did exist.
- 31. It is important not to confuse cash flow variability with fair value volatility. While caps, floors and collars reduce the variability of cash flows they result in increased fair value volatility for the hybrid contract. To illustrate: a variable benchmark¹⁹ rate loan with frequent rate resets is subject to only insignificant fair value interest rate risk. However, if that loan included an interest rate cap it would be subject to potentially significant fair value interest rate risk because if the benchmark interest rate moved above the cap's strike rate then the loan would bear below market interest, similar to a fixed rate loan.

¹⁸ Leverage is discussed in the section 'No leverage' below.

¹⁹ For the sake of simplicity the example only looks at the interest rate variability and the fair value interest rate risk in relation to the *benchmark* interest rate.

32. Thus, financial instruments with embedded cap, floor or collar features can be regarded as a financial instrument with a combination of a fixed and a variable rate that switches between fixed and variable interest depending on the (eg benchmark) interest rate level.

Barriers (knock-in or knock-out features)

33. A barrier makes an option a contingently *existing* feature. In connection with a barrier the right to exercise the option depends on the reference variable (underlying) reaching (or crossing) a given barrier level.
34. There are different types of barriers:
- (a) A knock-in barrier makes the option exercisable only if the barrier is reached.
 - (b) A knock-out barrier makes an option exercisable until and unless the barrier is reached (ie the option becomes void if the barrier is reached).
35. Another variety is whether the barrier is approached from below or above. For example, an ‘up-and-in’ barrier feature for an LIBOR (3m EUR) interest rate cap (call option) with a strike rate of 3.5% has at inception a LIBOR (eg 3%) below the barrier level of 4%. Thus, LIBOR has to increase to 4% for the cap to become exercisable (activated). Then the cap limits the contractual variable benchmark interest at the strike rate of 3.5%. If the 4% barrier is not reached the cap is never activated even if LIBOR increases for example to 3.9%.
36. The question regarding the implication for classification is: do barriers reduce or increase cash flow variability? If the unit of account is an entire *hybrid* contract with an embedded cap, floor, or collar and a related barrier,²⁰ the combination of

²⁰ If the unit of account is a *standalone* option with a barrier then the variability of cash flows can arguably be considered higher compared to a standalone option without a barrier.

the cap, floor, or collar and the related barrier results in a dampening of cash flow variability compared to a contract without these embedded features. This dampening effect on cash flow variability has the following implication for classification: Any financial instrument that without these features (ie the combination of the cap, floor, or collar and the related barrier) would have a level of cash flow variability such that it would be considered eligible for the amortised cost measurement category would remain eligible if these features did exist.

37. Again, it is important not to confuse cash flow variability with fair value volatility (see paragraph 31 above).

Summary

38. In summary, embedded cap, floor and collar features as well as any related barriers ceteris paribus cause a reduction in cash flow variability. Thus, because of the purpose of the ‘determinable’ criterion financial instruments that include such features should be considered to have determinable cash flows.
39. In addition, because of the primary principle derived in agenda paper 2B, the interest cash flows resulting under embedded cap, floor and collar features as well as any related barriers must still constitute in substance interest (ie consideration for the use of cash or cash equivalents or amounts due to or from the entity). This raises the question about whether caps, floors or collars that at inception of the contract are in the money would be compatible with this requirement. An extreme scenario is that of a zero percent cap. This means that no interest cash flows would be paid. Consequently, the interest would be reflected in a difference between the initial advance and the repayment amount, which is in substance a zero coupon bond. Such a scenario would meet the

‘determinable’ criterion. Another extreme²¹ scenario is a 100 percent floor. The excessive ‘interest’ would again be reflected in a difference between the initial advance and the repayment amount, which is in substance results in a fixed rate loan (eg a zero coupon bond if there is only one interest period and an annuity type loan if there is more than one interest period). Arguably, if the most extreme scenarios are consistent with the notion of in substance interest then the less extreme scenarios of (at inception) in-the-money caps, floors and collars should not be treated differently.

Variability of timing

40. Agenda paper 2B explains that in the context of variability of the *timing* of cash flows specification is about contractual provisions that allow or require a change in cash flow dates. The following paragraphs elaborate on the aspects of:
- (a) optionality; and
 - (b) conditionality.

Optionality

41. As set out in agenda paper 2B, optional features allow one or both parties to the financial instrument (ie debtor and holder) to unilaterally change the timing of the cash flows under the contract. This changes the maturity.
42. The change in the maturity can also result in a change of:
- (a) the amount of contractual cash flows:
 - (i) the total amount of interest cash flows changes with the change in the maturity; for example, if a loan is repaid two years early no interest is paid for the last two years of the original term; and / or

²¹ Assuming a non-hyperinflationary environment.

- (ii) the exercise of options might result in a modification of the contractual cash flows that reflects compensation for the other party or an exercise premium or strike price; for example, if the debtor of a loan that has become above market interest bearing exercises a prepayment option the holder might be entitled to receive a payment that reflects compensation for the foregone interest differential;
 - (b) the effective interest rate (or return):
 - (i) a premium or discount (or any other form of prepaid interest such as on a zero coupon bond) changes the return on the financial instrument depending on changes in the maturity; and / or
 - (ii) any modifications of the contractual cash flows reflecting compensation for the effect resulting from exercising the option (see item 42(a)(ii) above) also change the return on the financial instrument.
43. Currently, IAS 39 addresses the implications of changes in the contractual timing of cash flows and any related changes in cash flow amounts as part of embedded derivative accounting.²² The annual improvements to IFRSs issued in April 2009 changed the requirements for the assessment of embedded prepayment options with prepayment penalties.
44. The implications of embedded derivative accounting for classification are discussed in a separate paper (see agenda paper 2A). Possible ways of making the variability in the *timing* of cash flows operational are:
- (a) **Alternative 1:** retaining the approach of IAS 39 (ie using embedded derivative accounting to screen variability in the contractual timing of cash flows);

²² See IAS 39.AG30(c) and (g), and AG33(e).

- (b) **Alternative 2:** transforming the existing embedded derivative requirements of IAS 39 regarding the variability in the contractual timing of cash flows into guidance that interprets the ‘determinable’ criterion; or
 - (c) **Alternative 3:** developing new guidance that interprets the ‘determinable’ criterion for the aspect of variability in the contractual timing of cash flows.
45. The difference between Alternatives 1 and 2 is editorial. Depending on whether and, if so, at what stage of this project the Board decides to address embedded derivative accounting the status quo would be retained or transformed into guidance that interprets the ‘determinable’ criterion.
46. Alternative 3 is about making the criterion ‘determinable’ operational regarding the variability in the timing of cash flows. Many typical lending activities involve flexibility in the timing of cash flows. That reflects that borrowers or / and lenders want to have some flexibility to respond to changes in their circumstances. For example, a mortgagee may want to have the ability to repay the mortgage loan earlier in response to salary rises or because of moving to a different location.
47. Before analysing what types and degrees of variability in timing should be considered ‘determinable’ for the purpose of classifying financial instruments into the measurement categories amortised cost or fair value it is important to recall the how the effective interest method (EIM) works. The EIM determines amortised cost on the basis of a present value calculation that uses the effective interest rate to discount the *estimated* future cash flows. That estimate takes into account contractual variability of amounts *and timing* of cash flows.

48. The EIM relates to changes in the contractual timing of cash flows as follows: Because of the continuous re-estimate of expected cash flows²³ the amortised cost amount gives usually a good indication for the cash flow *amounts* that result from changes in the contractual timing of cash flows. The effect of the timing changes themselves on amortised cost depends on the circumstances:

(a) If a change in the timing of the principal repayment (only) changes the number of interest coupons in response to the changes in number of interest periods, and the financial instrument was issued at par without transaction costs, the carrying amount would not be affected by changes in the timing of cash flows. This means the carrying amount does not change in response to changes in the expected timing of cash flows. Consequently, in such a scenario amortised cost provides useful information about the amount but not the timing of the cash flows.

(b) Conversely, if the financial instrument was issued at a premium or discount (or involved significant transaction costs) the carrying amount would be affected by changes in the timing of cash flows.

Consequently, the carrying amount would change in response to (and thus include information about) changes in the expected timing of cash flows. However, a discount or premium in connection with a prepayment option gives rise to the issue whether the return associated with the financial instrument still has a close relation to the funding volume that reflects the essential economic characteristics of interest.²⁴ Some premiums and discounts reflect fine tuning of interest (eg when the coupon rate is determined earlier than the price fixing or coupons are even amounts). However, significant discounts or premiums would in case of an early repayment not result in a return that reflects a close relation to the funding volume that could still be considered in substance interest. The most extreme example is a principal only strip

²³ Other than credit loss related changes under the incurred loss model, which depend on whether a loss event has occurred.

²⁴ See paragraph 20(b) above.

with an embedded prepayment option, which is in effect a prepayable zero coupon bond. Although the amount of interest is fixed the return is highly variable. Hence, the relation between the return and the funding volume does not reflect a relation that is consistent with the notion of interest.²⁵ In order to make the classification criteria operational a reference to significant premiums or discounts could be used with the examples of fine tuning interest rates and principal only strips with embedded prepayment options.

- (c) Many financial instruments require compensation payments (eg prepayment penalties) or have strike prices that make whole the other party to the contract. For example, if the debtor repays a loan early that might trigger a payment that makes whole the holder regarding a switch to an alternative investment that replaces the prepaid investment. Because changes in the timing of the cash flows entail a change in the contractual cash flow amounts amortised cost would change in response to (and thus include information about) changes in the expected timing of cash flows as well as the related changes in amounts.
- (d) Interest only strips with embedded prepayment options have a significant variability of both cash flow amounts and returns. This type of financial instrument represents in substance an annuity-type instrument for which the repayment of the principal portion is contingent on the exercise of the repayment option by the debtor. This gives rise to a loose correlation with the level of interest rates but also other, debtor-specific circumstances. The contingent repayment of principal in response to these variables is not a lending-type arrangement. It is the very essence of *lending* that the principal is

²⁵ NB: In accordance with IAS 39.AG33(e) a prepayment option embedded in a principal only strip is closely related. This is inconsistent with IAS 39.AG30(g), which would require separating an embedded derivative for such a prepayment option (ie the hybrid contract in its entirety does not qualify for amortised cost). Thus, prohibiting amortised cost accounting for principal only strips with embedded prepayment options would be a change of the status quo.

repaid.²⁶ Thus, AG33(e) would not be retained for interest only strips under a principles-based approach.

Conditionality

49. As set out in agenda paper 2B, conditional features either require changing the timing of the cash flows or allow one or both parties to the financial instrument (ie debtor and holder) to unilaterally do so. These features change the maturity of a financial instrument but are contingent on the occurrence of an event.

50. The common conditional features in relation to loans and other lending-type arrangements can be regarded as a modification of optional features that make an option²⁷ (such as a put or call option) *exercisable*²⁸. Conversely, conditional features that make an option *no longer exercisable*²⁹ are less common for loans and other lending-type arrangements.

51. Building on the discussion of optional changes in the contractual timing of cash flows above (see section ‘Optionality’) the effect of contingencies on cash flow variability has the following implication for classification: Any financial instrument that without the contingent feature would have a level of cash flow variability such that it would be considered eligible for the amortised cost measurement category would remain eligible (notwithstanding the existence of the contingent feature).

²⁶ This would be consistent with the overall outcome in accordance with IAS 39. While IAS 39.AG33(e) sets out that prepayment options embedded in interest only strips are closely related, these interest only strips do not qualify for amortised cost (see item (c) of the definition of loans and receivables in IAS 39.9 and IAS 39.AG18 regarding held-to-maturity).

²⁷ Conditional features that require changing the timing of the cash flows are tantamount to an automatic exercise of the option as it is activated (assuming the option would be beneficial to one of the parties and thus exercised anyway). Thus, this type of contingent feature is not separately discussed but the implications for contingent options apply accordingly.

²⁸ This is similar to a knock-in barrier. However (in contrast to the discussion of caps, floors and collars), the options that are activated by these contingent features are not of a type that reduces cash flow variability but increases it.

²⁹ This is similar to a knock-out barrier.

52. In other words, contingent features that relate to a call, put or extension option or similar feature would not change the assessment of that option feature.³⁰
53. The conclusions above are logically derived from the criterion of determinability of cash flows (ie cash flow variability). As set out earlier in this paper,³¹ amortised cost relates to cash flows with the economic substance of interest. That implies that the return associated with the financial instrument has a close relation to the funding volume that reflects the essential economic characteristics of interest:
- (a) consideration for the time value of money; and
 - (b) consideration for the credit risk associated with the financial instrument.
54. The implication for the type of contingencies that can be considered to be related to cash flows that have the economic substance of interest is that they *also* relate to the time value of money and credit risk. For example:
- (a) contingencies that relate to credit risk include prepayment or put provisions depending on:
 - (i) a credit rating change;
 - (ii) an event of (credit) default;
 - (iii) debt covenant criteria that reflect credit quality (such as gearing or interest coverage ratios); or

³⁰ This is a straightforward conclusion for 'knock-in'-type contingencies. The conclusion also applies to 'knock-out'-type contingencies because else a degree of cash flow variability that would otherwise preclude eligibility for amortised cost classification could result if the contingency occurred. In other words, it would be tantamount to contingently allowing an unacceptable outcome.

³¹ See paragraphs 20 above.

- (iv) a change in control³² of the debtor.
 - (b) contingencies that relate to the time value of money such as prepayment or put provisions depending on inflation³³ changes.
55. The only other type of contingency that warrants consideration whether it should be considered to be related to cash flows that have the economic substance of interest is a change in tax laws or similar. This could be justified because many investing and funding decision regarding financial instruments are made taking tax effects into account (ie on the basis of the net return). The decision depends on whether someone looks at interest solely as a pre-tax or also as a post-tax phenomenon.
56. Conversely, a contingency that relates to a commodity price index exceeding a certain threshold would not be considered to be related to cash flows that have the economic substance of interest.

No leverage

57. In addition to having determinable cash flows a financial instrument that qualifies for the amortised cost category also must not have leverage.³⁴ Leverage amplifies the variability of cash flows and can be achieved in various ways. Some examples are discussed below.
58. Interest rates can be leveraged for example by:

³² These clauses are common in order to protect the holder against the knock-on effect that the new controlling party might have on the credit risk of the debtor.

³³ The decision depends on whether someone looks at interest as a nominal or real phenomenon (see paragraph 22 above).

³⁴ See paragraph 8(b) above.

- (a) using a multiple of a financial instrument's notional amount (where notional amount reflects the funding volume³⁵) for determining interest or principal payments (eg a periodic interest payment determined as notional amount $\times 2 \times [\text{LIBOR} + 20\text{bps}^{36}]$); or
- (b) by setting the interest rate as a multiple of a reference benchmark interest rate (eg a periodic interest payment determined as notional amount $\times [\text{LIBOR} \times 2 + 20\text{bps}]$)

Such leveraged structures are typically overlaid with positive or negative fixed spreads and / or cap, floors, or collars³⁷.

59. Derivatives are an example of the leverage created by using a notional amount that does not reflect a funding volume. This is in substance the same as using a multiple of a financial instrument's notional amount (see paragraph 58(a) above). For example, an interest rate swap uses a notional amount to determine the variable and fixed leg payments but does not involve any funding at inception. Thus, the notional amount of the interest rate swap constitutes an extreme leverage.
60. The outcome that derivatives do not qualify for amortised cost accounting because of their leverage is also consistent with the implication of the contractual payments lacking interest character.³⁸ In order to make the 'no leverage' principle operational the implications of discounts should be clarified. 'Technically' any discount could be considered to create leverage because it results in a funding volume (eg the initial advance) that is lower than the notional amount that serves as the reference basis for determining coupon interest payments. However, a discount that is used to adjust the coupon interest such that the resulting combined yield reflects the economic character of interest

³⁵ For the implications of the funding volume see paragraphs 20 above.

³⁶ Basis points.

³⁷ These features are discussed in the related section 'Embedded caps, floors and collars' in this paper.

³⁸ See paragraph 7 above.

does not create leverage given the close relation between funding volume and return. In other words, scenarios where a discount is merely used as an alternative to coupon interest to create the same effective yield do not give rise to leverage.³⁹

61. Leverage can also be achieved by amplifying the effect of indexation to other variables in a similar way as for interest rates, for example regarding the variables discussed in paragraph 19 above.
62. Another type of leverage with respect to credit risk results from a CDO structure commonly referred to as a 'waterfall'.⁴⁰ A waterfall is a structure in which the priority of payments to tranche holders follows the subordination ranking of the tranches. This means that a senior tranche is paid in full, before any subordinated tranche is paid. Thus, the junior tranche bears some of the risk of senior tranches regarding the credit risk of the reference assets in consideration for a higher return. Compared to a symmetrical structure⁴¹ this creates leverage for both credit risk exposure as well as returns.⁴²
63. Leverage also relates to investments commonly referred to as a 'deep discount bond' (but the instrument could just as well be a loan). An investor that acquires a debt instrument at a deep discount that reflects larger credit losses than originally⁴³ expected in effect takes a gamble on that losses will be less than

³⁹ That is broadly consistent with the discussion of fine tuning interest in the context of making the criterion 'determinability' operational regarding variability in the timing of cash flows (see paragraph 48(b) above).

⁴⁰ The IASB discussed the waterfall feature in the context of CDO structures in its November 2008 meeting (see agenda paper 11B).

⁴¹ A symmetrical structure has tranches whose credit exposure is proportional to the principal amount just like the credit exposure of an equivalent direct investment in the reference assets.

⁴² Requiring fair value measurement for financial instruments that have a more than proportional exposure owing to a waterfall structure would be a major change as waterfall structures by themselves do not preclude amortised cost accounting under the practice that has evolved under IFRSs.

⁴³ That is to say, at inception so that the losses are not compensated by the original pricing when the instrument was negotiated.

reflected in the purchase price. Thus, a deep discount bond can be considered as an investment that creates exposure to significant (non-contractual) variability of cash flows.⁴⁴ This risk profile gives rise to leverage.

64. The ‘no leverage’ principle could be made operational regarding the aspect of leverage from deep discount investments by using a reference to investments acquired at a discount that reflects incurred credit losses. That notion is used in IAS 39.AG5 to establish when credit losses have to be included in determining the effective interest rate of a financial instrument.

Summary

65. This paper elaborates on the classification principles developed in agenda paper 2B.
66. In discussing those classification principles this paper also illustrates how they could be made operational and provides examples.
67. The staff recommendations and the questions to the Board regarding the classification approach are included in agenda paper 2E.

⁴⁴ This investing rationale also relates to the business model overlay discussed in agenda paper 2D. Investment in deep discount bonds would arguably not qualify for classification into the amortised cost category because of the business model associated with such investments (even if they—in a first step—were considered eligible for amortised cost on the basis of their characteristics).