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IASB Meeting

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Paper topic	Multi-dimensional risk management objectives (Step 7)		
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Introduction

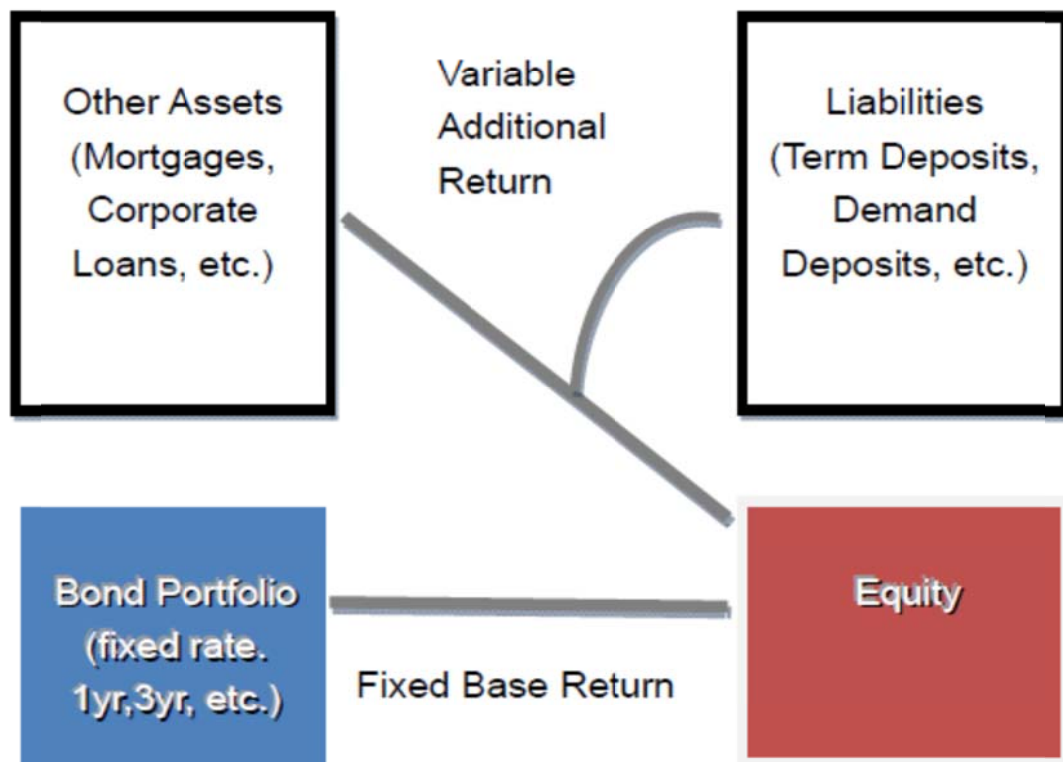
1. At its May 2012 meeting, the Board discussed a procedural aspect of the project. It tentatively decided that the project on accounting for macro hedging should work towards a discussion paper as the next due process step.
2. This paper resumes the discussion of an accounting model for macro hedging activities on the basis of the “11 steps” that the Board started discussing at its November 2011 meeting.¹
3. The analysis of the “11 steps” so far was based on two implicit assumptions:
 - (a) Business activities (financial assets) are entirely funded with liabilities, leading to a net position of nil in respect of notional amounts (ie funding does not include any equity).
 - (b) The objective of the risk management activities is simply to balance the entire portfolio with respect to the hedged risk (interest rate risk), eg the entire net risk position is to be swapped from fixed interest rates to floating ones.
4. Some entities, however, do also include equity as a source of funding as part of their interest rate risk management. In addition, the objectives of risk management activities might also be different for short-term and long-term

¹ See agenda paper 7A of the November 2011 IASB meeting.

horizons. As an example that addresses both those aspects (ie equity as a funding source that is included in the interest rate risk management and different objectives for different horizons), this paper discusses the concept of an *equity model book* and its ramifications for financial reporting.

Conceptual background of the equity model book

5. The origin of the equity model book concept is that many banks used funds raised through capital transactions or retaining earnings to invest in fixed rate bonds with different maturities to generate a fixed basic return. Some banks apparently still run that approach today.



6. Other banks use (some of) these funds as part of the *overall* funding for their business activities in general rather than investing them separately. To achieve a similar result as with the described investment in a separate bond portfolio, the funds raised through equity can be internally distributed, like other funds raised through debt, based on transfer pricing transactions that have maturity and interest

structures like a separate bond portfolio would have. Also, similarly to some types of debt funding, the target ‘base return’ for equity funding (see paragraphs 7 and 8) can be *modelled* as an interest rate risk profile using for example a *replication portfolio*. This is a tool for banks to incorporate funds raised through equity into their entire balance sheet management based on transfer pricing transactions. In essence, the mechanics of the replication portfolio approach are similar to the considerations applying to core demand deposits. However, when used for equity modelling, a replication portfolio represents a different funding instrument and therefore different considerations apply regarding influencing factors.

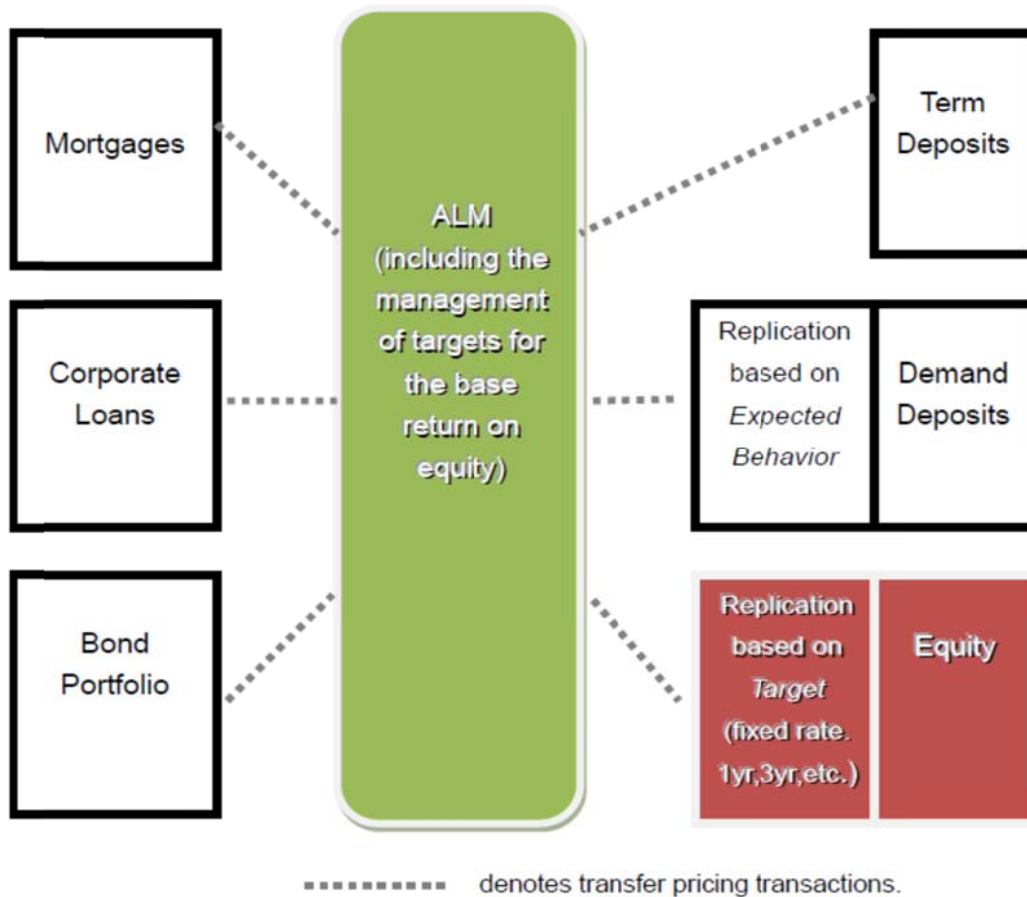
7. This paper refers to ‘base return’ as one part of the overall return on equity. The overall return on equity can be disaggregated (for analytical purposes) into:
 - (a) a *base return* that is similar to ‘interest’, ie it compensates equity holders for providing funding (ie the cash or liquidity aspect); and
 - (b) the *residual return* that results from the total *net income*² that accrues to equity holders. The residual return is the gain or loss that equity holders have because of their economic position of providing loss absorption.
8. This distinction can be illustrated by comparing providing equity with providing a financial guarantee (for a situation in which the guarantee represents the entire residual return³): they are the same⁴ regarding the residual return aspect but differ in that only equity has the additional funding aspect (and hence demands a base return), which explains the difference in compensating equity and guarantee providers. The equity model book captures this analytical difference. The difference between funding (ie the base return aspect) versus loss absorption (ie

² For this analytical purpose, net income is adjusted for the base return (ie the base return is deducted). This is necessary to avoid double counting because net income as an accounting concept (ie profit or loss) includes the base return whereas this analysis separates the base return from the residual return.

³ For example, a closed portfolio of fixed rate, fixed term debt instruments that must hold the assets for collection. The best performance is the collection of the full contractual cash flows but because of credit risk not all contractual cash flows might be collected. The guarantee represents the full residual return because it absorbs any losses but if there are none this maximises the profit for the guarantor (that would receive the full risk premium earned under the guarantee but would not have any payout under the guarantee).

⁴ Assuming the guarantee would not be affected by credit risk of the guarantor (eg a collateralised guarantee).

the residual return aspect) has important ramifications for capital management: the former aspect is equivalent to interest rate risk management, whereas the latter aspect is about the effects of leverage and product margins. The risk management strategies and instruments used for interest rate risk are completely different from those that address the factors that drive the residual return (which often requires an open risk position to generate a residual return, eg from assuming credit risk).



Illustrative Example

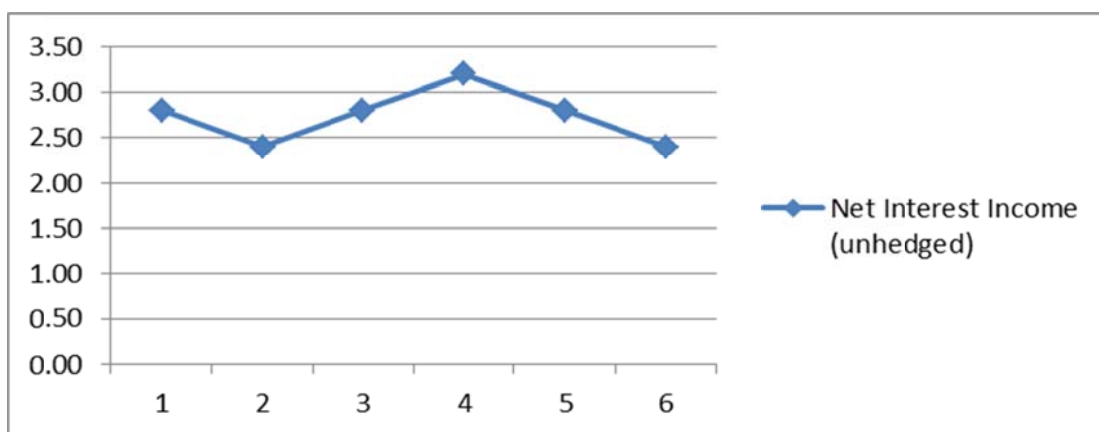
- The following simplified example explains the basic conceptual idea of the equity model book. A bank has equity of 40 and a loan portfolio with a notional amount of 100 (bearing floating benchmark interest rates plus a fixed margin of 1%). The funding gap is closed by a liability portfolio with a notional amount of 60 (bearing floating benchmark interest rates minus a fixed margin of 1%).

10. The example assumes the following development of (benchmark) interest rates and contractual rates of the described products:

End of Period	0	1	2	3	4	5
Benchmark Rate	3.0%	2.0%	3.0%	4.0%	3.0%	2.0%
Lending Margin	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Business Rate	4.0%	3.0%	4.0%	5.0%	4.0%	3.0%
Benchmark Rate	3.0%	2.0%	3.0%	4.0%	3.0%	2.0%
Funding Margin	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Funding Rate	2.0%	1.0%	2.0%	3.0%	2.0%	1.0%

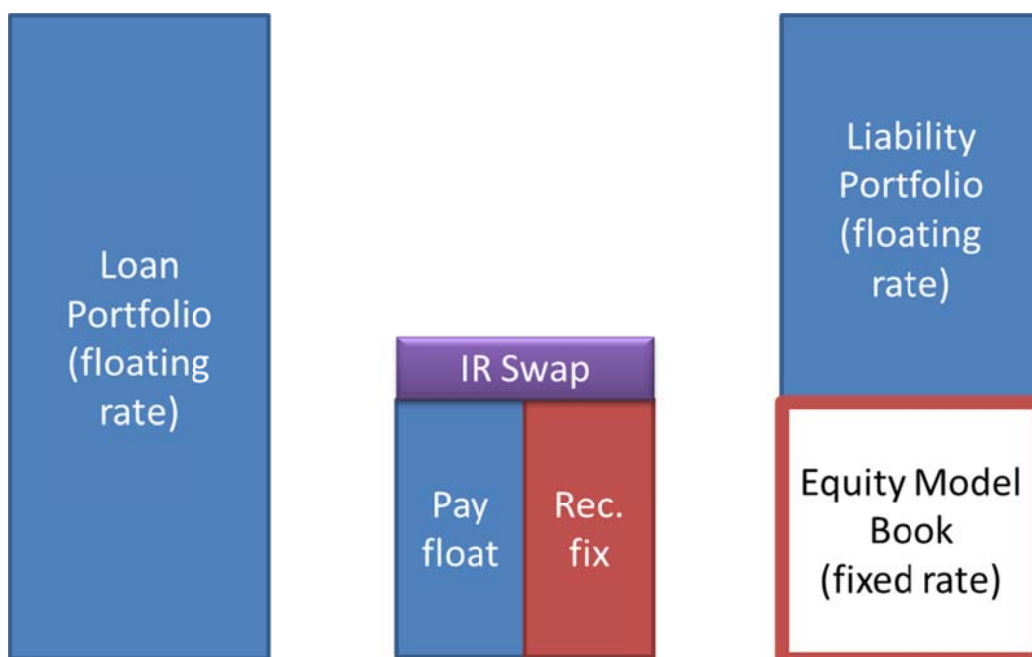
11. On that basis, net interest income resulting from the described portfolio develops as follows:

Income Statement Period	1	2	3	4	5	6
Interest Revenue	4.00	3.00	4.00	5.00	4.00	3.00
Interest Expense	-1.20	-0.60	-1.20	-1.80	-1.20	-0.60
Net Interest Income	2.80	2.40	2.80	3.20	2.80	2.40
<i>Lending Product Margin</i>	1.00	1.00	1.00	1.00	1.00	1.00
<i>Funding Product Margin</i>	0.60	0.60	0.60	0.60	0.60	0.60
<i>Benchmark Interest Revenue</i>	1.20	0.80	1.20	1.60	1.20	0.80



12. The development of net interest income can be split into the two product margin elements that are earned constantly (*in this example*) on all assets and liabilities. In addition, the portfolio generates interest revenue on the *net* asset position of 40 that is equal to the benchmark rate.

13. Hence, the overall return⁵ on equity is influenced by the product margin (affecting the residual return) *and* the development of benchmark interest rates (affecting the base return). However, a bank might want a fixed base return on its equity funding (for distributions to equity holders or to meet capital targets).
14. For this example it is assumed that the bank targets a fixed base return on its equity for three periods on the basis of the benchmark interest rate (ie a three-period interest rate), which is 3.0% at the end of period 0.⁶ Consequently, for risk management purposes the equity is treated like a fixed rate liability with a notional of 40, a fixed interest rate of 3.0% and a term of three periods. This ‘deemed’ liability is also referred to as the *equity model book*.
15. On the basis of a risk management approach that derives the net risk position from the fixed rate items, the equity model book is used like a ‘placeholder’ to generate a particular interest rate risk profile that becomes part of the overall net position. This leads to the following portfolio structure (on a *modelled* basis):



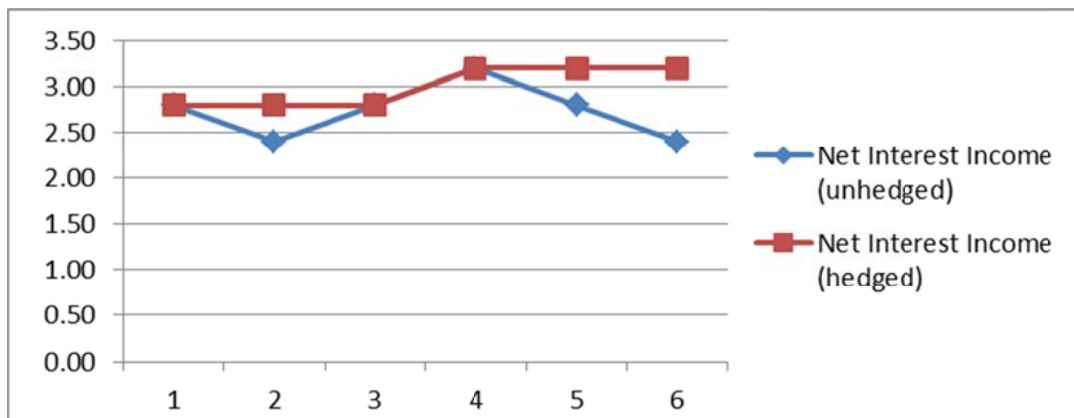
16. For this example the net risk position (from the perspective that fixed rate exposures represent interest rate risk) is identical to the equity model book. It is assumed that risk management addresses the fixed rate risk by entering into a

⁵ See paragraph 7.

⁶ For simplification, this example assumes a *flat* interest rate curve. Hence the example ignores potential differences in the development of the curve for a three year period in comparison to the one for a one year period.

matching swap transaction. At the end of the third period, the equity model book is re-set for another three periods based on the then current benchmark interest rate for a three period investment (4.0%).⁷ On that basis the income statement develops as follows:

Income Statement Periods	1	2	3	4	5	6
Interest Revenue	4.00	3.00	4.00	5.00	4.00	3.00
Interest Expense	-1.20	-0.60	-1.20	-1.80	-1.20	-0.60
Net Interest Income	2.80	2.40	2.80	3.20	2.80	2.40
Swap Income	0.00	0.40	0.00	0.00	0.40	0.80
Hedged Net Interest Income	2.80	2.80	2.80	3.20	3.20	3.20
Lending Product Margin	1.00	1.00	1.00	1.00	1.00	1.00
Funding Product Margin	0.60	0.60	0.60	0.60	0.60	0.60
Benchmark Interest Revenue	1.20	1.20	1.20	1.60	1.60	1.60



17. As described above, the resulting net interest income can be split into the elements of product margin and benchmark interest revenue. On the basis of the described risk management activities, the benchmark interest revenue is now stable for the periods addressed by the equity model book.
18. *Mechanically*, the equity model book is modelled and treated like a fixed rate liability. This reflects the risk management approach to manage a dynamic net risk position and identify interest rate risk on the basis of fixed rate items. The equity model book is a tool that includes a target in the portfolio in a way that it fits to the overall risk management approach.

⁷ Please see footnote 6 regarding the assumptions for the benchmark interest rates for the purposes of this example.

Accounting considerations

General considerations

19. As long as management identifies interest rate risk on the basis of fixed rate items (in this example: the equity model book), the natural accounting solution is a fair value hedge. However, the portfolio structure illustrated above shows that there is an alternative: the designation of the interest rate swap as hedging a part (40) of the floating rate loan book (ie a cash flow hedge).
20. The fundamental problem of this approach is that it would ignore that the hedged risk is identified on the basis of fixed interest rate positions. In essence this would lead to a split of the risk position for accounting purposes, which becomes difficult to maintain when trying to keep up with the dynamic development of a portfolio. In that sense, using a cash flow hedge for the above example works only as a *proxy* to present actual risk management in financial statements. For a dynamic portfolio, this would require ongoing adjustments to the cash flow hedge and to the accounting for any net fixed interest rate risk position⁸ in order to respond to changes in the volumes of variable and fixed rate exposures.
21. Hence, more generally, an equity model book approach has two main advantages when accounting for a dynamic net position:
 - (a) it avoids having to identify parts of the assets or liabilities for which a different accounting solution must be used (ie other than the accounting model for the dynamic risk position):
 - (i) items that should remain unhedged (if those are available—eg in the above example, if the entity had some fixed rate assets with a suitable maturity that would generate the fixed rate cash inflows needed as the base return for the equity funding); or
 - (ii) items that could be used as the hedged item in a cash flow hedge (if no suitable fixed rate assets are available but there are suitable variable rate interest cash inflows); this would also require identifying those derivatives that are used as

⁸ In the above example (see paragraph 9) the net fixed interest rate position is nil (because there are only variable rate assets and liabilities). However, in reality that is an unlikely situation.

hedging instruments because their fair value changes (to the extent they are effective hedges) would be recognised in the cash flow hedge reserve instead of profit or loss.

Identifying those items would often be an arbitrary decision in the context of a dynamic net position (because of the many different items to choose from for a decision that is a mere accounting consideration).

- (b) it is operationally much more feasible than hedging large parts of a net position but excluding some parts (if suitable ones are available) as unhedged, and/or alternatively use cash flow hedge accounting (where possible), to reflect the traditional accounting perspective. Excluding for accounting purposes some parts of the net position that is managed together creates operational complexity because of the interaction between the 'accounting net position' and the 'unhedged' part (because the interest rate risk exposure that is available to be left 'unhedged' for accounting purposes will change in a dynamic portfolio). Similarly, operational complexity arises from combining a cash flow hedge with the accounting for the 'accounting net position' (because of the need to adjust the extent of cash flow hedges used in response to the development of the dynamic portfolio).

Effect of using an equity model book by different situations

22. An equity model book can be used for capital management in various situations. The accounting effect of using an equity model book differs depending on the situation, for example:
- (a) The effect when the equity model book is **used as a 'placeholder'**:
 - (i) for a cash flow hedge of variable rate net asset positions.
 - (ii) for avoiding revaluation (a fair value hedge) of fixed rate net asset positions.
 - (b) The effect when the equity model book is **used to change the type of cash flow variability**, eg if:

- (i) equity and hence the equity model book is not in the functional currency of the entity (eg the equity model book is used to generate a fixed dividend in GBP for an entity whose equity is issued in GBP-based shares but USD is the entity's functional currency).
- (ii) used for changing between the USD prime rate and USD LIBOR.
- (c) The effect when the equity model book is **used but not 'fully hedged'**, ie if the interest rate risk net position that includes the equity model book is left (completely or partially) open.

Equity model book used as a 'placeholder'

23. In this situation, the equity model book could be viewed as a simplification to achieve hedge accounting as part of one unified accounting model for macro hedging instead of separating the accounting into:
- (a) a cash flow hedge for some variable rate assets (outside of the accounting model for macro hedging) and applying the accounting model for macro hedging for the remainder of the interest rate risk position; or
 - (b) some fixed rate assets that are excluded from the net position and left as unhedged for accounting purposes and applying the accounting model for macro hedging for the remainder of the interest rate risk position.
24. Using the equity model book as a simplification that avoids separating the accounting into different models means that conceptually it is used as an accounting *surrogate* (ie in lieu of separating the accounting and using cash flow hedging or leaving part of the net position unhedged for accounting purposes). However, using the equity model book as a surrogate creates a risk of accounting arbitrage. Possible examples of that arbitrage are:
- (a) When used as a surrogate for a cash flow hedge, using the equity model book:
 - (i) could avoid the assessment of whether expected variable cash flows (forecast transactions) are 'highly probable'; and

- (ii) *if* changes in the value of the equity model book were presented as an asset or a liability,⁹ that would result in a presentation of the change in the value of the hedged position outside of equity instead of causing volatility within equity (ie like a cash flow hedge does in accumulated other comprehensive income—AOCI).
- (b) When used as a surrogate for unhedged fixed rate assets, the equity model book would actually result in ‘gross’ accounting: the fixed rate assets would be revalued for changes in the interest rate risk while the equity model book would result in a revaluation for interest rate risk in the opposite direction. This gross accounting could only be avoided if an entity was allowed to net those two revaluations. In contrast, if fixed rate assets are accounted for as unhedged they would not be revalued (and no revaluation would arise from using an equity model book as a ‘placeholder’ with regard to those assets). Hence, using the equity model book would give rise to a different accounting outcome and might create arbitrage in that sense. However, given that entities typically have a preference for avoiding gross presentation (because it avoids volatility of measures of leverage) this arbitrage is one that would discourage instead of encourage (like under (a) above) the use of an equity model book.

Equity model book used to change the type of cash flow variability

25. Allowing an equity model book approach when an entity only changes the *type* of cash flow variability (instead of reducing the exposure to cash flow variability) would create arbitrage because cash flow hedge accounting would not be available when changing the type of cash flow variability instead of reducing it.¹⁰

Equity model book is used but not ‘fully hedged’

26. If an entity includes the equity model book in its interest rate risk net position but leaves that exposure completely or partially unhedged (ie ‘open’) an equity model

⁹ The presentation alternatives are discussed later in this paper (see paragraphs 48–41) noting that presentation as an asset or liability would conflict with the definitions in the Framework.

¹⁰ This is the reason why an instrument that only changes the type of variability (often called a ‘basis swap’) on its own does not qualify as a cash flow hedge.

book approach can result in outcomes that do not represent the actual economic situation of the entity.

27. This can best be illustrated with a (*deliberately extreme*) example: An entity has variable rate assets of 100 and equity of 100. The entity uses an equity model book that has the profile of five-year fixed term fixed (benchmark) rate debt. The entity does not enter into any hedges, ie it intentionally leaves the interest rate risk position completely open. Using the equity model book for accounting purposes would mean that in profit or loss there would be a gain or loss equivalent to a (interest rate related) change in the value of five-year fixed (benchmark) rate debt (in addition to the variable interest revenue on the assets). However, the economic situation of the entity is one of earning variable interest revenue from assets. This is different from situation in which the equity model book is a surrogate¹¹.
28. However, the situation in practice will not be as clear as the extreme example above. If the risk position includes more different items and is partially left open, the analysis becomes more difficult. This can be illustrated by a different example: An entity has variable rate assets of 100, variable rate liabilities of 49, fixed rate liabilities of 1 with a fixed term of five years and equity of 50. The entity enters into a five-year interest rate swap (receiving fixed and paying variable interest). This swap hedges the interest rate risk net position, which the entity considers as an exposure to changes in the five year benchmark interest rate on a nominal amount of 51¹². That means the entity hedges 50 out of 51 of the risk exposure and leaves 1 unhedged (based on nominal amounts).
29. This situation gives rise to an *allocation* issue:
- (a) If the equity model book was regarded as hedged by the interest rate swap in its *entirety*, the equity model book could be used for accounting purposes as a surrogate for a cash flow hedge (of the variability in cash inflows from 50 of the variable rate assets).

¹¹ See paragraph 24.

¹² The total of the equity model book with a profile of five-year fixed term fixed (benchmark) rate debt of 50 and the fixed rate liabilities of 1.

- (b) If the interest rate swap was regarded as hedging the fixed rate liabilities of 1 and 49 of the equity model book, the remainder of 1 of the equity model book would have to be excluded from the accounting or it would create the same issue as illustrated by the extreme example above¹³.

The allocation of the interest rate swap to a particular part of the overall net position is solely an accounting question. From a risk management perspective, the net position would be regarded as one exposure (that is partially hedged) and this question does not arise.

30. Hence, using the equity model book would give rise to a different accounting outcome depending on the allocation, and might create arbitrage in that sense. However, given that entities typically have a preference for avoiding volatility in profit or loss this arbitrage is one that would increasingly discourage (instead of encourage like under paragraph 24(a)) the use of an equity model book as the extent of the unhedged risk exposure increases.

Implications for the accounting model for macro hedging

31. The above analysis shows that there is a trade-off between:
- (a) providing operational relief and keeping the accounting model simple; and
 - (b) limiting arbitrage opportunities.
32. However, this does not result in a decision between ‘all or nothing’. Instead, the question is whether it would be feasible to use some type of ‘test’ to differentiate whether an equity model book:
- (a) represents a ‘placeholder’ or only changes the type of cash flow variability; and
 - (b) if it represents a ‘placeholder’, whether it is a surrogate for a cash flow hedge or unhedged fixed rate assets.
33. If that differentiation was feasible, the accounting for the equity model book could be varied by scenario, ie:

¹³ See paragraph 27.

- (a) treatment like AOCI if it is a surrogate for a cash flow hedge;
- (b) netting against asset revaluation if it is used as a surrogate for an unhedged fixed rate asset position; and
- (c) excluding it from the accounting if it only changes the type of cash flow variability.
- (d) in situations in which the equity model book is not fully hedged:
 - (i) exclude it from the accounting; or
 - (ii) provide an allocation approach to determine which part of the equity model book would be included for accounting purposes.

Alternatives (a) and (b) *mechanically*¹⁴ could be regarded as an approximation of the accounting outcomes that otherwise (if separate accounting treatments were used) would be available (ie a cash flow hedge or leaving fixed rate assets unhedged). However, differentiating alternatives (a) and (b) would require an *allocation* of the changes in the value of the equity model book to those two types of surrogates.

34. Addressing the situations in which the equity model book is not fully hedged would increase complexity in several aspects (depending on the alternative chosen):
- (a) determining whether and (if applicable) to what extent the equity model book is unhedged;
 - (b) splitting the equity model book into a part used for accounting purposes and one that is excluded (allocation—if applicable);
 - (c) accounting for changes between situations in which there is a variation in the extent to which an equity model book would be included in the accounting.
35. An approach that included differentiation along those lines (be it all or some of it) on the one hand would increase the operational complexity as well as the

¹⁴ The presentation related potential arbitrage aspects (see paragraph 24) could be addressed by requiring a presentation that is similar to a cash flow hedge or leaving items unhedged but the potential arbitrage aspect regarding the 'highly probable' assessment of forecast transactions would remain.

complexity of the model (ie the design) but on the other hand it would reduce arbitrage opportunities and the potential for conflict with the Framework.

Determination of the equity model book

36. The equity model book is predominantly based on capital management decisions on its key terms, ie:
- (a) notional amount (assigned equity)
 - (b) terms (periods covered and (benchmark) interest rate or rates)
 - (c) roll-over mechanism.
37. These decisions might be based on expectations regarding future interest rate scenarios (impact on notional amount and periods), the planning horizon (determination of the periods covered) and relevant markets (selection of benchmark interest rates regarding products, jurisdictions and currencies). In essence, these decisions are similar to and closely related with investment decisions. This reflects the origin of the equity model book approach: being a substitute for investments in a bond portfolio (the traditional approach).

Accounting treatment: consistency with a net portfolio valuation approach

38. From the perspective of a net portfolio valuation approach, there are two alternatives regarding the accounting treatment of the equity model book: *ignore* (ie exclude from the revaluation of the risk position) or *accept* (ie include).

Ignoring equity model book approaches

39. Ignoring equity model book approaches means that all *other* items of the risk position (when accepted for accounting purposes) and the hedging instruments become subject to an ongoing valuation. As a consequence, even in a situation in which risk management exactly meets its targets for the risk position (as expressed through the equity model book), valuation impacts would still create volatility in profit or loss (even though the target is stabilising the base return for equity funding and that target is achieved).

40. For the example used in this agenda paper, ignoring the equity model book leaves the fair value measurement of the hedging instruments without an offsetting valuation. Therefore, consequential valuation mismatches cannot be seen as being an indicator of the risk management approach not achieving its objective. In other words, when the hedging activities are successful in achieving the capital management objective to earn a fixed base return for equity funding, the profit or loss shows volatility. This is because derivatives are accounted for in isolation, without taking into account any item that gives rise to offsetting effects (eg the cash flow variability on the variable rate assets).
41. However, ignoring equity model book approaches does not necessarily lead to accounting outcomes described above. This is because an entity can use a different accounting solution (if the entity is prepared to make that effort). For instance, in the above example, an entity could use a cash flow hedge by designating the interest rate swap as hedging a part of the floating rate loans. In that case, the accounting outcome (profit or loss volatility) is similar to that when equity model approaches would be used. Hence, a decision on whether to accept equity model book approaches should take this aspect into account (ie creating the incentive for entities to optimise the accounting outcome by combining different approaches, which comes at the expense of increased complexity both in terms of understandability of the information as well as from an operational perspective).

Accepting equity model book approaches

42. Accepting the equity model book as part of the net portfolio approach means that it would become subject to an ongoing valuation in the same way as the other items of the risk position. As a consequence, volatility in profit or loss shows the result of hedging activities that also address (ie include in the risk exposure) capital management objectives, which focuses on the target base return for equity funding.
43. However, including the notion of the equity model book for accounting purposes leads to three main questions:
- (a) How does the acceptance of the equity model book give useful information to users in comparison to ignoring it?

- (b) What would be the appropriate presentation of this valuation in the statement of financial position?
- (c) How to deal with the fact that the valuation is predominantly based on management's targets and therefore an entity specific decision (ie does not represent an aspect of measuring an asset or a liability)?

Information usefulness

44. The decision whether to ignore or accept the equity model book concept should consider which alternative provides more useful information. This issue is closely linked to the question which alternative best represents the performance of the entity.
45. Therefore, the decision depends on which of the below is considered the performance:
- (a) the performance against the entity's decision to *lock in* a fixed base return for equity funding, ie the accuracy of the risk management activities in addressing the entity's risk position that results from including the capital management target. That performance would be expressed as valuation mismatch, which would be nil if perfectly hedged. This means *accepting* equity model book approaches.
 - (b) the performance resulting from regarding derivatives in isolation. This is based on the view that the overall return on equity is one residual return. Users with this view (eg prudential regulators) make only importance of the loss absorption function of equity and do not disaggregate the overall return into a base return and a residual return in the narrower sense.¹⁵ There might be also a view that remeasuring an item that is *not* an asset or a liability does not provide useful information. The performance when *ignoring* the equity model book provides users information about whether *not* to lock in the base return would have been advantageous or not. With a perfect risk management approach, the value of the hedged net portfolio (hedged items and hedging instruments—excluding the equity model book) represents the

¹⁵ See paragraph 7.

opportunity gains or losses resulting from the capital management decision to fix (a part of) the portfolio's return.¹⁶ This means the valuation in this case does *not* provide information about the accuracy of the risk management approach taken but instead whether a different capital management target might have been preferable. However, in reality the accounting outcome will not necessarily be as described (ie derivative accounting in isolation—see paragraph 41).

46. From the perspective of users of financial statements, the fundamental question is whether they prefer a definition of the risk position that is consistent with and hence includes the entity's capital management. Users' support for this approach would mean they want to evaluate the performance of the entity using its capital management decision to lock in a fixed base return as a starting or reference point¹⁷. This would consequently include decisions about capital management targets that need to be explained accordingly.
47. Alternatively, users might prefer to limit the scope of the risk position to those types of items that can be eligible as hedged items under existing accounting conventions (ie assets, liabilities and forecast transactions). The valuation impacts that result from the deviation of the hedged risk position for accounting purposes from that which includes the actual capital management objective could then be explained in the disclosure section of the financial statements.

Presentation

48. Unlike other items of the risk position, the equity model book is not an asset or a liability. Therefore, the change in the value of the equity model book cannot be treated as a valuation adjustment of a carrying value of an asset or a liability. Two alternatives can be considered:

¹⁶ In the example used for this paper, the return for the first three periods was fixed at 3% (on the basis of a benchmark rate). In the case where the equity model book approaches are accepted, when the benchmark rate goes up a gain is shown resulting from a *negative* valuation of the deemed liability (that neutralises the loss on revaluing the interest rate swap) and vice versa. In the case where the equity model book approaches are ignored, however, no valuation change of the deemed liability is recognised.

¹⁷ This does *not* mean users have to agree with that objective—that is a different question from what the starting point of the analysis is. For example, if there is no objective as a base return, the starting or reference point would be the total return on equity irrespective of its composition. A user who disagreed with the objective not to set a base return but preferred a base return objective would still have to use the capital management target of not having a base return as the starting or reference point and expand the analysis.

(a) Accumulated other comprehensive income (AOCI):

This alternative reflects that the equity model book results from assigning equity to interest rate risk management. Therefore presenting the valuation change of the equity model book as an adjustment to equity would be consistent. It also uses a balance sheet item that already exists (ie equity).

The disadvantage is that this alternative would lead to a sole shift between equity and profit or loss, ie the journal entry would be to debit AOCI and to credit profit (or vice versa). This could be seen as questionable when the valuation is not offset by hedging instruments (ie in those situations in which the equity model book is not a surrogate for a cash flow hedge). On the other hand, the advantage of this alternative is that it maximises the benefits of using an equity model book as a placeholder that is part of the overall net position, namely operational feasibility¹⁸ and avoiding the need to ‘allocate’ the changes in the value of the equity model book by the type of surrogate¹⁹.

(b) Separate balance sheet item:

This alternative regards the equity model book as a separate item within the risk position that is revalued for interest rate risk (reflecting the capital management target for the base return on equity funding).

However, when considered on its own, this separate balance sheet item would not meet the definitions of an asset or a liability in the Conceptual Framework, which defines an asset as “a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity” and a liability as “a present obligation of the entity arising from past events, the settlement of which is expected to result in an outflow from the entity of resources embodying economic benefits”.²⁰ Therefore, unless this separate balance sheet item was treated *as if it were* an asset or a

¹⁸ See paragraph 21(b).

¹⁹ See paragraphs 21(a) and 33.

²⁰ See Conceptual Framework, paragraph 4.4.

liability, it would by default be an item within equity. Hence, it would in essence be the same as the presentation in AOCI under alternative (a).

49. Regardless of the presentation alternative, it has to be considered that the recognition of the change in the value of the equity model book, *when considered on its own*, would be a departure from the Conceptual Framework:

- (a) it is not an item that meets the definition of an asset or a liability; and
- (b) equity is a residual amount²¹, which means it cannot be *directly* remeasured²² but only changes indirectly as a result to changes in the assets and liabilities.

However, *when considered in the context* of accounting for assets and liabilities, the equity model book would be consistent with the Conceptual Framework (or at least use accounting treatments that already exists in IFRSs²³) to the extent that it is a *surrogate*.

Addressing judgemental areas

50. Given the significant influence of management decisions on the shape, terms and conditions assigned to the equity model book, and hence its valuation, any accounting approach that uses this valuation requires a high level of transparency regarding:

- (a) the modelling (eg using a replication portfolio) as well as parameters on which the equity model book is based, and the rationale for selecting those; and
- (b) changes to those models and parameters, the rationale for those changes and their impact (quantification).

²¹ Defined in the Conceptual Framework (paragraph 4.4) as “the residual interest in the assets of the entity after deducting all its liabilities”.

²² Even though the *overall amount* of equity would not change, an accounting that affects the performance statement with a balancing entry to equity (including one via OCI) that does not involve any changes to assets or liabilities would be inconsistent with this concept.

²³ The Conceptual Framework only includes the income statement as a performance statement. The conceptual nature of OCI has yet to be resolved (which was also the feedback on the Board’s agenda consultation) but it is widely used under IFRSs already.

51. An equity model book that is subject to frequent changes could de facto lead to a deferral of the net valuation impact of the hedged risk position. This would happen if the fair value changes on the derivatives were always compensated by an offsetting change in valuation of the equity model book—the model book would follow the derivative position (this could be regarded as ‘reverse engineering’). Hence, it is questionable whether such a situation represents a valid capital management strategy as those are usually not subject to such frequent ad hoc changes.
52. It is unrealistic, however, that changes to the equity model book settings would never occur because management approaches change over time to adapt to changes in the environment.
53. Overall, the concept that management decisions directly impact the valuation for accounting purposes can be found elsewhere in IFRSs as well.²⁴ For example, a risk management objective that hedges only 40% of a financial instrument leads to a hedge adjustment limited to 40% of the hedged item under the general hedge accounting model when designated that way. Also a change to that risk management objective resulting in the discontinuation of the hedging relationship is accepted for accounting purposes. However, the discontinuation would *not* lead to an immediate impact on profit or loss (given that the hedged item is still recognised). This approach might be considered as well when applying the equity model book concept for accounting purposes.²⁵
54. However, it also has to be considered that the impact of risk management decisions as described for the general hedge accounting model is limited by the size of an existing risk position (which is the maximum volume that can be designated as a hedged item). In contrast, the equity model book could furthermore lead to situations in which the approach *creates* additional risks to be addressed by hedging instruments, or results in gains or losses that do not

²⁴ This paper elaborates only on hedge accounting. However, there are many different areas of accounting in which management decisions (on management objectives) affect the valuation for accounting purposes (eg in accordance with IAS 2 *Inventories*, IAS 12 *Income Taxes*, IAS 16 *Property, Plant and Equipment*, IAS 36 *Impairment of Assets*, IAS 38 *Intangible Assets*, IAS 40 *Investment Property*, and IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*).

²⁵ For a more general discussion of changes to the risk management approach and how to treat those for accounting purposes, refer to the agenda paper 6A of the March 2012 IASB meeting.

represent the economic situation of the entity. Therefore the scope of the equity model book approach is wider²⁶.

Practicability

55. Either accepting or ignoring the equity model book approach would *not* lead to *practicability* issues. The valuation would be based on the approach applied for risk management purposes and therefore not require performing separate procedures for accounting purposes. A similar assessment is true for the exclusion of the equity model book from the valuation of the risk position. Practicability issues, however, would occur with a separate (rather static) accounting-only solution to avoid volatility (eg using cash flow hedges as an alternative in lieu of using the accounting for macro hedging in the above example²⁷).

Disclosures

56. When *accepting* the equity model book for accounting purposes, supporting disclosures should focus on the parameters for valuing the risk position, changes to those parameters and an explanation of the reasons for the parameter selection and changes to it. This has to be supplemented by quantitative information on the development of the equity model book value, especially when the approach or parameters changed.
57. Even when *ignoring* the equity model book approach for accounting purposes, an entity may want to disclose similar contents as a basis for explaining the reasons for the resulting valuation effects. This is to create a bridge between the actual risk management approach and the financial statement information.

²⁶ This would be the case in situations in which the use of the equity model book goes beyond that as a surrogate (see paragraphs 22(b), 25 and 27–29).

²⁷ The accounting would also be operationally more difficult if the availability of an equity model book approach for accounting purposes was made conditional on verifying that an alternative like a cash flow hedge (or not hedging a fixed rate asset for fair value interest rate risk) would be available so that the equity model book could be considered a surrogate (see paragraphs 33–35).

Conclusion

58. *Mechanically*, the equity model book approach shares similarities with the core demand deposit discussion, in that both are managed under the transfer price mechanisms based on modelling and (typically) replication.
59. However, there are also differences between the two. The equity model book approach is based on a *target* for the base return for equity funding, while the core demand deposit model is based on *expected behaviour of liabilities*. Consequently, the impact of the management decisions might be larger, as it includes the judgment about the *target* of the base return for equity funding, on which the valuation of the equity model book is based.
60. Bearing these features of the equity model book in mind, the decision whether to ignore or accept it is about what information users find useful. Information conveyed through profit or loss volatility depends on whether an equity model book approach is accepted:
- (a) if not, fair value changes in derivatives represent opportunity gains/losses.
 - (b) if so, (an absence of) net profit or loss volatility represents the accuracy of hedging activities based on the objective to lock in the base return for equity funding.
61. In reality, however, such a black-and-white discussion of information usefulness is too naïve. This is because in situations in which an equity model book is a surrogate, an entity could directly apply the accounting represented by the surrogate (eg a cash flow hedge) if the entity is prepared to make that effort. When considered a surrogate, an equity model book might be accepted as an approximation of an allowed accounting treatment in a way that is operationally more feasible (sometimes referred to as a ‘practical expedient’).
62. However, using the equity model book for accounting purposes create a trade-off between:
- (a) a simple model design, understandability and operational feasibility;
- versus

- (b) consistency with the Conceptual Framework and limiting arbitrage opportunities.

A model that is positioned between those ends of the spectrum involves design and operational complexity because of the need to differentiate situations for accounting purposes (including allocation issues).

63. When accepting the equity model book approach for accounting purposes, the valuation of the book economically represents an adjustment of the overall valuation of the entire risk position that represents management targets. Therefore, the change in the valuation of the equity model book cannot (in most cases—at least not without arbitrariness or an accounting convention and the associated complexity) be allocated to items of the risk position as an adjustment of their respective carrying amounts. Hence, the acceptance of the valuation for recognition and measurement purposes would imply using a separate presentation (within equity—whether as part of AOCI or otherwise) in order to reduce complexity.
64. The equity model book represents management decisions about its target for the base return for equity funding. Hence, accepting equity model book approaches for accounting purposes inevitably requires disclosures to achieve a high level of transparency. Furthermore, clear provisions regarding the effect of changes to the approach on the financial statements are important.